

# **Comprehensive Strategy for Prescribed Fire to Restore Longleaf Pine in the Southeast United States: A Vision for 2025**

Developed by the  
Southeast Regional Partnership for Planning and Sustainability (SERPPAS)  
Prescribed Fire Work Group

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## Preface

The Comprehensive Strategy for Prescribed Fire to Restore Longleaf Pine in the Southeast United States is a focused effort to increase prescribed burning in support of longleaf pine restoration. It is written for professionals in the fire community, representing agencies and organizations whose active involvement in directing policy and implementing programs is essential to achieve the goals of the Strategy.

This Strategy is one of several concurrent efforts to increase prescribed fire in the Southeast. The National Cohesive Wildland Fire Strategy: Southeastern Regional Assessment and Strategy<sup>i</sup> places a strong emphasis on the use of prescribed fire as part of an overall approach to more comprehensive wildfire management. The National Association of State Foresters and Coalition of Prescribed Fire Councils' 2012 National Prescribed Fire Use Survey Report<sup>ii</sup> is a first-ever comprehensive review of prescribed fire use, intended to facilitate direction and vision on future prescribed fire programs throughout the United States. The Range-Wide Conservation Plan for Longleaf Pine<sup>iii</sup> provides recommendations for fire management to restore longleaf pine in the Southeast. Developed in this context of growing recognition for the importance of and need for prescribed fire, the Prescribed Fire Strategy is intended to work in concert with other efforts, and to encourage more cohesive and coordinated action among relevant agencies and organizations.

The Southeast Regional Partnership for Planning and Sustainability (SERPPAS) Prescribed Fire Work Group led strategy development, garnering input from a broad stakeholder group. The final product represents consensus among representatives of federal and state agencies, non-governmental organizations, academic institutions, the private sector and private landowners. We appreciate the contributions of everyone involved, and hope to have their continued input, advice, and assistance in implementing the Prescribed Fire Strategy.

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## Executive Summary

The Southeast Regional Partnership for Planning and Sustainability (SERPPAS) works across geographic and organizational boundaries to overcome development pressures in select areas to maintain military lands, to encourage compatible resource-use decisions, and to improve coordination among regions, states, communities, and military services. SERPPAS has focused on projects such as “Sustaining the Land of the Longleaf Pine” to meet mutual objectives of member organizations. Many SERPPAS member agencies sit on the Regional Longleaf Partnership Council. The Council is a collection of state and federal agencies, non-governmental organizations, and private representatives established to coordinate actions called for in the Range-wide Conservation Plan for Longleaf Pine Forests under America’s Longleaf Restoration Initiative.

Longleaf pine is a fire-dependent species. Managing it properly with prescribed fire not only helps restore longleaf ecosystems, but yields associated benefits such as reducing the risk of catastrophic wildfire, thereby protecting air quality, and improving wildlife habitat for game, at-risk, and endangered species. Such benefits enhance natural, economic, and human resources, as well as national security. The Comprehensive Strategy for Prescribed Fire to Restore Longleaf Pine in the Southeast was written to fulfill SERPPAS’ Strategic Action Plan goal of developing a comprehensive, regional strategy for increasing prescribed burning for longleaf pine in the Southeast, which is important to numerous agencies including, but not limited to, the Department of Defense, Environmental Protection Agency, Forest Service, Fish and Wildlife Service, Natural Resources Conservation Service, and state forestry and wildlife agencies.

The Prescribed Fire Strategy represents a consensus among representatives of federal and state agencies, non-governmental organizations, academic institutions, and the private sector. It focuses on achieving the goals of the Range-wide Conservation Plan for Longleaf Pine, which calls for increasing longleaf pine acres from 3.4 million to 8 million by 2025. Of that 4.6 million increase, 3.4 million acres will be on private land and 1.2 million acres will be on public land. The vision of the Prescribed Fire Strategy is to have region-wide application of prescribed fire at the scale and frequency needed to establish the additional acres of longleaf pine on private lands by the year 2025, while supporting continued longleaf conservation by public land managers. The following eight goals are set as benchmarks to achieve the vision.

- Ensure sufficient, consistently available resources to promote and implement increased prescribed fire operations.
- Implement focused, effective communication, and education campaigns to increase awareness of prescribed fire and willingness to burn.
- Increase the number of trained, qualified and experienced burners (both landowners and contractors) conducting prescribed burning on private and public lands.
- Minimize landowners’ risk of liability associated with prescribed fire.
- Support prescribed fire programs on public lands.

- Minimize local smoke impacts on air quality and public health and safety. Maximize coordination between air and fire communities.
- Implement a consistent fire activity and emissions tracking system across the Southeast that is accessible to public and private burners.
- Ensure coordination and collaboration at the regional, state, and local levels to implement the prescribed fire strategy.

The Strategy describes regional, state, and local activities that need to be accomplished in the short-term to make progress toward achieving the goals by 2025. Additionally, it emphasizes the importance of leveraging the numerous funding sources, organizations, and networks, as well as identifying existing prescribed fire tools and models to maximize efficiency and success. Well-supported, collaborative implementation of the Prescribed Fire Strategy will improve the application of prescribed fire, ensuring longleaf pine restoration and benefits to numerous parties.

## Introduction

The Range-Wide Conservation Plan for Longleaf Pine (Conservation Plan) calls for increasing longleaf pine acreage from 3.4 million to 8 million by 2025. This effort is supported by federal and state agencies and nongovernmental organizations (NGOs) in the Southeast, and dovetails with the Southeast Regional Partnership for Planning and Sustainability's (SERPPAS) focus on "Sustaining the Land of the Longleaf Pine." Prescribed fire is an essential tool for restoring and maintaining the longleaf ecosystem. Based on the limited information available about the amount of prescribed burning currently done in longleaf ecosystems, meeting the 8 million acre goal will depend on the ability to more than double the current amount of prescribed burning in longleaf. Barriers to implementing prescribed fire at the magnitude and frequency needed require that relevant stakeholders work together to develop and implement a strategy to address the practical, social, financial, political, and regulatory challenges impeding forward progress.

An estimated 45% of existing longleaf acres are on public lands. Accordingly, federal, state, and local public land managers have identified longleaf conservation as a management objective where appropriate. However, while public lands are critical to longleaf pine restoration, the majority of forestland potentially available for restoration across the historic longleaf range is privately held. The Conservation Plan projects that 65% of the future 8 million acres of longleaf pine will be in private ownership. For this reason, a strategy to increase prescribed burning and restore longleaf pine must focus on educating, enabling, and empowering private landowners, while supporting continued conservation by public land managers.

In the absence of unlimited resources, longleaf pine restoration efforts, including prescribed fire, need to be spatially focused. The Conservation Plan identifies Significant Geographic Areas (SGAs) where resources, expertise, partners, and action can be targeted to conserve longleaf pine ecosystems at meaningful scales. SGAs include both Significant Landscapes larger than 100,000 acres (Appendix 1), and Significant Sites smaller than 100,000 acres<sup>iv</sup>. Half the 4.6 million acreage increase is being targeted in Significant Landscapes; the remainder is targeted in Significant Sites or distributed across the range. Factors considered in delineating SGAs included occurrence of longleaf pine, conservation areas and protected areas, rare and imperiled longleaf-dependent species, and human population and infrastructure. The SGAs – both Significant Landscapes and Sites – provide an ideal spatial focus for directing resources, capacity-building, and other activities as part of a strategy to increase prescribed burning for longleaf pine.

## The Prescribed Fire Initiative

Prescribed fire is an important land management tool, the use of which should be expanded and supported in numerous southeastern ecosystems. However, a mature coalition (America's Longleaf Restoration Initiative) already exists in support of a fiscal and collaborative approach to longleaf restoration. In today's tight fiscal climate, that support and momentum are necessary to achieve demonstrated results in the near term. Thus, the focus on prescribed fire

to support longleaf pine restoration will achieve tangible and timely results that can be built on later to support work at a broader scale in other fire dependent ecosystems. Progress toward increased burning for longleaf also will yield associated benefits such as reducing the risk of catastrophic wildfire, thereby protecting air quality, and improving wildlife habitat for game, at-risk, and endangered species. Such ancillary benefits enhance natural, economic, and human resources, as well as national security.

In Fall 2011, the SERPPAS Principals established a Prescribed Fire Work Group to synthesize current knowledge about barriers and alternatives related to prescribed fire in the Southeast, and to craft a Comprehensive Strategy for Prescribed Fire to Restore Longleaf Pine. The SERPPAS prescribed fire effort is in concert with the activities of the Longleaf Partnership Council, the collaborative group supporting overall implementation of the Range-wide Conservation Plan for Longleaf Pine.

The Synthesis Report: Current Work on Prescribed Fire Related to Longleaf Pine Restoration<sup>v</sup> uncovered numerous and interrelated challenges that are deterring wider application of prescribed fire in the nine-state historic longleaf pine range (Virginia, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, and Texas). These include:

- Lack of adequately funded, appropriately incentivized programs or private markets that support prescribed burning practitioners and landowners
- Gaps in information dissemination and marketing efforts to key stakeholder groups and the general public
- Lack of qualified, experienced prescribed burning practitioners, burn training, and services
- Legal and practical uncertainties creating a risk averse environment
- Inconsistent smoke management programs and guidelines across the nine states and uncertainty related to air quality limitations on burning
- Lack of adequate information and decision support structures to inform smoke emissions, air quality, and other decisions
- Lack of coordination and fragmented approaches across federal, state, local agencies

The synthesis provided the SERPPAS Prescribed Fire Work Group with a comprehensive understanding of the current state of prescribed burning in the Southeast, and the challenges to be overcome to increase prescribed fire. The next step was to develop strategic priorities to increase capacity to apply prescribed fire in longleaf ecosystems. A survey was conducted of Work Group members and others in the fire, air quality, and longleaf communities to assess stakeholder priorities and available resources to develop and implement a prescribed fire strategy. Sixty-five people responded, and the results indicated clear trends in priority issues, which are reflected in the goals and activities that follow. Data from the 2012 National Prescribed Fire Use Survey Report identifying the impediments limiting prescribed fire nationally and in the Southeast, closely mirror the impediments summarized in the synthesis and the priorities identified in the survey, helping validate the focus of these strategic efforts.

In April 2012, several members of the Work Group conducted a collaborative exercise to begin developing the strategy, using the survey results to inform the focus and prioritization of activities. Ultimately, we focused our effort on developing goals and activities that would expand private landowners' ability to burn, particularly in Significant Geographic Areas for longleaf pine. Our logic was to strategically address: (1) factors that limit available burn days, (2) factors that limit burning on available days, and (3) intervening factors that affect both (1) and (2).

### **A Vision for Prescribed Fire in the Southeast:**

#### **Expanding Burning on Private Lands While Sustaining Strong Fire Programs on Public Lands**

*Our vision for the year 2025 is region-wide application of prescribed fire at the scale and frequency needed to establish an additional 3.4 million acres to achieve and maintain a total of 5.2 million acres of longleaf pine on private lands. The outcome is supported by government programs and private markets; adequate qualified and experienced practitioners; landowner engagement; public acceptance and understanding; and reduced risk of liability. Longleaf conservation and prescribed burning efforts on public lands are well-supported to maintain core ecosystems that are augmented by longleaf on adjoining private lands, and public land managers (particularly in SGAs) play a leadership role in implementing collaborative planning and management of longleaf. Progress toward the vision is achieved by activities at the regional, state, and local levels over the next five years.*

Achieving the goals of the Range-wide Conservation Plan for Longleaf Pine requires that restoration efforts place greater emphasis on private lands. Under the Conservation Plan, longleaf on private lands will have to increase from 1.8 million to 5.2 million acres by 2025 (a net increase of 3.4 million acres), compared to an increase from 1.6 million to 2.8 million acres on public land (a net increase of 1.2 million acres). Because restoration on private lands is expected to exceed that on public lands almost three-fold, this strategy emphasizes actions necessary to increase prescribed fire to restore and maintain new longleaf acres on private lands.

As an ecosystem-scale project, most of the opportunities for collaboration are at the regional level, but effectively reaching private landowners requires activities at the state and local level. Accordingly, the activities recommended in this strategy are nested at the regional, state, and local levels. To further target strategic efforts, the Work Group recommends prioritizing Significant Landscapes and Sites for longleaf pine identified in the Conservation Plan to capitalize on the greatest opportunities and maximize the potential for success.

While prioritizing prescribed burning on private lands is essential to successfully establish and restore longleaf pine, continued support of fire programs on public lands also is necessary to achieve the goals of the Conservation Plan. Federal, state, and local public lands anchor the SGAs, and opportunities exist to expand restoration efforts by increasing the application of fire in these areas. Moreover, public land management agencies are important sources of knowledge, training, technical assistance, resources, and other support, and are well-situated



to lead or help coordinate efforts to plan and manage prescribed burning programs for longleaf pine.

In developing the strategy, the SERPPAS Prescribed Fire Work Group recognized that numerous funding sources, organizations, networks, tools, and models for prescribed fire already exist, and should be leveraged to maximize efficiency and success (Appendix 2). Organizations or networks such as Prescribed Fire Councils, The Longleaf Alliance, the Longleaf Partnership Council, State Coordination Teams<sup>vi</sup>, Local Implementation Teams<sup>vii</sup>, Natural Resources Conservation Service state technical committees, forestry associations, conservation district associations, wildlife and recreation organizations, neighborhood or community associations, as well as state forestry and wildlife agencies can share in and help implement the vision for prescribed fire and longleaf. Existing tools such as the One Message Many Voices campaign and GoodFires.org can be used to enhance the effectiveness of landowner and public communication. State certified prescribed burner training, the Longleaf Academy, and landowner workshops can be expanded to build landowner capacity. The Southern Fire Exchange<sup>viii</sup> and Prescribed Fire Council meetings can be used for knowledge exchange and technology transfer. We recommend taking advantage of these opportunities when implementing the strategy, rather than creating new, potentially duplicative, tools and programs to achieve the goals.

### **Goals and Actions for Achieving the Vision**

Each goal sets a benchmark for achieving the vision by 2025. Activities describe more specific work that needs to be accomplished at the regional, state, and local levels during the next five years to make progress toward achieving the longer-term goals.

#### **Goal One: Ensure sufficient, consistently available resources to promote and implement increased prescribed fire operations.**

Robust, comprehensive funding for prescribed fire is essential for public agencies and private landowners. Agencies need adequate resources to put fire on the ground, as well as to implement effective training, education, outreach, and communication efforts. Private landowners need help offsetting management costs related to applying fire at regular intervals, whether through financial incentives or creative income streams.

#### **National/Regional Level**

To ensure both restoration and maintenance of longleaf pine on private lands, there needs to be continued funding to support frequent fire. Given state and federal budget constraints, creative funding strategies and mechanisms will be important.

**Activity 1:** Develop a clearer understanding of how much funding currently is available for prescribed fire, through what programs they are being delivered, and how much is needed to reach the longleaf restoration goal.

**Activity 2:** Review existing federal programs and identify opportunities to provide additional support for prescribed fire for longleaf pine.

**Activity 3:** Create and implement a communications plan to convey to key decision-makers at the national and regional levels the importance of prescribed fire for longleaf pine, and future resource needs for successful longleaf restoration.

**Activity 4:** Leverage existing organizations (e.g. National Coalition of Prescribed Fire Councils, Longleaf Partnership Council, National Association of State Foresters, Southern Group of State Foresters, Southeastern Association of Fish and Wildlife Agencies and National Bobwhite Conservation Initiative) to advocate for increased federal and state dollars to meet future resource needs for prescribed fire, with a focus on assisting landowners with their first burns, while ensuring maintenance burning at appropriate intervals for longleaf pine.

The Farm Bill is reauthorized every five years, with the next reauthorization scheduled for 2012. Landowner incentive programs in the Farm Bill are critical sources of funding for prescribed fire and the reauthorization process provides an opportunity to ensure adequate federal support. State and non-governmental organizations have the ability to communicate prescribed fire needs to Congress. Demonstrating that Farm Bill conservation programs are achieving desired outcomes can help make the case for continued support.

**Activity 5:** Leverage existing organizations to advocate for maintaining or increasing funding for prescribed fire in longleaf pine from Farm Bill programs.

**Activity 6:** Encourage state agencies and non-governmental organizations to evaluate and advocate that recipients of Farm Bill funding achieve desired outcomes.

### **State Level**

Several programs provide some amount of funding for prescribed fire, but funding levels are often inadequate and engagement with landowners is not always optimum.

**Activity 1:** Involve the State Coordination Teams in identifying and supporting prescribed fire funding and capacity-building opportunities in state programs as well as initiatives for prescribed burning for longleaf on public and private lands.

**Activity 2:** Develop a comprehensive, accessible system to inform private landowners of funding opportunities for prescribed burning, eligibility criteria, and how to apply.

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**Goal Two: Implement focused, effective communication and education campaigns to increase awareness of prescribed fire and willingness to burn.**

Increasing the use of prescribed fire requires a communications and marketing campaign to raise public, landowner, and policymaker awareness about the importance of fire for longleaf restoration. It also requires an education and training campaign to develop landowners' ability, willingness, and comfort with conducting prescribed burning.

**National/Regional Level**

Restoring longleaf pine across its historic range is a southeast region-wide effort. Success depends on increasing regional awareness about the use and importance of prescribed fire, and aligning the Farm Bill and state incentive programs to promote prescribed fire to landowners. Farm Bill and state landowner incentive, cost-share, and technical assistance programs are significant sources of support for prescribed fire. Encouraging successful program applicants to take a prescribed fire training course during the term of their contract would ensure they come out with a better understanding of the basic ecology and application of fire, while helping expand the total number of trained prescribed burners.

**Activity 1:** Coordinate multi-state messaging programs on the use and importance of prescribed fire.

**Activity 2:** Develop and promote an educational component for landowners receiving assistance from Farm Bill, state, or other landowner incentive, cost-share, and technical assistance programs. Leverage the Prescribed Fire Councils, states, and non-governmental organizations to move this vision forward with the appropriate Congressional delegations and/or administrative agencies in Washington, DC.

**State Level**

Existing networks and tools for communication and education can be leveraged to disseminate prescribed fire messages. A peer-to-peer model, using trusted people and programs from the local district or neighbors can be effective for reaching private landowners. Existing educational resources and messaging campaigns (e.g., Longleaf Academy, One Message Many Voices, GoodFires.org, Firewise, and longleaf pine landowner workshops) can be used as models. Public land managers, state forestry associations, state conservation district associations, Prescribed Fire Councils, wildlife/recreation organizations, longleaf organizations and the Southern Fire Exchange can help identify access points for reaching landowners and can be

used to communicate the message through existing media and venues (visitors centers, websites, newsletters, meetings).

**Activity 1:** Train public land managers and extension agents to be ambassadors for longleaf and prescribed fire.

**Activity 2:** Conduct workshops to educate landowners about longleaf pine and prescribed fire.

**Activity 3:** Disseminate prescribed fire messages to landowners through existing networks.

**Activity 4:** Utilize Local Implementation Teams to target education to landowners in Significant Geographic Areas for longleaf pine.

### **Local Level**

Forest landowners in the Southeast have different motivations for managing their land and growing longleaf, thus the effort to encourage increased burning must be framed appropriately. For many landowners this will mean making the case that prescribed fire is beneficial for wildlife, including game species and species of conservation concern. For others, it will mean making an economic case for using prescribed fire to manage forest productivity and prevent wildfire.

**Activity 1:** Leverage landowner motivations by developing, marketing, and targeting materials appropriate for their land management objectives. Work through existing networks, including Longleaf Local Implementation Teams and landowner organizations, to reach the appropriate audiences.

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**Goal Three: Increase the number of trained, qualified and experienced burners (both landowners and contractors) conducting prescribed burning on private and public lands.**

Currently, the capacity to burn rests with federal and state agencies, some NGOs, and some private landowners. Increasing the amount of acreage treated with prescribed fire will require that we have more trained and qualified prescribed burning practitioners and service providers. Expanded training opportunities are needed for private landowners to get initial and continued training to burn on their own. Adequate technical assistance, agency personnel, and

equipment are needed to support private landowners and build their capacity and confidence to burn.

### Regional Level

Prescribed Burn Associations are organized landowner cooperatives that are user owned, controlled, and operated. These associations share knowledge, experience and equipment to reduce risk and increase the application and safety of prescribed fire. Prescribed Burn Associations offer the potential to increase landowner capacity for prescribed burning.

**Activity 1:** Determine what policies/institutional changes are needed to support formation of Prescribed Burn Associations and advocate for those policies and changes.

Some states in the Southeast have agreements for burn manager reciprocity with other states. Currently, Alabama has reciprocity with Mississippi, Georgia, and South Carolina; South Carolina has reciprocity with Mississippi, Georgia, and Florida. This allows, for example, a certified prescribed burn manager from Mississippi to operate in Alabama without being certified as a burn manager in Alabama. Reciprocity is facilitated by states having similar prescribed burning laws and requirements.

**Activity 2:** Encourage reciprocity among states to enable certified burn managers to operate in multiple states.

### State Level

In addition to Prescribed Burn Associations, models for building capacity include the Greater Okefenokee Association of Landowners (GOAL), the Gulf Coastal Plain Ecosystem Partnership (GCPEP) Ecosystem Support Team, The Nature Conservancy's Ecosystem Restoration Teams (ERTs), and Georgia's Interagency Burn Team (IBT) (Appendix 3). GOAL is a landowner organization providing communication and collaboration to manage, protect, and promote forest resource stewardship in and around the Okefenokee Swamp in Georgia and Florida. GCPEP is a partnership of federal and state land management agencies, the military, non-governmental organizations, and private companies working to increase buffers around military installations and conserve biodiversity and recreational opportunities in southern Alabama and Florida's panhandle. GCPEP's Ecosystem Support Team assists with on-the-ground management, including prescribed burning on GCPEP lands. ERTs are mobile, supplemental resources for agency fire managers, assisting with burns on federal, state, county and private lands. Similar to the ERTs, Georgia's IBT is a mobile "strike team" facilitating application of prescribed fire in Georgia.

**Activity 1:** Identify, adapt, and diffuse models through existing networks to expand private landowner capacity in Significant Landscapes, Significant Sites, and state-identified priority areas for longleaf pine (e.g., areas identified in state Forest and

Wildlife Action Plans, and Natural Resources Conservation Service priority areas for longleaf).

**Activity 2:** Establish new and support existing prescribed burn “strike teams” around Significant Landscapes, Significant Sites, and state-identified priority areas for longleaf pine (e.g., areas identified in state Forest and Wildlife Action Plans, and Natural Resources Conservation Service priority areas for longleaf) to increase the capacity to burn on public and private lands.

### Local Level

Consulting foresters, private burn consultants, and other qualified private service providers can help increase the capacity to conduct prescribed burning. Such private sector burners are not numerous, and they often struggle to find enough work. Opportunities such as “batching” the needs for fire by multiple landowners in an area, or developing a practitioner registry could help attract and support private consultants.

**Activity 1:** Identify and develop opportunities to engage and support private sector practitioners capable of planning and conducting prescribed fire.

Increasing landowner capacity to burn requires training private landowners and fostering their ability and comfort level to burn independently. Bringing landowners together for training also provides opportunities to create support networks and may result in the development of landowner burn cooperatives. Training should be concise, straight-forward, and practical, taking into consideration the time and resource constraints of private landowners.

**Activity 2:** Work with the states to establish locally-based prescribed fire training academies to educate and empower landowners to burn on their own, with scholarships available to promote landowner engagement.

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### **Goal Four: Minimize landowners’ risk of liability associated with prescribed fire.**

Liability is an important consideration for private landowners and public land managers who conduct prescribed burning. Minimizing the risk of liability will require increasing understanding of – and perhaps modifying – prescribed fire laws, developing robust and affordable liability insurance, and promoting public communication and outreach to allay concerns about fire-related risks.

## Regional Level

Each of the nine states in the historic longleaf pine range has a law in place related to prescribed burning, but the laws vary in terms of the legal obligations imposed on individuals and the guidelines for liability protection. For example, Florida's law protects the property owner or agent from liability only if s/he has a certified prescribed burn manager in charge of the burn, while Georgia law protects the property owner or agent if s/he has an individual with previous prescribed burning experience or training in charge of the burn. Also, the laws in Florida, Georgia, and South Carolina protect burners from liability unless "gross negligence" is proven, which is a stricter standard than in the other southeastern states.

**Activity 1:** Analyze and identify appropriate changes in state and local laws and policies regarding liability to decrease the risk of applying fire.

## State Level

The extent to which landowners understand the protections offered by their state's prescribed burning laws and the availability and coverage of liability insurance is unclear.

**Activity 1:** Use prescribed burn training programs to educate landowners about state laws protecting them from liability as well as insurance coverage available in the state.

By arranging for group coverage for its members, Prescribed Burn Associations or similar landowner cooperatives may be able to reduce the costs of liability insurance. The Edwards Plateau Prescribed Burn Association in Texas has procured insurance coverage for all of its 300 members for about \$15,000/year.

**Activity 2:** Determine what organizational structure/policies need to be in place to allow groups of private landowners to obtain group liability insurance coverage and disseminate that information through the State Coordination and Local Implementation Teams, and the Southern Fire Exchange.

Communication campaigns such as One Message Many Voices and state Prescribed Fire Awareness Weeks, and organizational venues such as the Southern Wildland Urban Interface Council and state Prescribed Fire Councils can be used to address public concerns about smoke and escaped fire. Messaging should acknowledge air quality impacts of wildfire, and the potential to minimize those impacts by conducting prescribed burns for which weather and fuel conditions are carefully monitored. Messaging should also highlight what burners do to minimize smoke impacts, while acknowledging there are uncertainties in weather and other conditions that require the public to be prepared in case the unexpected happens.

**Activity 3:** Expand the content of existing messaging and public education campaigns to promote tolerance of smoke and educate the public about what to do if they encounter smoke.

## Local Level

In addition to the potential to reduce liability insurance costs, Prescribed Burn Associations can decrease the risk and increase the safety of applying fire by ensuring members have proper training and equipment, and experienced help. Landowner workshops can provide similar benefits.

**Activity 1:** Engage State Coordination and Local Implementation Teams to encourage formation of Prescribed Burn Associations in Significant Geographic Areas for longleaf pine where needed.

**Activity 2:** Use landowner workshops and training programs to educate burners about and encourage fire safety and best smoke management practices.

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## **Goal Five: Support prescribed fire programs on public lands.**

Almost half the existing acres in longleaf are on public lands. It will be important to maintain these acres through active management with fire, due to their value as core forests for the Significant Geographic Areas. Active restoration needs to take place on other public lands to convert suitable sites currently in other forest types or land classifications to longleaf pine. Restoring longleaf on these sites depends on reaching desired fuels condition classes through fire management. Federal and state agencies have prioritized longleaf restoration in some areas, particularly for endangered species. This is an opportunity we should capitalize on to put fire on the ground for longleaf restoration. Budget cuts threaten state agency fire programs and will impede progress if action is not taken (see Goal One).

## Regional Level

**Activity 1:** Leverage the Wildland Fire Leadership Council to build support among federal and state agency leadership in the Southeast for prescribed burning activities on public land.

## State Level

**Activity 1:** Increase training and staffing capacity to enable public land managers to more effectively apply fire to restore longleaf.

**Activity 2:** Implement fire on public lands with existing longleaf pine ecosystems at the necessary frequency of 2-3 years.



**Activity 3:** Implement fire on public lands with a desired future condition of longleaf pine at the necessary frequency of 2-3 years.

**Activity 4:** Encourage greater inclusion of prescribed burning in federal and state agency land management plans and ensure adequate resources for public land managers to apply prescribed fire to the extent described in their land management plans.

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**Goal Six: Minimize local smoke impacts on air quality and public health and safety. Maximize coordination between air and fire communities.**

To successfully increase prescribed burning for longleaf restoration, we must be mindful of air quality laws and standards and work to minimize air quality impacts. Improving communication and coordination between the air quality and fire communities at the national and state levels and employing best smoke management practices at the local level will help facilitate increased burning.

**National/Regional Level**

Better communication and coordination between the Environmental Protection Agency (EPA) and the fire community at a high level is essential to ensure sound policy that enables increased prescribed burning while providing for smoke management and air quality. Opportunities for public comment on regulatory changes offer one avenue for the fire community to provide input, but more proactive conversations and joint learning between fire and air leadership at the national level are necessary as well.

**Activity 1:** Encourage the Wildland Fire Leadership Council and Environmental Protection Agency to work together to develop air quality standards that support increased prescribed burning in the Southeast.

**Activity 2:** Leverage existing organizations to engage in relevant EPA public comment periods to ensure a coordinated approach to prescribed fire and air quality in the Southeast.

**State Level**

Regional air quality in Significant Geographic Areas for longleaf pine is in attainment with federal air quality standards; most nonattainment areas are around urban areas. Air quality was not identified as a high priority for this strategy, as currently it is not an issue for the more

rural areas where burning for longleaf is generally done and needs to be concentrated in the future. Of greater concern are the localized impacts of prescribed fire on air quality. When increasing burning for longleaf near urban areas or air quality monitors, smoke management guidelines will be more restrictive, and violations are more likely to occur. We need to raise awareness of the potential for adverse impacts in these areas, and ensure the time and resources necessary to demonstrate an exceptional event are factored into the decision to burn there. Otherwise, burning should be prioritized in Significant Geographic Areas for longleaf pine, where there is a lack of human population and infrastructure constraining longleaf management with fire.

**Activity 1:** Prioritize prescribed burning in areas where air quality is less of a concern (e.g., the more rural Significant Landscapes and Sites). Preferentially provide financial and other incentives to enable burning to occur in these prioritized areas.

Often, private landowners are not aware of best smoke management practices and tools for learning about and considering smoke impacts from prescribed fire. The National Coalition of Prescribed Fire Councils coordinated with SERPPAS to develop a Prescribed Fire Smoke Management pocket guide, to provide smoke management recommendations to prescribed burners in a format that is useful and easily accessible. Prescribed burn training programs offered by state forestry agencies are another avenue to increase smoke management literacy.

**Activity 2:** Disseminate SERPPAS Smoke Management pocket guide.

**Activity 3:** Hold regular workshops and/or training programs in every longleaf state to promote best smoke management practices and educate landowners about weather and smoke forecasting tools, such as those available through the Southern Fire Exchange.

The South Carolina Bureau of Air Quality and the South Carolina Forestry Commission have convened a diverse work group – including air quality regulators, government, non-governmental, and private prescribed burners, regulated industries, local governments, and health and other interest groups – to develop a prescribed fire communication plan for the state. This work group provides a model for other states to ensure consistent messaging, joint outreach, and shared ownership and commitment to prescribed fire and air quality.

**Activity 4:** Expand the number of state work groups representing air quality, public health, forest, fire, longleaf, and wildlife interests in the public, non-governmental, and private sectors (similar to the partnership in South Carolina) to improve communication, build relationships, and achieve shared goals.

**Activity 5:** Incorporate air quality information into One Message Many Voices campaign.

The EPA's Exceptional Events Rule provides an opportunity for states to avoid air quality violations associated with properly conducted prescribed fires. However, state agencies have

found taking advantage of the Rule challenging, because they must make a demonstration for each violation recorded at an air quality station, and provide extensive evidence tying the violations back to prescribed burning. Moreover, states tend to make the case for an exceptional event long after the prescribed fire occurred, so they do not always have adequate records to trace the air quality impact back to its source. EPA is working to develop improved guidance on the use of the Exceptional Events Rule. In the meantime, reviewing case-by-case documentation developed by states and EPA's decision documents for individual exceptional events demonstrations could inform states in preparing exceptional event demonstrations and improve efficiency of the demonstration process.

**Activity 6:** Form a work group of representatives from state land management and air quality agencies and EPA to enhance communication, foster sharing of lessons learned from past prescribed fire exceptional event demonstrations, and improve understanding of EPA's regulations and guidance for exceptional events.

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**Goal Seven: Implement a consistent fire activity and emissions tracking system across the Southeast that is accessible to public and private burners.**

Results from the 2012 National Prescribed Fire Use Survey Report show that, in 2011, 82% of all forested acres managed with prescribed fire were in the Southeast. Further, six of the seven states that burned more than 250,000 acres for forestry objectives were in the historic longleaf range. These numbers give us a big picture view of burning in the Southeast, but we lack more specific data on burning in longleaf. With more fine-grained and longleaf-centric data on the number of acres burned and where, we can better determine: how many more acres need to be burned to reach longleaf restoration goals, where to concentrate burning, education, and capacity building efforts, and what the air quality and smoke impacts are from prescribed fire, among other things. Developing a regional fire activity and air emissions tracking system is essential to inform strategic activities and resource allocation decisions, and to measure progress toward our goals.

**Regional Level**

Some states in the Southeast, for example Florida and South Carolina, currently track several prescribed fire variables. There is also relatively good data on the amount of prescribed burning being conducted on federal lands. Nevertheless, the data remain inconsistent and incomplete. A collaborative effort is underway to develop a fire activity and emissions tracking system, involving Georgia, North Carolina, Tennessee, South Carolina, and Louisiana. This system will track all fires, including prescribed burns. A grant from the US Forest Service is

supporting a Project Manager at the North Carolina Forest Service to lead the effort. An important element of this, and all similar tracking systems, will be to include data specific to longleaf (i.e., a field that tracks “fuel type”).

**Activity 1:** Track and support the existing effort of GA, NC, TN, SC, and LA to develop a fire activity and emissions tracking system that includes data on fuel type.

**Activity 2:** Encourage and provide financial support for other states in the longleaf range to develop or improve online information tracking systems to collect consistent data in their states.

Existing efforts to collect data on longleaf acres and condition class and to establish state restoration goals will be important to build on and support in the future. These efforts include the US Department of Agriculture Forest Inventory and Analysis Program, the Forest Service Activity Tracking System, the Southern Research Station, the Longleaf Partnership Council, the State Coordination Teams and the Local Implementation Teams.

**Activity 3:** Work with existing and emerging efforts to track and share consistent data on longleaf pine acreage, condition class, and management activities. Develop state-specific maps detailing relevant longleaf data.

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**Goal Eight: Ensure coordination and collaboration at the regional, state, and local levels to implement the prescribed fire strategy.**

A challenge to implementing this strategy is that SERPPAS, the Longleaf Partnership Council, and other relevant agencies and organizations operate independently to support progress toward their organizational goals. Thus, successful implementation of this plan will depend on coordination, communication, and cooperation among these and other key stakeholders.

**Regional Level**

**Activity 1:** Implement the National Coalition of Prescribed Fire Councils’ communications strategy and enhance the Coalition’s website to help improve communication and collaboration among state Prescribed Fire Councils to build partnerships, share information, and take action to implement this strategy.

**Activity 2:** Identify and support a part time program manager to facilitate and coordinate implementation of this strategy.

## State Level

Recognizing that the southeastern states are at different places with regard to the sophistication of their prescribed burning programs, a one-size-fits-all strategy is not useful. Some states will require basic capacity building and funding, while others will benefit from expanding existing successes or targeting specific barriers.

**Activity 1:** Support State Coordination Teams in integrating prescribed fire goals and objectives, tailored to the state's prescribed fire needs, into state land management programs and activities.

State Coordination Teams have been established in many states to help identify state level goals for longleaf restoration, track accomplishments and coordinate and leverage opportunities among public and private programs. These teams are an important coordination/delivery mechanism for enabling more fire on the ground. They can help scope local needs, but they need support to operate effectively.

**Activity 2:** Support State Coordination Teams in coordinating prescribed burning activities for longleaf pine at the state level. This should include channeling additional funding and technical assistance as needed to facilitate strategic goal accomplishment.

## Local Level

Local Implementation Teams work to bring specific landowners, managers and their partners together to put fire on the ground in the Significant Geographic Areas for longleaf pine. They are responsible for identifying areas for focused restoration and maintenance activities, bringing key stakeholders together, defining and implementing priority management actions as well as tracking and reporting results of the local efforts.

**Activity 1:** Support Local Implementation Teams in coordinating prescribed burning activities for longleaf pine at the local level.

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## Implementing the Prescribed Fire Strategy

No one agency, organization, or organized body has the authority or the capacity to implement this strategy single-handedly. Achieving the vision and goals will require voluntary support and collaboration by multiple parties at the regional, state, and local level. To initiate taking this strategy from plan to implementation, we propose:

1. Forming a team, led by a program manager, to facilitate and coordinate implementation.
2. Identifying those players critical for implementation and securing their buy-in.
3. Developing an implementation plan, including a vision for each implementing agency and priorities for the goals and activities.
4. Identifying the entity or group of entities that will provide the lead on completing each activity. Lead groups will decide on details for implementing the activities.
5. Developing a time line for key milestones or deliverables.
6. Evaluating on an annual basis the effectiveness of activities and progress toward goals.

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<sup>i</sup> Wildland Fire Leadership Council. (2011). *A National Cohesive Wildland Fire Strategy: Southeastern Regional Assessment*. Retrieved (9 February 2012) from <http://www.forestsandangelands.gov/strategy/documents/wfec/meetings/13oct2011/reports/southeastregionalassessment20110930.pdf>

<sup>ii</sup> Melvin, Mark. (2012). *2012 National Prescribed Fire Use Survey Report*. Retrieved (10 July 2012) from <http://www.prescribedfire.net/>

<sup>iii</sup> America's Longleaf. (2009). *Range-Wide Conservation Plan for Longleaf Pine*. Retrieved (29 May 2012) from [http://americaslongleaf.org/media/86/conservation\\_plan.pdf](http://americaslongleaf.org/media/86/conservation_plan.pdf)

<sup>iv</sup> *Ibid.*, p. 21-23.

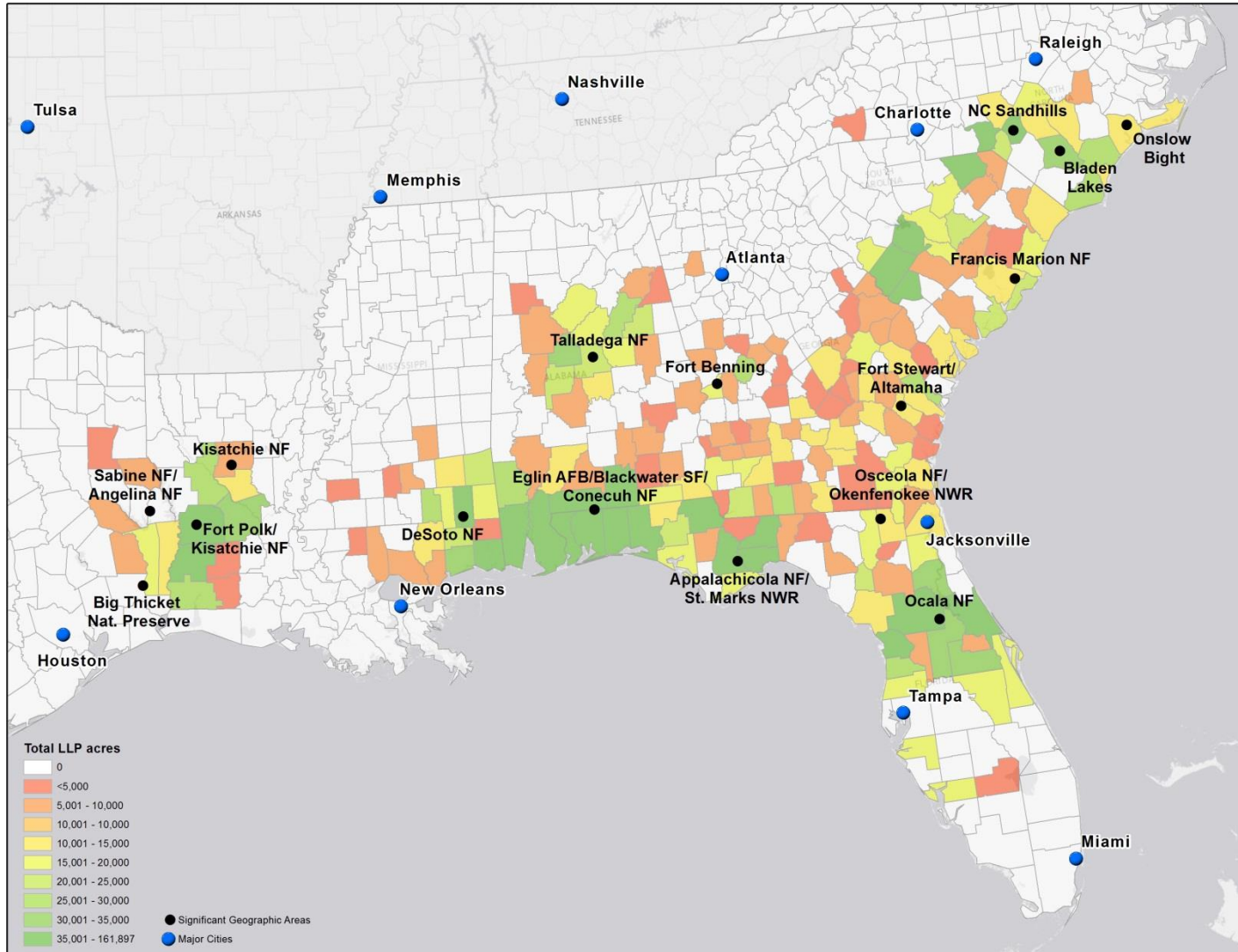
<sup>v</sup> Burke, C., T. Steelman and C. Serenari. (2012). *Synthesis Report: Current Work on Prescribed Fire Related to Longleaf Pine Restoration*. Regional Readiness Cooperative. April. 27 pp. Retrieved (22 May 2012) from [http://www.southernfireexchange.org/Products/Synthesis\\_01-12.pdf](http://www.southernfireexchange.org/Products/Synthesis_01-12.pdf)

<sup>vi</sup> State Coordination Teams are state-level partnerships for America's Longleaf Restoration Initiative, led by State Conservationists and Foresters, helping define programs, allocate funds, and report accomplishments for the Initiative.

<sup>vii</sup> Local Implementation Teams are local-level partnerships for America's Longleaf Restoration Initiative, typically centered around Significant Geographic Areas, responsible for bringing together key stakeholders, implementing priority management actions, and tracking and reporting results of the local efforts.

<sup>viii</sup> <http://www.southernfireexchange.org/>

## Appendix 1. Significant Geographic Landscapes for Longleaf Pine Restoration



**Significant Geographic Landscapes for Longleaf Pine Restoration** were developed from expert opinion and numerous data inputs including occurrence of longleaf forests and threatened and endangered species. Shading indicates longleaf pine acreage according to USDA Forest Service Forest Inventory and Analysis data.

## Appendix 2. Resources Available for Increasing Prescribed Fire to Restore Longleaf Pine

### Comprehensive Strategy for Prescribed Fire Goals

- One:** Ensure sufficient, consistently available resources to promote and implement increased prescribed fire operations.
- Two:** Implement focused, effective private landowner communication and education campaigns to increase awareness of prescribed fire and willingness to burn.
- Three:** Increase the number of trained, qualified and experienced burners (both landowners and contractors) conducting prescribed burning on private and public lands.
- Four:** Minimize landowners’ risk of liability associated with prescribed fire.
- Five:** Support prescribed fire programs on public lands.
- Six:** Minimize local smoke impacts on air quality and public health and safety. Maximize coordination between air and fire communities.
- Seven:** Implement a consistent fire activity and emissions tracking system across the Southeast that is accessible to public and private burners.
- Eight:** Ensure coordination and collaboration at the regional, state, and local levels to implement the prescribed fire strategy.

### Resources to Address Goals

Goal	Agency / Organization	Program / Area	Type of Support	Qualifying Entities	Description	Contact
<b>One</b>	National Fish and Wildlife Foundation	Longleaf Stewardship Fund	Funding	Local & State Government, Academic Institutions & Non-Governmental Organizations (NGOs)	Restoration of longleaf pine ecosystems through collaborative, result-oriented actions	Suzanne Sessine Assistant Director, Eastern Partnership Office <a href="mailto:Suzanne.Sessine@nfwf.org">Suzanne.Sessine@nfwf.org</a>
	National Wild Turkey Federation	Habitat Conservation	Funding	Individual	Conservation to improve turkey habitat	(800) 843-6983
	State Agencies	Alabama Agricultural & Conservation Development Commission Program	Funding	Individual	Funds locally established objectives to include forestry practices such as prescribed burning	Soil & Water Conservation Committee (334) 242-2620
		Alabama Landowner Incentive Program	Funding	Individual	Funds fish and wildlife habitat improvement projects	Landowner Incentive Program (LIP) Coordinator (334) 353-0503
		Florida Landowner Incentive Program	Funding	Individual	Funds fish and wildlife habitat improvement projects	Florida Forest Service County Forester Office
		Georgia Landowner Incentive Program	Funding	Individual	Funds bobwhite quail habitat improvement projects	Georgia Department of Natural Resources, Wildlife Resources Division Professional Biologist



## Appendix 2. Resources Available for Increasing Prescribed Fire to Restore Longleaf Pine

Goal	Agency / Organization	Program / Area	Type of Support	Qualifying Entities	Description	Contact
		Louisiana East and West Gulf Coastal Plain Prescribed Burn Initiatives and Landowners for Wildlife Program	Funding and Technical	Individual	Provide technical assistance and cost-share funding for prescribed burning within the East and West Gulf Coastal Plains of Louisiana	Louisiana Department of Wildlife and Fisheries, Private Lands Program David Breithaupt (225) 765-3962 Cody Cedotal (225) 765-2354
		Louisiana Forest Productivity Program and Forest Land Enhancement Program	Funding	Individual	Provide technical assistance and cost-share funding for prescribed burning	Louisiana Department of Agriculture and Forestry District Offices
		Mississippi Forest Resource Development Program	Funding	Individual	Provides cost-share funding to implement actions that will improve timber production and wildlife development	Brendix Glasgow (662) 842-5312
		North Carolina Community Firewise Project Grants & Urban Interface Project Grants	Funding	Government, NGOs, Communities	Grants to reduce hazard fuels, develop & improve firebreaks, and for land management practices	North Carolina Forest Service (919) 857-4801
		North Carolina Forest Development Program	Funding	Individual	Provides cost-sharing assistance for forest stand improvement	North Carolina Forest Service (919) 857-4801
		North Carolina Landowner Incentive Program	Funding	Individual	Targets restoration of fire-dependent longleaf pine ecosystems	LIP Biologist (910) 866-8343
		South Carolina Forest Renewal Program	Funding	Individual	Provides cost-share assistance to individuals to improve woodlands	County Project Forester with the South Carolina Forestry Commission
		Texas Cost-share programs	Funding	Individual	Texas Forest Service, Texas Parks & Wildlife Department (TPWD), USFWS, and USDA offer cost-share assistance for prescribed fires.	Local USDA County Extension or TPWD office
		Virginia Community Firewise Project Grants	Funding	Government, NGOs, Communities	Grants to reduce hazardous fuels, develop & improve firebreaks, and for land management practices	Virginia Department of Forestry John Miller (434) 977-6555
	US Air Force	Air Force Wildland Fire Center	Technical	Federal Government (Air Force)	The center provides coordination of mobile fire teams and technical assistance for other installations	James Furman (850) 882-8399
	US Departments of Agriculture (USDA) and Interior (USDOl)	National Fire Plan	Funding, Coordination	All	Departments will work with states and other stakeholders to implement the National Fire Plan	USDA-Sandra Cantler (202) 205-1512 USDOl-Jenna Sloan (202) 606-5858
	USDA Natural Resources Conservation Service (NRCS)	Conservation Reserve Program (CP 3, CP 11, CP 36)	Funding	Individual	Annual rental program and cost share program for establishing long-term, resource conserving covers on eligible farmland	Local Farm Service Agency (FSA) Office
		Conservation Reserve Enhancement Program	Funding	Individual	Annual rental program and cost share program for protection of environmental sensitive land (erosion, wildlife, and surface water)	Local FSA Office
Conservation Stewardship Program		Funding	Individual	Annual land use payment to producers who increase conservation activities and enhance & maintain current conservation activities	Local NRCS Office	

## Appendix 2. Resources Available for Increasing Prescribed Fire to Restore Longleaf Pine

Goal	Agency / Organization	Program / Area	Type of Support	Qualifying Entities	Description	Contact
		Cooperative Conservation Partnership Initiative	Funding & Technical	State & Local Government, Indian Tribes, NGO's, Other Entities	Partners leverage non-federal funding with CCPI funds and enter multi-year agreements for financial and technical assistance to enrich conservation outcomes across the landscape.	<a href="http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/ccpi">http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/ccpi</a>
		Environmental Quality Incentives Program	Funding	Individual	Financial and technical assistance to help plan and implement conservation practices which address natural resource concerns such as soil, water, plant, animal, and air	Local NRCS Office
		Healthy Forest Reserve Program	Funding	Individual	Cost-share program to promote habitat for endangered species, improve biodiversity, and enhance carbon sequestration	Local NRCS Office
		Wildlife Habitat Incentive Program	Funding	Individual	Cost-share program for landowners who want to improve wildlife habitat on agricultural land, nonindustrial private forest land, and Indian land	Local NRCS Office
	USDA Forest Service (USDA FS)	Competitive Grants to the States	Funding	State Government	A percentage of the USDA FS allocation is invested in projects selected through a competitive process. Processes are informed by the national guidance and administered through a joint effort between state forestry and USFS leadership at the Regional Level.	<a href="http://www.fs.fed.us/spf/redesign/index.shtml">http://www.fs.fed.us/spf/redesign/index.shtml</a>
		Forest Legacy Program (FLP)	Funding	State Government	FLP is a Federal program in partnership with States, which assists State efforts to protect privately owned, environmentally sensitive forest lands	Southern Region (404) 347-5214 <a href="http://www.fs.fed.us/spf/coop/programs/loa/flp.shtml">http://www.fs.fed.us/spf/coop/programs/loa/flp.shtml</a>
		Forest Stewardship Program (FSP)	Technical	Individual	FSP provides technical assistance through State forestry agency partners to nonindustrial private forest owners to foster active, long-term forest management	State Forester <a href="http://www.fs.fed.us/spf/coop/programs/loa/fsp.shtml">http://www.fs.fed.us/spf/coop/programs/loa/fsp.shtml</a>
		Southern Pine Beetle	Funding	Individual	Cost share to encourage individuals to initiate prevention measures against beetles and to restore beetle impacted lands	State Forestry Agency
	Fish & Wildlife (USFWS)	Partners for Fish and Wildlife	Funding	Individual	Provide financial and technical assistance for the benefit of federal trust species	US Fish & Wildlife Service office
	<b>Two &amp; Three</b>	America's Longleaf Restoration Initiative	Collaborative Longleaf Restoration Effort	Awareness, Coordination	All	This initiative is a collaborative effort of public and private partners to encourage the range-wide efforts to reestablish and conserve longleaf pine ecosystems
Association for Fire Ecology		Science-based Decision Making	Awareness, Training & Research	All	Work to improve knowledge and use of fire in land management; also has a wildland fire certification program	<a href="http://fireecology.org/">http://fireecology.org/</a>

## Appendix 2. Resources Available for Increasing Prescribed Fire to Restore Longleaf Pine

Goal	Agency / Organization	Program / Area	Type of Support	Qualifying Entities	Description	Contact
	Extension	Universities	Awareness	All	Provides support for forest landowners	<a href="http://www.aces.edu/forestry/">www.aces.edu/forestry/</a> <a href="http://www.sfrc.ufl.edu/extension/index.html">www.sfrc.ufl.edu/extension/index.html</a> <a href="http://extension.uga.edu/agriculture/forestry/">http://extension.uga.edu/agriculture/forestry/</a> <a href="http://msucares.com/forestry/index.html">http://msucares.com/forestry/index.html</a> <a href="http://www.ces.ncsu.edu/forestry/">www.ces.ncsu.edu/forestry/</a> <a href="http://www.clemson.edu/extension/natural_resources/forestry/">www.clemson.edu/extension/natural_resources/forestry/</a> <a href="http://www.sref.info/resources/states/tx">www.sref.info/resources/states/tx</a>
	Joseph W. Jones Ecological Research Center	Longleaf Ecology Research	Awareness, Coordination, Research	All	Runs programs centered on longleaf research, conservation/restoration, and education/outreach	<a href="http://www.jonesctr.org">www.jonesctr.org</a>
	National Institute of Food and Agriculture	Beginning Farmer and Rancher Development Program	Funding	Regional, Local Government and Private Entities	Entities may receive funding to develop programs for beginning farmers and ranchers	<a href="http://www.start2farm.gov/beginning-farmers-and-ranchers-development-program/about">http://www.start2farm.gov/beginning-farmers-and-ranchers-development-program/about</a>
	National Interagency Prescribed Fire Training Center	Prescribed Fire Training	Training	Government, Tribal agencies, and Other Organizations	Training program to provide maximum field experience along with classroom instruction	<a href="http://www.fws.gov/fire/pftc/">http://www.fws.gov/fire/pftc/</a>
	Prescribed Burn Associations	Texas	Awareness, Liability, Training, & Equipment	Individuals	Texas landowner cooperatives for prescribed burning	Local USDA County Extension or TPWD office
	Prescribed Fire Councils	Alabama, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Texas, Virginia	Awareness, Research, Training	All	Prescribed fire councils foster collaboration among parties in the state or region with an interest or stake in prescribed fire	<a href="http://www.alpfc.org/">http://www.alpfc.org/</a> <a href="http://www.floridaforestservice.com/wildfire/rx_councils.html">http://www.floridaforestservice.com/wildfire/rx_councils.html</a> <a href="http://www.garxfire.com">www.garxfire.com</a> <a href="http://www.legis.louisiana.gov/boards/board_members.asp?board=849">http://www.legis.louisiana.gov/boards/board_members.asp?board=849</a> <a href="http://www.msfirecouncil.org/">www.msfirecouncil.org/</a> <a href="http://www.ncprescribedfirecouncil.org/">www.ncprescribedfirecouncil.org/</a> <a href="http://www.clemson.edu/cafls/departments/forestry/pfc/index.html">http://www.clemson.edu/cafls/departments/forestry/pfc/index.html</a> <a href="http://www.tpwd.state.tx.us/landwater/land/technical_guidance/burn/">http://www.tpwd.state.tx.us/landwater/land/technical_guidance/burn/</a> <a href="http://www.dof.virginia.gov/fire/vpfc.htm">http://www.dof.virginia.gov/fire/vpfc.htm</a>
	Southern Fire Exchange	Regional Fire Science Delivery Program	Awareness, Funding, Research, Tools	All	Consolidates fire information and allows the fire community to interact	<a href="http://www.southernfireexchange.org/">www.southernfireexchange.org/</a> Alan Long <a href="mailto:ajl2@ufl.edu">ajl2@ufl.edu</a>
	Southern Group of State Foresters	One Message Many Voices	Awareness	All	Campaign directed at sending a clear message to educate the public on prescribed fires	<a href="http://fireecology.org/docs/conferences/4IFEC/Abstracts/209.pdf">http://fireecology.org/docs/conferences/4IFEC/Abstracts/209.pdf</a>
	State Agencies	Community Wildfire Protection Plan	Awareness	All	Planning tool used to prioritize funding for hazard fuels reduction, compatible with Firewise	<a href="http://www.forestsandrangelands.gov/communities/cwpp.shtml">http://www.forestsandrangelands.gov/communities/cwpp.shtml</a>
		Alabama	Awareness, Contract Rx Services, Technical Assistance, & Training	All	Alabama Forestry Commission offers fire management services	Alabama Forestry Commission (334) 240-9300
		Florida	Awareness, Contract Rx Services, Technical Assistance, & Training	All	Florida Forest Service offers fire management services	Florida Forest Service (850) 488-6611

## Appendix 2. Resources Available for Increasing Prescribed Fire to Restore Longleaf Pine

Goal	Agency / Organization	Program / Area	Type of Support	Qualifying Entities	Description	Contact
		Georgia	Awareness, Contract Rx Services, Technical Assistance, & Training	All	Georgia Forestry Commission offers fire management services	Georgia Forestry Commission County office
		Louisiana	Awareness, Technical Assistance, & Training	All	Louisiana Department of Agriculture & Forestry offers fire management services	Forest Protection Chief (225) 925-4500
		Mississippi	Awareness, Contract Rx Services, Technical Assistance, & Training	All	Mississippi Forestry Commission offers fire management services	Local Mississippi Forestry Commission Office or Southern Regional Fire Training Center (601) 420-6004
		North Carolina	Awareness, Contract Rx Services, Technical Assistance, & Training	All	North Carolina Forestry Service fire management services	North Carolina Forest Service (919) 857-4801
		South Carolina	Awareness, Contract Rx Services, Technical Assistance, & Training	All	South Carolina Forestry Commission offers fire management services	South Carolina Forestry Commission (803) 896-8800
		Texas	Awareness, Technical Assistance, & Training	All	Soil and Water Conservation Districts, Texas Cooperative Extension, Texas Forest Service, Texas Parks & Wildlife, The Nature Conservancy of Texas, US Fish and Wildlife Services, & USDA Natural Resources Conservation Services offer technical and training assistance	County NRCS office, Local USDA County Extension ,or TPWD office
		Virginia	Awareness, Technical Assistance, & Training	All	Virginia Department of Forestry offers fire management services	Virginia Department of Forestry (434) 977-6555
	Tall Timbers Research Station	Fire Ecology Research	Awareness, Coordination, & Research	All	Resource center for fire ecology, game bird management, vertebrate ecology, and forestry	(850) 893-4153
	The Longleaf Alliance	Longleaf Organization	Awareness, Coordination, & Research	All	Focused on sustaining longleaf	<a href="http://www.longleafalliance.org/">http://www.longleafalliance.org/</a>
	The Nature Conservancy	Ecosystem Restoration Teams	Awareness, Coordination, & Research	All	These teams, which include multiple agencies and organizations, work to maintain fire where it is beneficial. An example is Alabama's Longleaf Ecosystem Restoration Team (ALERT).	<a href="http://www.nature.org/ourinitiatives/habitats/forests/howwework/maintaining-fires-natural-role.xml">http://www.nature.org/ourinitiatives/habitats/forests/howwework/maintaining-fires-natural-role.xml</a>
	US Air Force	Air Force Wildland Fire Center	Training	Federal Government (Air Force) & other	The center provides experiential and classroom training at Eglin AFB to Air Force personnel and other cooperating personnel	James Furman (850) 882-8399
	USDA FS, USDO, National Association of State Foresters	Firewise	Awareness & Training	All	Encourages local solutions for wildfire safety by collaborating with homeowners, local leaders, and firefighters; offers courses and training	(617) 984-7486
	USDA FS	GoodFires.org	Awareness	All	13 state effort to strengthen appreciation for natural lands and to increase understanding and support for prescribed fires	<a href="http://www.goodfires.org/about">http://www.goodfires.org/about</a>
VistMyForest.org		Awareness	All	Site focused on providing awareness to forest resources and issues	<a href="http://visitmyforest.org/">http://visitmyforest.org/</a>	

## Appendix 2. Resources Available for Increasing Prescribed Fire to Restore Longleaf Pine

Goal	Agency / Organization	Program / Area	Type of Support	Qualifying Entities	Description	Contact
	Wildlife Conservation	Habitat Joint Ventures (Atlantic Coast, East Gulf Coastal Plain, Lower Mississippi Valley), National Bobwhite Conservation Initiative, National Wild Turkey Federation, Quail Unlimited, & Quail Forever	Awareness & Coordination	All	Wildlife conservation organizations	<a href="http://www.acjv.org/">http://www.acjv.org/</a> <a href="http://www.lmvjv.org/">http://www.lmvjv.org/</a> <a href="http://www.egcpjv.org/">http://www.egcpjv.org/</a> <a href="http://bringbackbobwhites.org/">http://bringbackbobwhites.org/</a> <a href="http://www.nwtf.org/">www.nwtf.org/</a> <a href="http://www.quailforever.org/">www.quailforever.org/</a> <a href="http://www.qu.org/">www.qu.org/</a>
<b>Four</b>	State Agencies	Policy	Liability	All	State laws on prescribed fire including liability	<a href="http://www.forestry.alabama.gov/PB_Act.aspx?bv=1&amp;s=7">http://www.forestry.alabama.gov/PB_Act.aspx?bv=1&amp;s=7</a> <a href="http://www.sfrc.ufl.edu/Extension/florida_forestry_information/planning_and_assistance/prescribed_burning_regulations.html">http://www.sfrc.ufl.edu/Extension/florida_forestry_information/planning_and_assistance/prescribed_burning_regulations.html</a> <a href="http://warnell.forestry.uga.edu/fuels/Burning_laws/Georgia_fire_laws.html">http://warnell.forestry.uga.edu/fuels/Burning_laws/Georgia_fire_laws.html</a> <a href="http://www.ldaf.louisiana.gov/portal/Offices/Forestry/ForestProtection/CertifiedPrescribedBurnManager/tabid/249/Default.aspx">http://www.ldaf.louisiana.gov/portal/Offices/Forestry/ForestProtection/CertifiedPrescribedBurnManager/tabid/249/Default.aspx</a> <a href="http://www.fwrc.msstate.edu/pubs/burning.pdf">www.fwrc.msstate.edu/pubs/burning.pdf</a> <a href="http://www.cals.ncsu.edu/wq/lpn/statutes/nc/prescribedburning.htm">http://www.cals.ncsu.edu/wq/lpn/statutes/nc/prescribedburning.htm</a> <a href="http://www.state.sc.us/forest/reflaws.htm#act">http://www.state.sc.us/forest/reflaws.htm#act</a> <a href="http://www.texasagriculture.gov/Home/ProductionAgriculture/PrescribedBurnProgram/PrescribedBurningBoardLawsandRegulations.aspx">http://www.texasagriculture.gov/Home/ProductionAgriculture/PrescribedBurnProgram/PrescribedBurningBoardLawsandRegulations.aspx</a> <a href="http://www.dof.virginia.gov/fire/index.htm">http://www.dof.virginia.gov/fire/index.htm</a>
<b>Five</b>	Federal Emergency Management Agency (FEMA)	Fire Department Training	Funding & Training	Government	Funding for fire departments and volunteer firefighter organizations to increase the number of trained, “front line” fire fighters available in their communities	<a href="http://www.fema.gov/staffing-adequate-fire-emergency-response-grants">http://www.fema.gov/staffing-adequate-fire-emergency-response-grants</a>
	Military Installations	Environmental Management Funds & Timber Receipts	Funding	Federal Government	Fund burning on military land	
	State Agencies	Firewise Project Grants	Funding	Government, NGO’s, Communities	Grants to reduce hazard fuels, develop & improve firebreaks, and for land management practices	<a href="http://www.firewise.org">http://www.firewise.org</a> Patrick Mahoney, Regional Firewise Advisor for the South <a href="mailto:firewisepatrick@nfpa.org">firewisepatrick@nfpa.org</a> State liaison contact information: <a href="http://submissions.nfpa.org/firewise/fw_state_liaisons.php">http://submissions.nfpa.org/firewise/fw_state_liaisons.php</a>

## Appendix 2. Resources Available for Increasing Prescribed Fire to Restore Longleaf Pine

Goal	Agency / Organization	Program / Area	Type of Support	Qualifying Entities	Description	Contact
		Louisiana	Funding	Local Government	Cost-share grant to fire department to organize, train, and equipment department to prevent and suppress fires	Forest Protection Chief (225) 925-4500
	US Air Force	Air Force Wildland Fire Center	Coordination	Federal Government (Air Force)	The center provides coordination of mobile fire teams and technical assistance for other installations	James Furman (850) 882-8399
	USDA FS	Hazardous Fuels Reduction/Prescribed Burning	Funding	Federal Government	Hazardous fuels reduction, wildlife habitat management, timber receipts burning on National Forest lands	
	USFWS	Prescribed Burning on National Wildlife Refuges	Funding	Federal Government	Wild land fire management funding for burning on refuges	
	US General Services Administration	Federal Surplus Personal Property Donation Program	Equipment	Government	Surplus property/equipment available to public agencies, volunteer fire departments, training centers	<a href="http://www.gsa.gov/portal/content/104590">http://www.gsa.gov/portal/content/104590</a>
Six	Prescribed Fire Councils	Best Management Practices, Smoke Management Program	Air Quality	All	The fire councils can provide expertise, advocate, and promote best management practices	<a href="http://www.alpfc.org/">http://www.alpfc.org/</a> <a href="http://www.floridaforestservice.com/wildfire/rx_councils.html">http://www.floridaforestservice.com/wildfire/rx_councils.html</a> <a href="http://www.garxfire.com">www.garxfire.com</a> <a href="http://www.legis.louisiana.gov/boards/board_members.asp?board=849">http://www.legis.louisiana.gov/boards/board_members.asp?board=849</a> <a href="http://www.msfirecouncil.org/">www.msfirecouncil.org/</a> <a href="http://www.ncprescribedfirecouncil.org/">www.ncprescribedfirecouncil.org/</a> <a href="http://www.clemson.edu/cafls/departments/fo_restry/pfc/index.html">http://www.clemson.edu/cafls/departments/fo_restry/pfc/index.html</a> <a href="http://www.tpwd.state.tx.us/landwater/land/technical_guidance/bum/">http://www.tpwd.state.tx.us/landwater/land/technical_guidance/bum/</a> <a href="http://www.dof.virginia.gov/fire/vpfc.htm">http://www.dof.virginia.gov/fire/vpfc.htm</a>
	State Agencies	Procedures and Requirements	Air Quality	All	States provide smoke management plans	<a href="http://www.alpfc.org/archives/docs/Alabama%20Smoke%20Management%20Program.pdf">http://www.alpfc.org/archives/docs/Alabama%20Smoke%20Management%20Program.pdf</a> <a href="http://www.dep.state.fl.us/air/rules/regulatory/regional_haze_imp/app_n.pdf">http://www.dep.state.fl.us/air/rules/regulatory/regional_haze_imp/app_n.pdf</a> <a href="http://www.gaepd.org/air/airpermit/download/planningsupport/regdev/smoke_plan/SMP%20Draft%20one%20DS.pdf">http://www.gaepd.org/air/airpermit/download/planningsupport/regdev/smoke_plan/SMP%20Draft%20one%20DS.pdf</a> <a href="http://www.ncforestservice.gov/fire_control/fc_smoke_management_guidelines.htm">http://www.ncforestservice.gov/fire_control/fc_smoke_management_guidelines.htm</a> <a href="http://www.state.sc.us/forest/smgglos.htm">http://www.state.sc.us/forest/smgglos.htm</a> <a href="http://info.sos.state.tx.us/pls/pub/readtac\$ext.TacPage?sl=R&amp;app=9&amp;p_dir=&amp;p_rloc=&amp;p_tloc=&amp;p_ploc=&amp;pg=1&amp;p_tac=&amp;ti=37&amp;pt=9&amp;ch=263&amp;rl=51">http://info.sos.state.tx.us/pls/pub/readtac\$ext.TacPage?sl=R&amp;app=9&amp;p_dir=&amp;p_rloc=&amp;p_tloc=&amp;p_ploc=&amp;pg=1&amp;p_tac=&amp;ti=37&amp;pt=9&amp;ch=263&amp;rl=51</a> <a href="http://www.dof.virginia.gov/fire/prescribed-smoke-mgmt.htm">http://www.dof.virginia.gov/fire/prescribed-smoke-mgmt.htm</a>

## Appendix 2. Resources Available for Increasing Prescribed Fire to Restore Longleaf Pine

Goal	Agency / Organization	Program / Area	Type of Support	Qualifying Entities	Description	Contact
	US Environmental Protection Agency (EPA)	Policy guidance	Air Quality	All	Federal policy on prescribed fire including treatment as exceptional events	<a href="http://www.epa.gov/ttn/chief/ap42/ch13/final/c13s01.pdf">http://www.epa.gov/ttn/chief/ap42/ch13/final/c13s01.pdf</a> <a href="http://www.epa.gov/ttn/oarpg/t1/fr_notices/e_xeventfr.pdf">http://www.epa.gov/ttn/oarpg/t1/fr_notices/e_xeventfr.pdf</a>
	USDA FS Southern Research Station	Enhanced Fire Weather Forecasts	Air Quality	All	Tool being developed to provide enhanced fire weather forecasts	<a href="http://www.srs.fs.usda.gov/">http://www.srs.fs.usda.gov/</a>
Seven & Eight	Interagency	Cooperative Agreements	Coordination	Federal & State Government, NGO's	Interagency agreements to exchange resources enable fire management across jurisdictions	
	State Prescribed Fire Councils & National Coalition of Prescribed Fire Councils	Best Management Practices, Smoke Management Program, Collaboration between state agencies	Coordination	All	The fire councils can provide expertise, advocate, and promote collaboration between state agencies; the coalition can help promote collaboration between state fire councils	<a href="http://www.alpfc.org/">http://www.alpfc.org/</a> <a href="http://www.floridaforestservice.com/wildfire/rx_councils.html">http://www.floridaforestservice.com/wildfire/rx_councils.html</a> <a href="http://www.garxfire.com">www.garxfire.com</a> <a href="http://www.legis.louisiana.gov/boards/board_members.asp?board=849">http://www.legis.louisiana.gov/boards/board_members.asp?board=849</a> <a href="http://www.msfirecouncil.org/">www.msfirecouncil.org/</a> <a href="http://www.ncprescribedfirecouncil.org/">www.ncprescribedfirecouncil.org/</a> <a href="http://www.clemson.edu/cafls/departments/forestry/pfc/index.html">http://www.clemson.edu/cafls/departments/forestry/pfc/index.html</a> <a href="http://www.tpwd.state.tx.us/landwater/land/technical_guidance/burn/">http://www.tpwd.state.tx.us/landwater/land/technical_guidance/burn/</a> <a href="http://www.dof.virginia.gov/fire/vpfc.htm">http://www.dof.virginia.gov/fire/vpfc.htm</a> <a href="http://www.prescribedfire.net/">http://www.prescribedfire.net/</a>
	State Agencies	Emission Tracking Systems	Coordination	All	States can collaborate in terms of smoke management plans	<a href="http://www.alpfc.org/archives/docs/Alabama%20Smoke%20Management%20Program.pdf">http://www.alpfc.org/archives/docs/Alabama%20Smoke%20Management%20Program.pdf</a> <a href="http://www.dep.state.fl.us/air/rules/regulatory/regional_haze_imp/app_n.pdf">http://www.dep.state.fl.us/air/rules/regulatory/regional_haze_imp/app_n.pdf</a> <a href="http://www.gaepd.org/air/airpermit/download/planningsupport/regdev/smoke_plan/SMP%20Draft%20one%20DS.pdf">http://www.gaepd.org/air/airpermit/download/planningsupport/regdev/smoke_plan/SMP%20Draft%20one%20DS.pdf</a> <a href="http://www.ncforestservice.gov/fire_control/fc_smoke_management_guidelines.htm">http://www.ncforestservice.gov/fire_control/fc_smoke_management_guidelines.htm</a> <a href="http://www.state.sc.us/forest/smgglos.htm">http://www.state.sc.us/forest/smgglos.htm</a> <a href="http://info.sos.state.tx.us/pls/pub/readtac\$ext.TacPage?sl=R&amp;app=9&amp;p_dir=&amp;p_rloc=&amp;p_tloc=&amp;p_ploc=&amp;pg=1&amp;p_tac=&amp;ti=37&amp;pt=9&amp;ch=263&amp;rl=51">http://info.sos.state.tx.us/pls/pub/readtac\$ext.TacPage?sl=R&amp;app=9&amp;p_dir=&amp;p_rloc=&amp;p_tloc=&amp;p_ploc=&amp;pg=1&amp;p_tac=&amp;ti=37&amp;pt=9&amp;ch=263&amp;rl=51</a> <a href="http://www.dof.virginia.gov/fire/prescribed-smoke-mgmt.htm">http://www.dof.virginia.gov/fire/prescribed-smoke-mgmt.htm</a>
	USDA FS, USDOJ, Bureau of Land Management (BLA), NPS (National Park Services), BIA (Bureau of Indian Affairs), USFWS, & States	National Wildfire Coordinating Group	Coordination	All	Coordinates programs of wildfire management agencies to encourage efficiencies and effectiveness	<a href="http://www.nwcg.gov/">http://www.nwcg.gov/</a>

## Appendix 3. Models and Innovative Programs for Increasing Prescribed Fire to Restore Longleaf Pine

### Comprehensive Strategy for Prescribed Fire Goals

- One:** Ensure sufficient, consistently available resources to promote and implement increased prescribed fire operations.
- Two:** Implement focused, effective private landowner communication and education campaigns to increase awareness of prescribed fire and willingness to burn.
- Three:** Increase the number of trained, qualified and experienced burners (both landowners and contractors) conducting prescribed burning on private and public lands.
- Four:** Minimize landowners' risk of liability associated with prescribed fire.
- Five:** Support prescribed fire programs on public lands.
- Six:** Minimize local smoke impacts on air quality and public health and safety. Maximize coordination between air and fire communities.
- Seven:** Implement a consistent fire activity and emissions tracking system across the Southeast that is accessible to public and private burners.
- Eight:** Ensure coordination and collaboration at the regional, state, and local levels to implement the prescribed fire strategy.

### Models and Innovative Programs to Address Goals

Program	Goal(s) Addressed	Description	Contact
<b>Apalachicola National Forest</b>	One, Five	Apalachicola National Forest (ANF) has 20 full time fire employees who burn approximately 100,000 acres/year. Burns are conducted 11 months of the year on 3-year rotations. Approximately 20% of the burns are conducted on a boundary line (urban interface). Burns also are conducted in two wilderness areas. ANF is a leader for large prescribed burns in wilderness areas and near urban interfaces including cities, airports, and roads.	Apalachicola National Forest Marcus Beard <a href="mailto:mbeard@fs.fed.us">mbeard@fs.fed.us</a> <a href="http://www.fs.usda.gov/resources/apalachicola/landmanagement/resourcemanagement">http://www.fs.usda.gov/resources/apalachicola/landmanagement/resourcemanagement</a>
<b>Fire Learning Network</b>	Two, Three, Eight	The Fire Learning Network is a unique avenue for landscape-scale collaborative planning, regional capacity building, and national coordination for fire dependent ecosystems.	The Nature Conservancy <a href="http://www.conservationgateway.org/topic/fire-landscapes">http://www.conservationgateway.org/topic/fire-landscapes</a> <a href="mailto:fire@tnc.org">fire@tnc.org</a>



### Appendix 3. Models and Innovative Programs for Increasing Prescribed Fire to Restore Longleaf Pine

<b>Program</b>	<b>Goal(s) Addressed</b>	<b>Description</b>	<b>Contact</b>
<b>Florida Forest Service</b>	Five, Six, Seven	Florida Forest Service is a leader in state fire management. The agency has developed tools for fuels management including the Florida Risk Assessment System, the Smoke Screening Tool, and the collection of Live Fuel Moistures. The agency also has a Fire Management Information System which it uses to inform burn authorizations to limit the impacts of smoke on sensitive areas.	Florida Forest Service (850) 488-6111 <a href="http://floridaforestservice.com/wildfire/index.html">http://floridaforestservice.com/wildfire/index.html</a>
<b>Fort Benning</b>	Five, Eight	With the help of federal agencies, NGOs, and academic institutions, Fort Benning is a leader in utilizing timber harvests and prescribed burning to convert existing forests to longleaf pine. Partner efforts have increased longleaf pine acreage from 6,000 to 34,000 acres since 1990.	The Nature Conservancy (706) 682-0104  US Army Infantry Center (706) 544-7076
<b>Georgia Interagency Burn Team</b>	One, Eight	The Georgia Interagency Burn Team (IBT) shows innovation in improving wildlife habitat by employing prescribed fire on private property. Agencies and organizations including The Nature Conservancy, Georgia Forestry Commission, Georgia Prescribed Fire Council, Jones Ecological Center, and U.S. Forest Service share staff and resources to facilitate prescribed burning.	Partners for Fish & Wildlife (912) 265-9336 x 25 <a href="http://www.georgiawildlife.org/node/2459">http://www.georgiawildlife.org/node/2459</a> <a href="http://www.fws.gov/southeast/pubs/facts/brncon.pdf">http://www.fws.gov/southeast/pubs/facts/brncon.pdf</a>
<b>Greater Okefenokee Association of Landowners</b>	One, Two, Three, Eight	This unique association has better equipped, educated, and positioned landowners for fire management on lands near the Okefenokee National Wildlife Refuge. Landowners maintain resource lists of fire equipment, personnel, and helicopter dip-sites, and the Georgia Forestry Commission provides free prescribed burn assistance to landowners within one mile of the Refuge.	Senior Forester Okefenokee Wildfire Hazard Mitigation (912) 287-4915 <a href="http://www.fws.gov/okefenokee/Goal.pdf">http://www.fws.gov/okefenokee/Goal.pdf</a> <a href="http://www.wildfireprograms.com/search.html?displayId=370">http://www.wildfireprograms.com/search.html?displayId=370</a>
<b>Gulf Coastal Plains Ecosystem Partnership</b>	One, Eight	This partnership demonstrates innovation in private-public collaboration. Together, the partners have preserved over 1 million acres of longleaf pine. The Ecosystem Support Team has assisted in burning more than 39,000 acres of GCPEP lands.	The Longleaf Alliance (850) 623-0987 <a href="http://www.longleafalliance.org/gcpep">http://www.longleafalliance.org/gcpep</a>
<b>John M. Bethea State Forest</b>	Two, Five, Eight	Bethea State Forest is between Okefenokee National Wildlife Refuge and Osceola National Forest. It has been commended for the development of an innovative, strategic prescribed fire plan and program, which has helped establish longleaf pine with slash pine on fire and drought damaged land.	Florida Forest Service (904) 259-2157 <a href="http://www.floridaforestservice.com/state_forests/john_bethea.html">http://www.floridaforestservice.com/state_forests/john_bethea.html</a>  State Review <a href="http://www.dep.state.fl.us/lands/ARC/LMR/LMR0809/John%20M.%20Bethea%20SF%20FINAL%20LMR%20Report.pdf">http://www.dep.state.fl.us/lands/ARC/LMR/LMR0809/John%20M.%20Bethea%20SF%20FINAL%20LMR%20Report.pdf</a>

### Appendix 3. Models and Innovative Programs for Increasing Prescribed Fire to Restore Longleaf Pine

Program	Goal(s) Addressed	Description	Contact
<b>National Interagency Prescribed Fire Training Center</b>	Three, Five, Eight	The National Interagency Prescribed Fire Training Center is a leader in prescribed fire training. The Center's 20-day program covers a wide variety of topics including fire monitoring, smoke management, and National Forest fire programs. It partners field and classroom training and is open to private, public, and non-profit agencies. The interagency partnership includes USDA Forest Service, USDI Fish and Wildlife Service, USDI Bureau of Land Management, USDI National Park Service, USDI Bureau of Indian Affairs, Florida Division of Forestry, and The Nature Conservancy.	Prescribed Fire Training Center Tallahassee, FL <a href="http://www.fws.gov/fire/pftc/">http://www.fws.gov/fire/pftc/</a> Greg Seamon (850) 523-8631
<b>Nature Conservancy Strike Teams</b>	One, Three, Five, Seven, Eight	Prescribed Fire Strike Teams are interagency teams coordinated by The Nature Conservancy. The teams work to decrease fuel loads, increase training, and maximize the number of acres burned. Strike teams such as the Lake Wales Ridge Prescribed Fire Team are leaders in prescribed burning in the wildland urban interface. In addition, they have developed a spatial database for tracking fire history.	The Nature Conservancy (407) 682-3664 <a href="http://www.nature.org/ourinitiatives/regions/northamerica/unitedstates/florida/placesweprotect/decades_of_fire_report_final-2.pdf">http://www.nature.org/ourinitiatives/regions/northamerica/unitedstates/florida/placesweprotect/decades_of_fire_report_final-2.pdf</a>
<b>NC Longleaf Coalition</b>	Two, Eight	NC Longleaf Coalition has a Prescribed Fire Team, which works closely with the NC Prescribed Fire Council to increase acres burned annually. Projects for the Prescribed Fire Team include determining burn windows, generating a certified burner list, and establishing landscape level burn projects.	North Carolina Longleaf Coalition <a href="mailto:info@nclongleaf.org">info@nclongleaf.org</a> <a href="http://www.nclongleaf.org/">http://www.nclongleaf.org/</a>
<b>NC Prescribed Fire Council</b>	Two, Eight	NC Prescribed Fire Council has developed committees on topics such as education, membership, implementation, data collection, and regulatory environment. The website contains important resources, is easy to navigate, and is well maintained.	North Carolina Prescribed Fire Council <a href="mailto:admin@ncprescribedfirecouncil.org">admin@ncprescribedfirecouncil.org</a> <a href="http://www.ncprescribedfirecouncil.org/index.html">http://www.ncprescribedfirecouncil.org/index.html</a>
<b>Okefenokee National Wildlife Refuge</b>	Two, Three, Five, Eight	The ONWR is the largest in the National Wildlife Refuge in the eastern U.S. It maintains a staff of 14 fire management personnel, has 3 million dollars' worth of equipment, and burns 12-15,000 acres each year. It has also developed cooperative ventures with adjacent landowners.	Okefenokee National Wildlife Refuge (912) 496-7836 <a href="mailto:okefenokee@fws.gov">okefenokee@fws.gov</a> <a href="http://www.fws.gov/okefenokee/Wildland%20Fire.html">http://www.fws.gov/okefenokee/Wildland%20Fire.html</a>
<b>Prescribed Burn Associations</b>	One, Two, Three, Four	Prescribed Burning Associations (PBA) in Texas and Oklahoma are first-of-their-kind landowner cooperatives, providing members with knowledge, experience, and equipment for prescribed burning on private lands. PBAs are currently being considered in Alabama.	Texas Parks and Wildlife Department (800) 792-1112 <a href="http://www.prescribedburn.org/">http://www.prescribedburn.org/</a>  Coastal Bend Prescribed Burn Association (361) 362-0430 <a href="http://www.prescribedburn.org/index.html">http://www.prescribedburn.org/index.html</a>

### Appendix 3. Models and Innovative Programs for Increasing Prescribed Fire to Restore Longleaf Pine

Program	Goal(s) Addressed	Description	Contact
<b>US Air Force Wildland Fire Center</b>	1, 3, 5, 6	This program was established at Eglin AFB to improve fire management across the Air Force through training and technical assistance. Assistance includes sending teams to directly assist installations with prescribed fire implementation. This model provides potential for replication at other DoD facilities.	James Furman (850) 882-8399