



Overview of America's Longleaf Restoration Initiative and the Longleaf Partnership Council

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Longleaf Historical Extent

- ❖ **Longleaf pine once dominated ecosystems in the Southeastern United States from southeastern Virginia to eastern Texas. The longleaf ecosystem is fire dependent and covers a range of site conditions.**

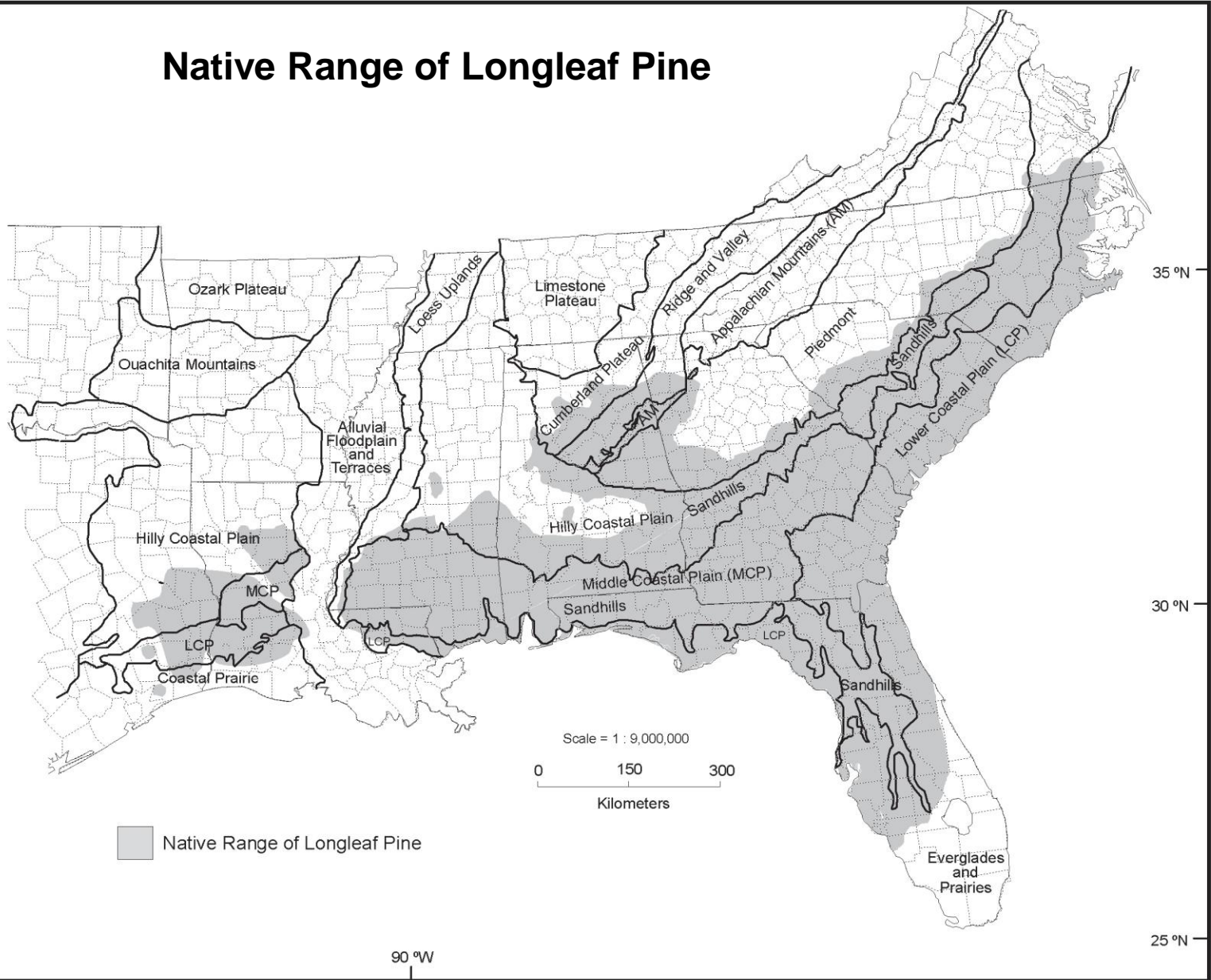


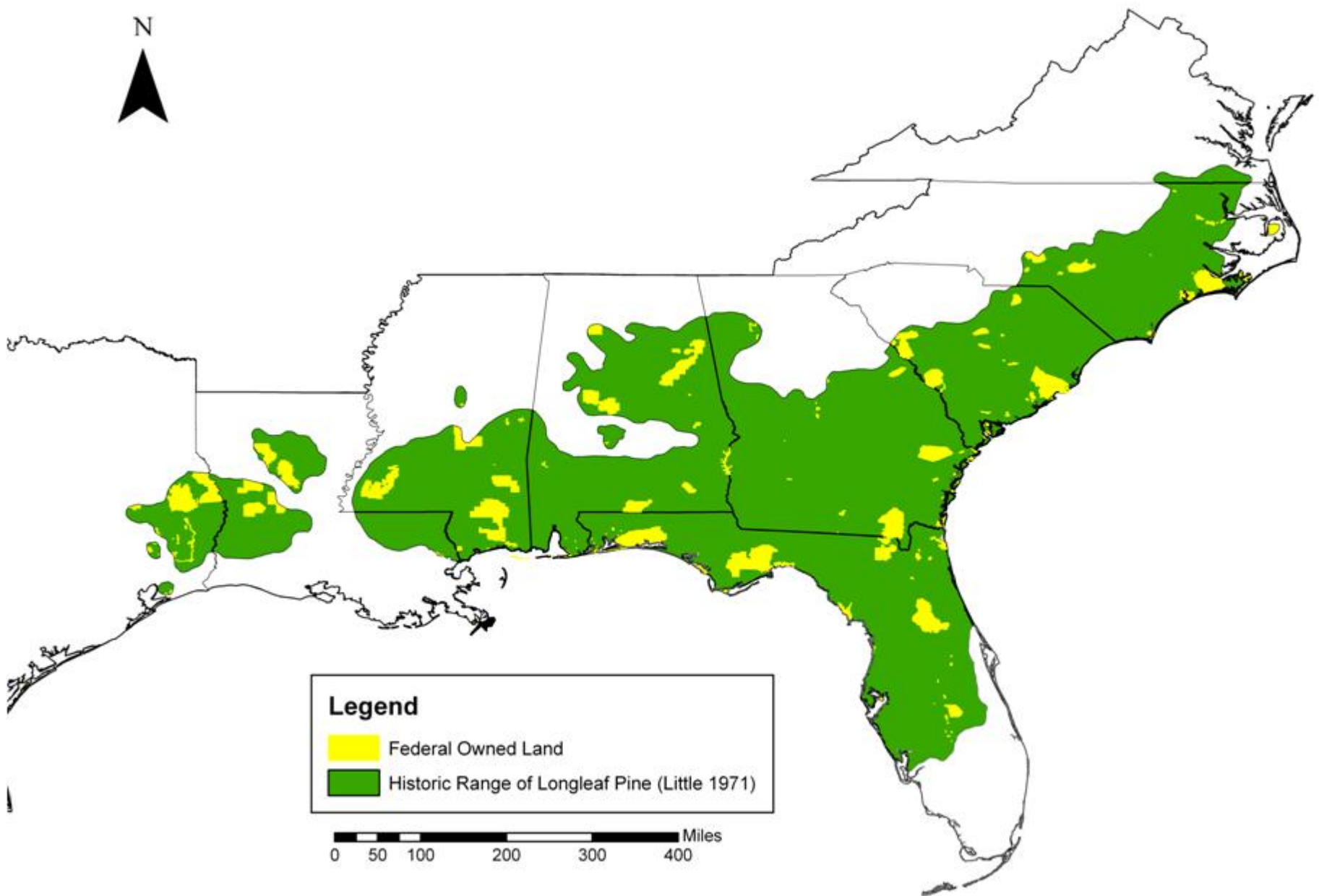
Historical Account of Piney Woods



- ❖ “We find ourselves on the entrance of a vast plain which extends west sixty or seventy miles.... This plain is mostly a forest of the great long-leaved pine, the earth covered with grass, interspersed with an infinite variety of herbaceous plants, and embellished with extensive savannas...” **William Bartram, 1791**
Travels through North and South Carolina, Georgia,...
- ❖ 'In "pine barrens" most of the day. Low, level, sandy tracts; the pines wide apart; the sunny spaces between full of beautiful abounding grasses, Liatris, long, wand-like Solidago, saw palmettos, etc., covering the ground in garden style. Here I sauntered in delightful freedom, meeting none of the cat-clawed vines, or shrubs, of the alluvial bottoms.' - **John Muir**
- ❖ "Not a part of this great natural wonder worthy of the name forest remains intact within the state's borders. It has been rooted out by hogs, mutilated by turpentine, cut down in lumbering, or burned up through negligence. The complete destruction of this forest constitutes one of the major social crimes of American history." **B.W. Wells, ecologist, 1932**

Native Range of Longleaf Pine







The First 400 years

- ❖ Longleaf occurred on an estimated 90 million acres at its peak, dominating on an estimated 60 million acres, probably the largest area on the continent dominated by a single tree species.
- ❖ By the mid-1900's, over half of that forest was gone.
- ❖ By 1995, an estimated 3 million acres remained, most of it in poor condition.



Old Growth Remaining

- ❖ Of the original **over 90 million acres** of longleaf pine **now only 8,777 acres of old growth** longleaf pine forest tracts remain. 56%, or 4,942 acres, can be found on Eglin Air Force Base. Another almost 29% may be found on four privately owned forests in Georgia. (Source – The Fire Forest, Longleaf Pine-Wiregrass Ecosystem, Georgia Wildlife Federation)

Old Growth Longleaf Pine Forest



Plant Diversity



- ❖ The longleaf pine ecosystem supports high plant diversity. **More than 40 species have been documented in a single square meter**, and as many as 170 species in 1000 square meters, or $\frac{1}{4}$ acre. This **level of diversity is very high** for ecosystems in the temperate United States, and is among the most diverse in North America. **Mostly these are herbaceous plants, which are found in combination with native grasses.....These grasses provide the fine fuels that carry the fires that are crucial for Longleaf reproduction and survival.**

Land Scope America

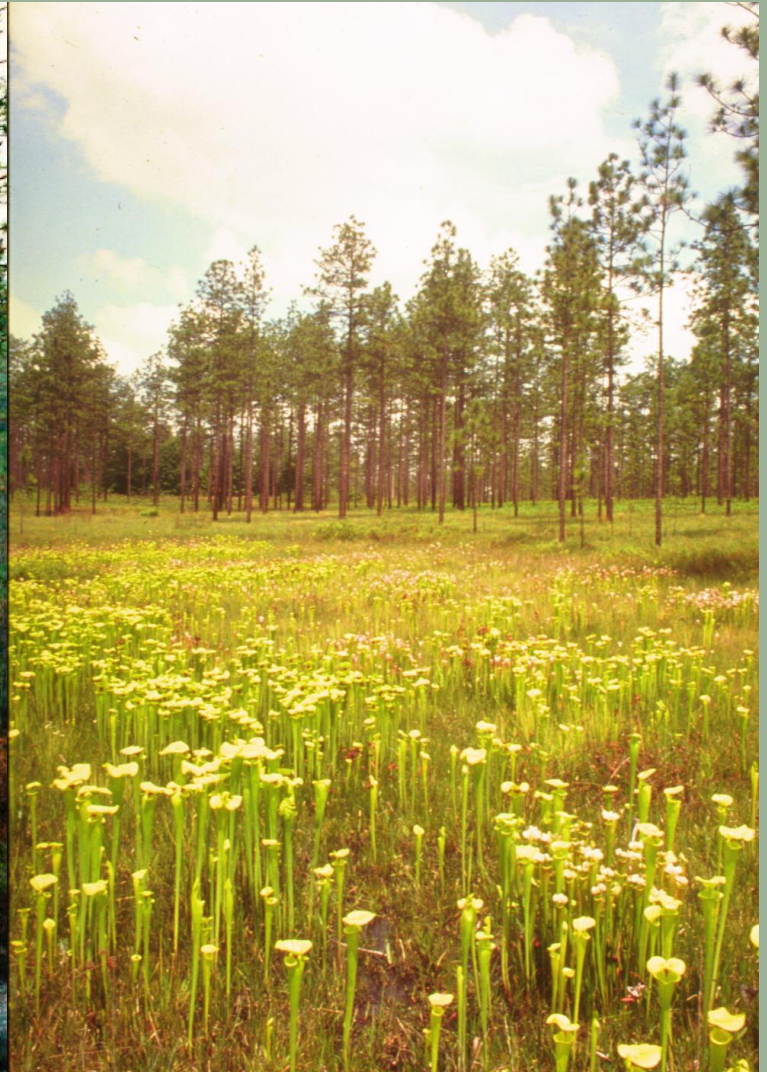
Plant Diversity



- ❖ “remarkable floristic diversity”
- ❖ At a within-community scale, longleaf vegetation can be among the most diverse in North America with some examples having 40 or more species of higher plants per square meter (Walker and Peet 1983) or 170 per 1000 m² (Peet, Carr and Gramling 2006; W. J. Platt personal communication)....This **diversity is particularly conspicuous in the floristic richness and endemism** of the region. There are on the order of **6000 vascular plant taxa that occur on the southeastern Coastal Plain, which represents almost a quarter of all plant species that occur in North America north of Mexico**. Moreover, 1630 taxa are endemic to the Coastal Plain, and with 1306 full species included (Sorrie and Weakly 2001, 2006). The region **falls just short of qualifying as one of the top 25 biodiversity hotspots on the globe** (see Myers et al. 2000). A **large proportion of the endemics occur in the longleaf-dominated vegetation** (Sorrie and Weakley 2005).

From Robert K. Peet, *Ecological Classification of Longleaf Pine Woodlands*

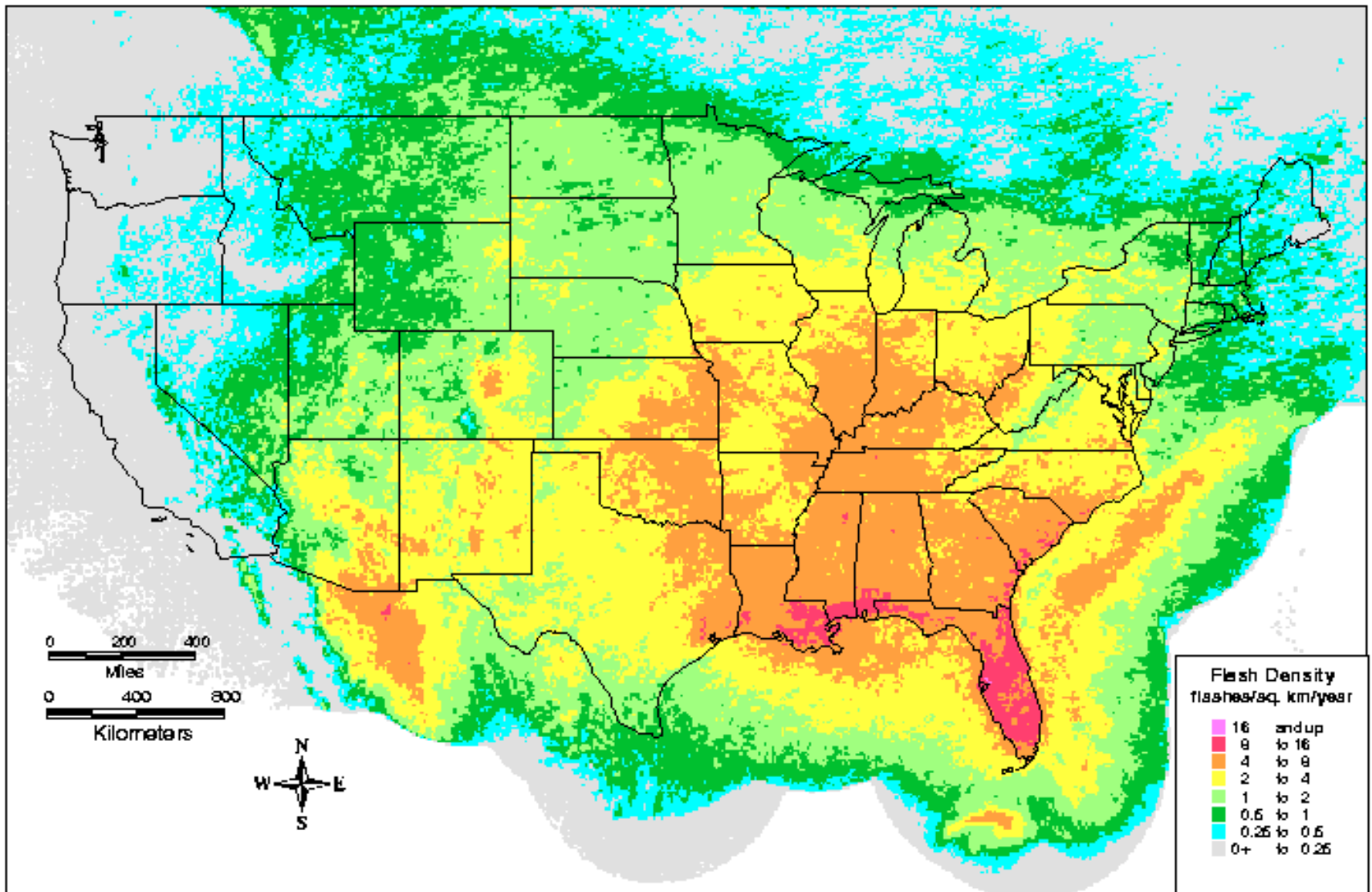
Prescribed Fire



Lightning – The Natural Fire Starter



Lightning shaped the **longleaf forest** by igniting fires and creating gaps in the canopy where **seedlings might get a start**. It remains the largest cause of mortality in mature longleaf.



Global Atmospherics, Inc.
Fault Analysis and Lightning Location System

1996-2000 Flash Density Map
10 kilometer grid

Jan 1, 1996 00:00:00 GMT
To
Dec 31, 2000 23:59:59 GMT



Things Started to Change in the 1990s



- ❖ **The Longleaf Alliance was created in 1995**
- ❖ **CRP on Private Lands – 340,000 acres**
- ❖ **Longleaf restoration on public lands**
- ❖ **Advancement of management techniques**



Why a Restoration Initiative for Longleaf?



Important Plant and Animal Habitat



Risk Aversion to Catastrophic Events

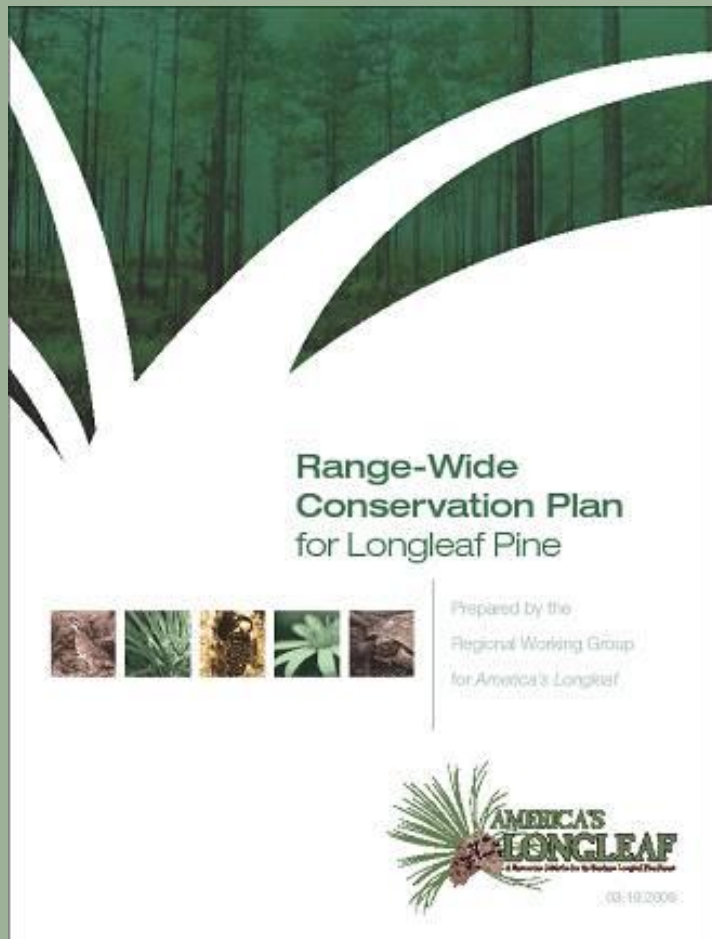


Economic and Cultural Benefits

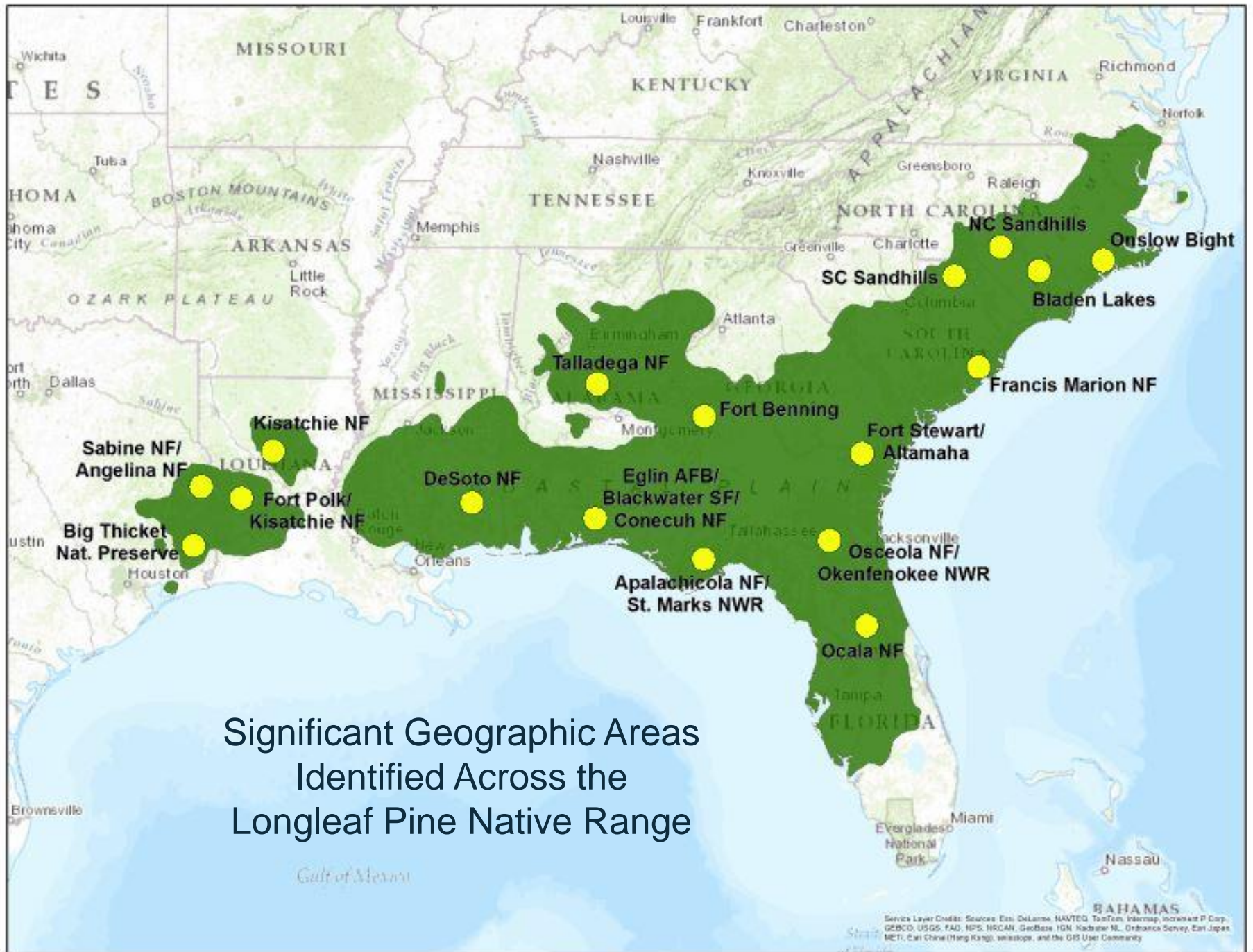




Range-wide Conservation Plan for Longleaf Pine



- ❖ Comprehensive Plan released in March 2009
- ❖ Developed by Regional Working Group representing 22 organizations
- ❖ Supported by USDA Forest Service, USDA Natural Resource Conservation Service, Department of Defense, and the U.S. Fish and Wildlife Service
- ❖ Identifies Significant Geographic Areas





Range-wide Conservation Plan for Longleaf Pine

- ❖ The **15-year goal** for the plan is an increase in longleaf from **3.4 to 8.0 million acres**.
- ❖ Guiding Principles
 - Strategic, science-based approach
 - Site-based conservation efforts in the context of sustainable landscapes
 - Involvement by public and private sectors
 - Partnerships and collaboration
 - Conservation plan as a framework and catalyst



Conservation Plan Implementation

- ❖ The goals set forth in the Conservation Plan are ambitious and achieving them will require an **exponential acceleration of conservation activities by many parties**. Implementation is accomplished through **voluntary collaborative efforts** of landowners, organizations, agencies, private businesses, and research and extension institutions associated with longleaf efforts across the range.



Conservation Plan

Levels of Management

- ❖ Maintaining existing longleaf ecosystems in good condition
- ❖ Improving longleaf acres missing significant components of understory communities and fire regimes; and
- ❖ Restoring longleaf pine forests to suitable sites currently in other forest types or land classifications



America's Longleaf Restoration Initiative

The Partnership



- ❖ 33 Member Longleaf Partnership Council formed
- ❖ State Coordination Teams
- ❖ Local Implementation Teams centered around SGAs
- ❖ Range-wide Technical Teams

Purpose of Longleaf Partnership Council



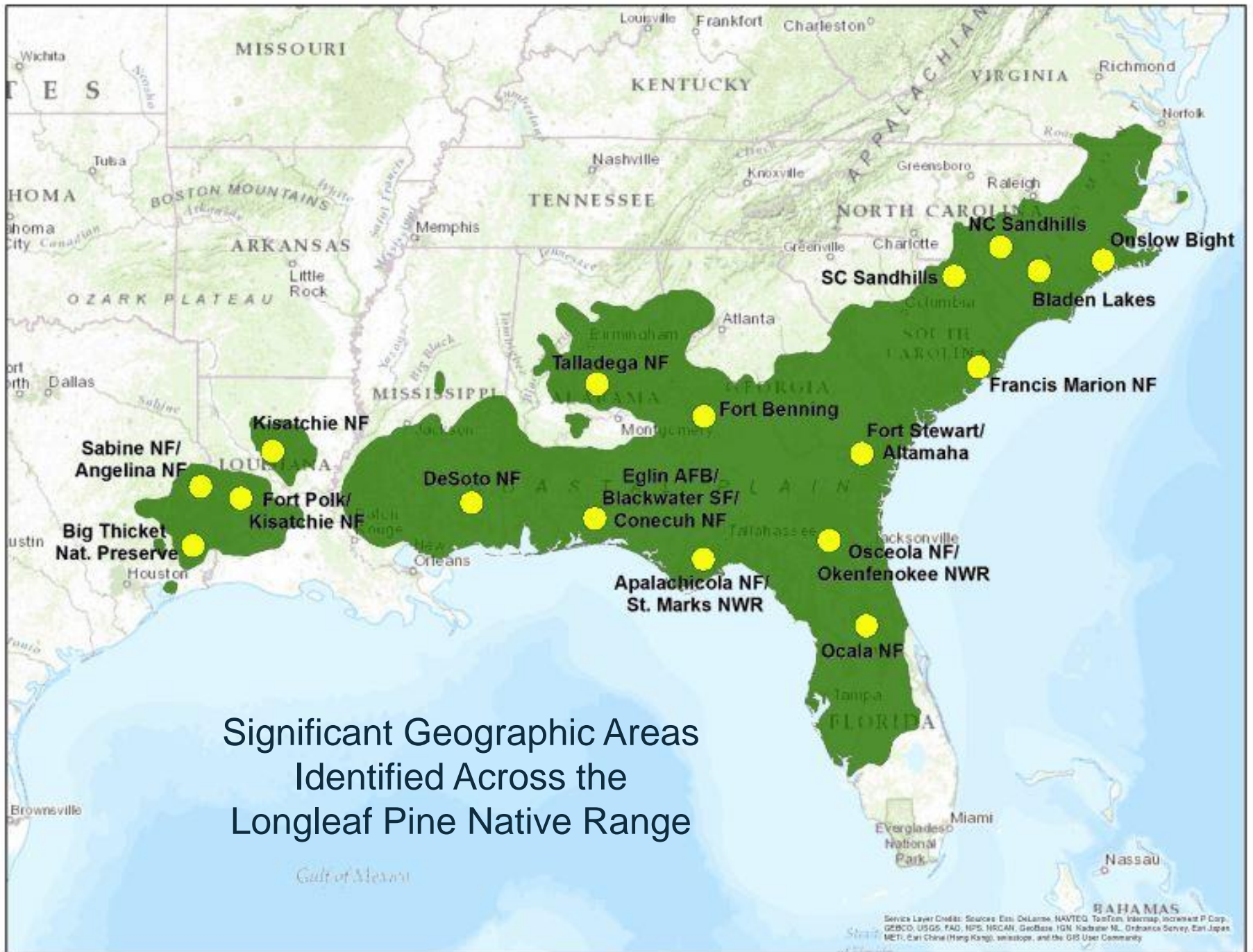
- ❖ The purpose of the Partnership Council is to **promote effective communication and collaboration** of the large number of partners working to conserve longleaf pine ecosystems across the South. The Council **provides a forum** for federal agencies, state agencies, non-government organizations, local collaborative efforts, industries, and private landowners who bring **different objectives, missions, responsibilities, and contributions** required to make the conservation implementation effort successful and demonstrate collective progress.

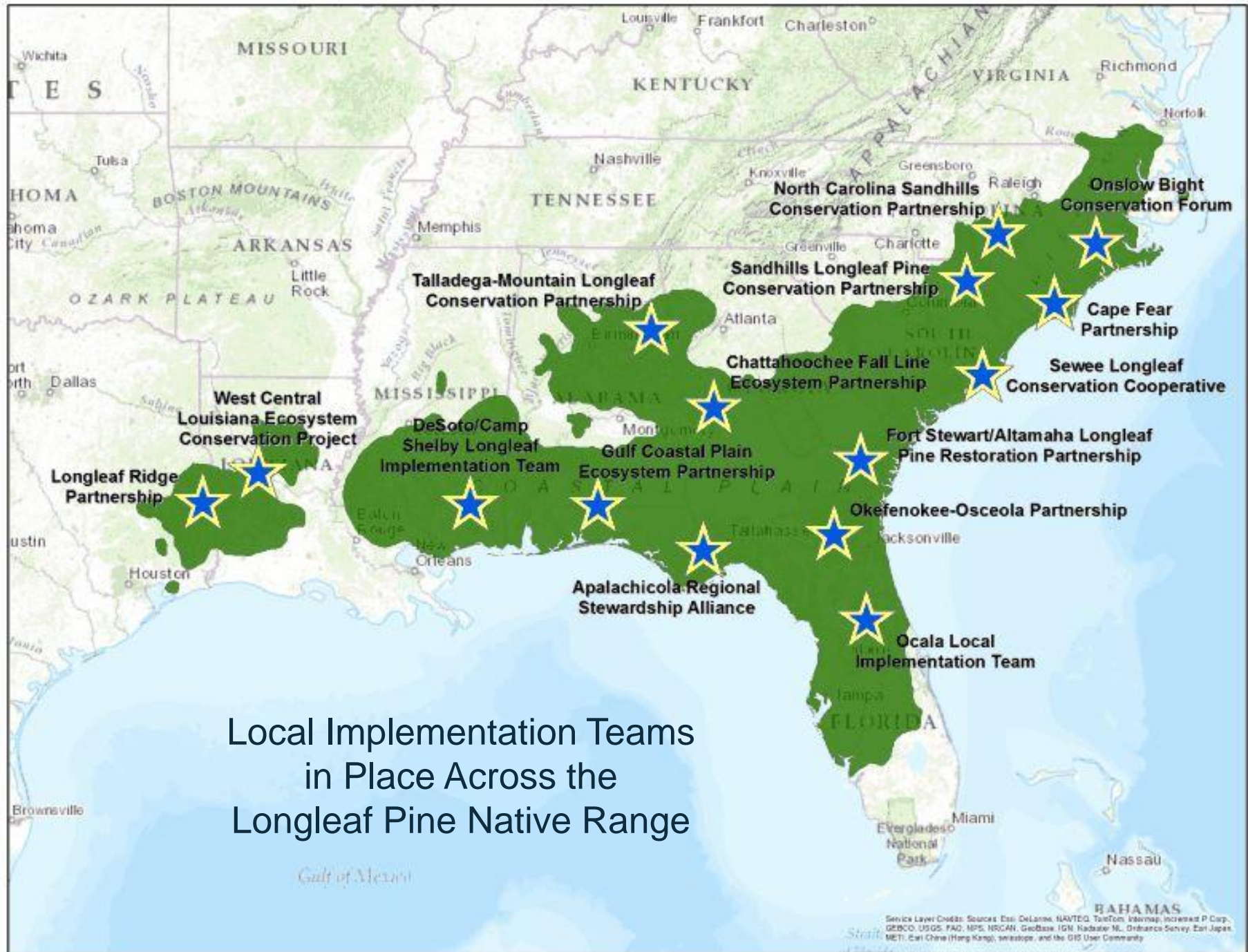


Longleaf Partnership Council

Structure

- ❖ Governed by a Chair-Elect, Chair, and Past-Chair
- ❖ Meets face-to-face no less than twice a year and use Ad Hoc committees and technical teams to address specific issues
- ❖ Meeting purpose is to promote a broader understanding, coordination of, and participation in ongoing activities in support of longleaf pine restoration within the longleaf range, and attend to the business of the Council.





Local Implementation Teams
in Place Across the
Longleaf Pine Native Range

Service Layer Credits: Sources: Esri, DeLorme, NAVTEQ, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, MPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), Swisstopo, and the GIS User Community



Longleaf Partnership Council



Identified Four Strategic Priorities and Twenty-one Specific Actions

1. Increase acres established in longleaf
2. Improve and maintain existing longleaf, with emphasis on increasing prescribed fire acres
3. Enhance ability to implement restoration action on the ground
4. Maintain and broaden resource base



Longleaf Partnership Council

Annual Range-wide Partners' Accomplishment Report

- ❖ Annual Performance Measures
- ❖ Acres treated to improve/maintain existing longleaf ecosystems
- ❖ Acres of longleaf pine established
- ❖ All will be stratified by state, ownership (private vs. public), and significant geographic areas





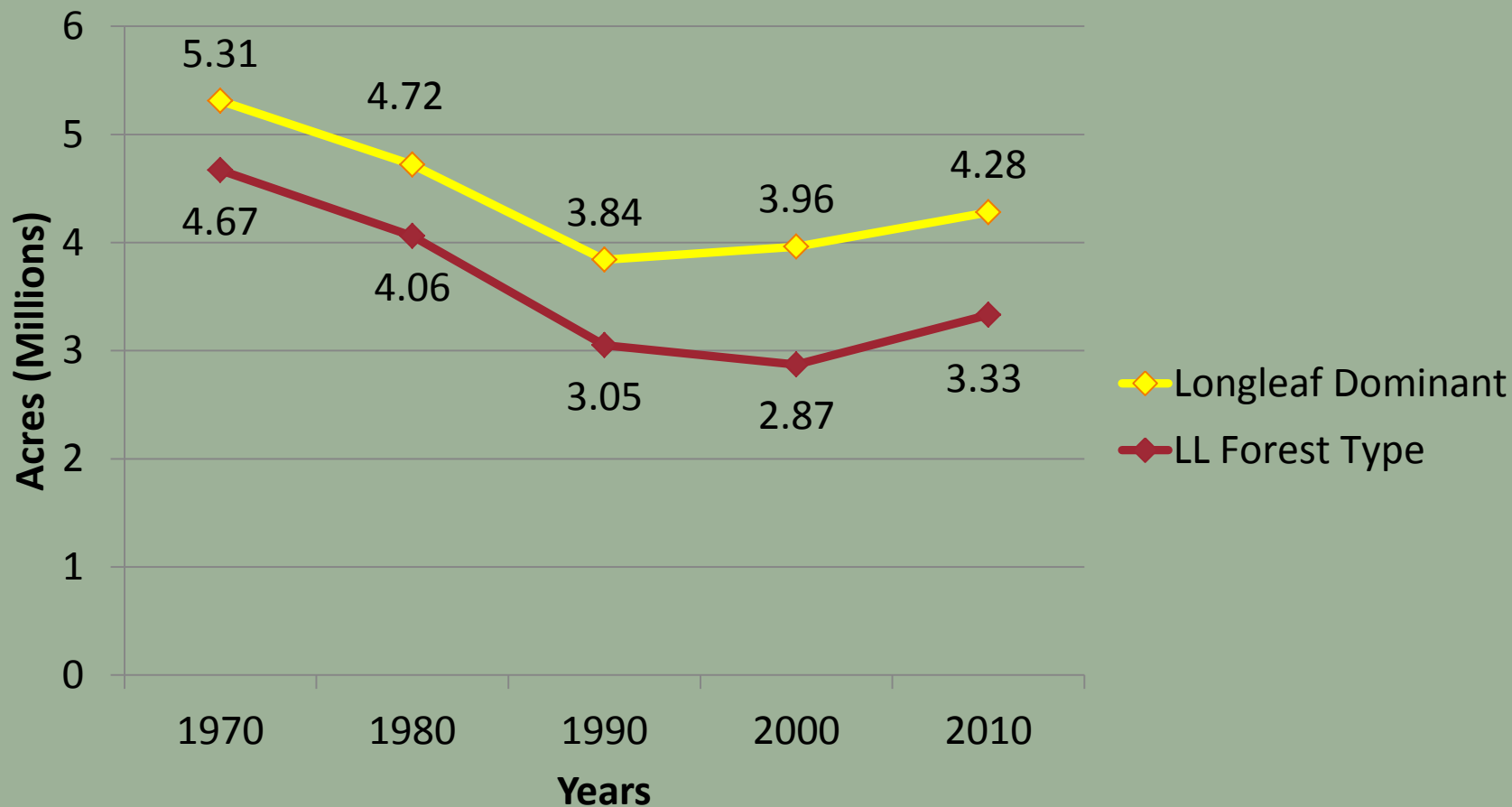
“A Good Measure of Success”



FIA data indicates a 8% net increase in the longleaf dominated forest over the past decade.



Trends in the acres of longleaf dominant forests and longleaf forest type from 1970 to 2010





What Makes America's Longleaf Restoration Initiative a Success?

- ❖ A science-based plan guides actions and clearly defines goals
- ❖ Multiple partners have a stake
- ❖ A diverse Longleaf Partnership Council of 33 entities
- ❖ Coordinated federal support by USDA (FS, NRCS, FSA), DOI (F&WS), and DoD (OSD)
- ❖ Leveraging public and private funds via the Longleaf Stewardship Fund
- ❖ Participation in America's Great Outdoors





What Challenges Remain

- ❖ 9 state scale is daunting
- ❖ Increasing need for accountability and effectively communicating progress
- ❖ Gaining understanding and support for continuing investments
- ❖ Increasing prescribed fire consistent with landscape scale restoration
- ❖ Continuing support allowing for increased private landowner investment
- ❖ Maintaining the momentum needed for successful longleaf restoration across the range





www.americaslongleaf.org