

FOREST ACTION PLAN

National Priorities



NATIONAL PRIORITIES

The 2008 Farm Bill, under Title VIII – Forestry, amends the Cooperative Forestry Assistance Act of 1978 to include the requirement that each state develop a long-term, state-wide Forest Action Plan for forest resources. This plan includes assessments and strategies focused on three national priorities:

- Conserve and manage working forest landscapes for multiple values and uses
- Protect forests from threats
- Enhance public benefits from trees and forests

The Forest Action Plan was developed with a comprehensive team of stakeholders to address cross-boundary, landscape-scale actions that would be the most efficient activities to address issues of concern developed for the assessment phase of the Forest Action Plan.

This document serves as a record of activities taken by *all* Texas stakeholders to address strategies identified in the Forest Action Plan for Texas. These actions will be updated every five years and reflect progress made in implementing the plan since the last revisions in 2015.

***Please note:** Supplemental language provided in the 2014 Farm Bill as signed on February 7, 2014 indicates additional coordination requirements. In subsequent reporting, accomplishments with these partners should be included. Section 2A(c) (5) reads; “as feasible, appropriate military installations where the voluntary participation and management of private or State –owned or other public forestland is able to support, promote, and contribute to the missions of such installations”.*

1. Conserve and Manage Working Forest Landscape for Multiple Values and Uses

Issue Addressed: Sustainability of Forest Resources in East Texas

Goal 1: Assess and promote the sustainability of East Texas forests.

Objective 1.2: Support the development of healthy, productive forests.

Strategy 1.2.2: Investigate silvicultural management options for climate resilient species.

Strategic Action: TFS created a new decision support tool, *Forestry Herbicide Prescriptions*, to provide the best information to control undesired vegetation.

Objective 1.3: Identify and mitigate threats to the forest resources of East Texas with a focus on high priority and threatened landscapes.

Strategy 1.3.4: Promote the restoration and enhancement of native forest ecosystems.

Strategic Action: TFS established a new longleaf pine seed orchard, the only improved longleaf seed orchard west of the Mississippi River.

Strategic Action: TFS is engaged in collaborative efforts to restore native forest ecosystems to their historic range. Staff serve in leadership roles of the Texas Longleaf Implementation Team and Northeast Texas Conservation Delivery Network. State Forests are used as demonstration areas for longleaf and shortleaf pine restoration.

Objective 1.4: Ensure the relevance of forest resource programs in East Texas.

Strategy 1.4.2: Deliver educational resource programs and professional technical assistance to meet the needs of clientele.

Strategic Action: TFS launched a new, innovative, and collaborative landowner outreach campaign in Northeast Texas called *Learn Plan Act*. A website was developed to serve as a clearinghouse of information and connect landowners with their local service forester. Traditional news outlets, social media, business-reply direct mailers to landowners, and other marketing materials were developed and distributed throughout an eight-county region in Northeast Texas.

Goal 2: Maintain working forests by improving markets for sustainable forest products.

Objective 2.1: Determine the impacts of changes in wood processing facilities on timber supply.

Strategy 2.1.1: Develop timber supply projections based on FIA data and likely wood utilization rates of existing and proposed mills.

Strategic Action: TFS conducted in-depth timber supply studies that aided in the decision to build a new Oriented Strand Board plant in Corrigan and sawmill in Lufkin.

Objective 2.2: Support workforce development and enhancement in the forest sector.

Strategy 2.2.1: Investigate strategies to enhance forest workforce capacity.

Strategic Action: TFS developed the *My Land Management Connector* application for the *Texas Forest Information Portal*. This application connects landowners, technical service providers, and vendors spatially to efficiently perform land management services.

Goal 3: Identify forest economic development opportunities.

Objective 3.1: Identify additional forest resource surpluses and deficits.

Strategy 3.1.1: Assess needs of existing forest products industries and opportunities for emerging markets.

Strategic Action: TFS, in partnership with SGSF, developed the *Southern Timber Supply Analysis* application. This application uses FIA data to calculate timberland area, volume, growth, and removals by forest type and product class for a 50- 75- and 100-mile supply radius of a user-defined point.

Strategic Action: TFS, in partnership with Woodworks, is promoting the use of mass timber for a variety of commercial building applications.

Issue Addressed: Central Texas Woodlands Conservation

Goal 1: Improve the health of forests and woodlands in Central and West Texas.

Objective 1.2: Ensure the relevance of forest and woodland resource programs in Central and West Texas.

Strategy 1.2.2: Deliver educational resource programs and professional technical assistance to meet the needs of clientele.

Strategic Action: TFS developed the *Got Land?* application to guide new landowners through the initial stages of acquiring or owning property. Management information and resources are provided based on user-selected goals and objectives for their property. This application is available in both English and Spanish.

Issue Addressed: Water Resources

Goal 1: Promote the role of trees and forests in maintaining watershed function.

Objective 1.2: Restore and enhance degraded and fragmented forests and woodlands.

Strategy 1.2.1: Expand innovative, educational efforts to reach new landowners, loggers, and contractors.

Strategic Action: TFS serves as an instructor in the TWRI Riparian and Stream Ecosystem Training workshops around the state.

Goal 2: Enhance water quality through Best Management Practices.

Objective 1.2: Promote continual improvement of BMP implementation.

Strategy 1.2.1: Provide technical assistance to landowners in riparian forest establishment, management, and restoration.

Strategic Action: TFS developed the *Texas Forestry BMPs* native smartphone application of the Texas Forestry Best Management Practices handbook.

Goal 3: Protect drinking water supply in priority watersheds.

Objective 3.1: Advance source water protection in priority drinking water supply watersheds.

Strategy 3.1.2: Identify, delineate, and target priority drinking water supply watersheds.

Strategic Action: TFS conducted a geospatial watershed assessment to identify priority surface drinking water supply watersheds. The Neches and Cypress Basin Prescribed Burn Program focuses conservation practices in these watersheds.

2. Protect Forests from Threats

Issue Addressed: Wildfire and Public Safety

Goal 1: Integrate climate, weather, and wildland forest fuel conditions into products that will enhance the ability of managers to make sound decisions.

Objective 1.6: Develop assessment information to cooperators, elected officials, and the public.

Strategy 1.6.1: Develop and maintain web-based products and information to provide for the dissemination of wildfire risk and assessment information to citizens, local government, state agencies, and other stakeholders and cooperators.

Strategic Action: TFS updated data layers in the *Texas Wildfire Risk Assessment Portal (TxWRAP)*, a web based GIS application that allows local governments and the public to identify and map wildfire risk throughout the state.

Goal 2: Maintain continuous wildfire mitigation and prevention programs that reduce fire occurrence, hazardous conditions, and the risk of loss from wildfires.

Objective 2.6: Work with ranchers, state agencies, and other large landowners and cooperators to develop and deliver wildland fuel reduction programs.

Strategy 1.6.2: Work with rural communities, ranchers, and other large landowners to develop and implement measures to protect high-risk communities from wildfires.

Strategic Action: TFS developed the Texas Ranch Wildfire Program to work with landowners to identify priority areas, points of contact, critical landscape features (water sources, sensitive areas, fences, gates, etc.), and fuel mitigation practices to allow firefighters to make tactical decisions that reflect the landowners priorities.

Objective 2.2: Base efforts on local assessment information.

Strategy 2.2.1: Work with predictive personnel to determine areas at risk, causal factors, and provide awareness to community leaders, cooperators, and citizens.

Strategic Action: TFS uses information and reports from TxWRAP to develop Community Wildfire Protection Plans (CWPPs). During CWPP development, TFS mitigation specialists also work to identify potential treatment areas on public lands (primarily local government ownership) where critical fuels reduction projects can be performed (by TFS mitigation staff and wildland firefighters) to help improve community protection and generate enthusiasm for additional, locally-led efforts.

Goal 3: The agency will work across internal and external boundaries to enhance the effective implementation of the Texas Wildfire Protection Plan (TWPP). Personnel will work collaboratively with other agencies, departments, and personnel in planning, developing, implementing, supporting, and evaluating TFS response capabilities and needs.

Objective 3.1: Analyze predictive services and fire occurrence data to determine local statewide preparedness levels.

Strategy 3.1.1: Monitor statewide wildfire occurrence along with TFS and fire department response activity to determine and communicate the appropriate regional and statewide preparedness levels in conjunction with the appropriate Predictive Services and Incident Response staff.

Strategic Action: TFS developed online wildfire reporting systems for fire departments and agency resources. These systems provide improved fire occurrence information for both short-term planning and feed into the national dataset for further analysis.

Goal 4: Local fire departments are the primary initial response resources for wildfire suppression in Texas. TFS is committed to train, equip, and assist them in support the TWPP.

Objective 4.2: Develop and deliver programs committed to training, equipping, and supporting local fire departments and other cooperators.

Strategy 4.2.1: Develop, maintain, and deliver a broad range of assistance programs to provide training, equipment, and other identified needs for Texas fire departments.

Strategic Action: TFS has delivered critical fire department assistance programs such as the Rural Volunteer Fire Department Assistance Program (\$12.8 million/year) and Texas Intrastate Mutual Aid System (\$1 million/year). TFS also administers a state/local equipment donations program and two federal property programs (FEPP and FFP). Collectively these grant and equipment programs provide about \$20 million per year in grants and equipment to Texas fire departments.

Issue Addressed: Sustainability of Forest Resources in East Texas

Goal 1: Assess and promote the sustainability of East Texas forests.

Objective 1.2: Support the development of healthy, productive forests.

Strategy 1.2.3: Develop practical approaches for monitoring, reducing, and mitigating invasive species.

Strategic Action: TFS is actively monitoring Emerald Ash Borer and Chinese tallow. TFS supports the invasive species website, www.texasinvasives.org

Issue Addressed: Central Texas Woodlands Conservation

Goal 1: Improve the health of forests and woodlands in Central and West Texas.

Objective 1.1: Identify and mitigate threats to the forest and woodland resources of Central and West Texas with a focus on high-priority and threatened landscapes.

Strategy 1.1.3: Facilitate recovery and restoration of damaged forest landscapes.

Strategic Action: TFS is also very active in restoring ponderosa pine in the Davis Mountains of West Texas. Wildfires and drought have taken a toll on this unique ecosystem. TFS, partnering with The Nature Conservancy, mapped and evaluated the affected area, marked dead and diseased trees for removal, collected native seed, and began growing seedlings at the West Texas Nursery.

Goal 2: Assess and promote the conservation of forests and woodlands in Central and West Texas.

Objective 2.2: Support the sustainability of health, productive forests and woodlands.

Strategy 2.2.5: Monitor and assess the impacts of disasters (hurricanes, wildfire, drought, insects, disease, etc.) on forests and woodlands.

Strategic Action: TFS developed a UAV Rapid Response Team to quickly deploy UAS pilots to gather imagery from newly devastated areas.

Issue Addressed: Urban Forest Sustainability

Goal 1: Integrate urban and community forestry into all scales of planning.

Objective 1.2: Encourage best practices for protecting high-value forest landscapes in and around urban areas.

Strategy 1.2.2: Support local land conservation groups to locate and protect high-value forest landscapes.

Strategic Action: Supported a *Community Forest Conservation Program* grant to the City of San Marcos to conserve and provide public access to 102 acres of woodlands along Sink Creek, the headwaters of the San Marcos River.

Goal 4: Strengthen urban and community forest health and biodiversity for long-term resilience.

Objective 4.1: Improve disaster preparedness and response following major events affecting trees in a community setting.

Strategy 4.1.2: Certify TFS urban foresters and ISA-certified arborists as Strike Team leaders, task specialists, and Public Information Officers.

Strategic Action: TFS dispatched an Urban Forest Strike Team (UFST) to assess tree damage in Rockport following Hurricane Harvey. Additional UFST training sessions have been hosted.

Objective 4.2: Monitor the impact of land-use change on urban forests in Texas.

Strategy 4.2.2: Through Urban Forest Inventory & Analysis and high-resolution imagery, maintain the urban tree assessment program for major metropolitan areas of Texas.

Strategic Action: TFS has completed urban FIA data collection in three Texas cities: Austin, Houston, and San Antonio. Data can be accessed through the TFS web application *My City's Trees*.

3. Enhance Public Benefits from Trees and Forests

Issue Addressed: Central Texas Woodlands Conservation

Goal 1: Improve the health of forests and woodland resource programs to Central and West Texas.

Objective 1.2: Ensure the relevance of forest and woodland resource programs in Central and West Texas.

Strategy 1.2.1: Incorporate user needs into program planning and delivery.

Strategic Action: TFS developed the *Texas Scenic Views* application to encourage people to get outside and enjoy nature by identifying the best spots in real time to view seasonal color (spring bloom and fall color).

Issue Addressed: Urban Forest Sustainability

Goal 2: Promote the role of urban & community forestry in human health and wellness.

Objective 2.1: Support community forest management for public health benefits.

Strategy 2.1.1: Develop partnerships with public health stakeholders, health care providers, and other groups to support and promote the therapeutic benefits of trees.

Strategic Action: TFS is promoting the *Healthy Trees Healthy Lives* campaign.

Objective 2.2: Support tree planting as an energy-saving practice.

Strategy 2.2.1: Strengthen partnerships to advance local programs to plant residential trees as an energy efficiency measure.

Strategic Action: TFS is delivering the *Energy Saving Trees* program in conjunction with The Arbor Day Foundation and Oncor Electric Delivery Company. This program provides electrical customers with free trees for planting to reduce energy usage.

Objective 2.3: Support local, regional, and statewide water quality and air quality programs and initiatives.

Strategy 2.3.2: Work with local water utility managers and public works directors on policies that support the contribution of urban trees and forests in water quality and quantity management.

Strategic Action: TFS is able to model stormwater runoff reduction in *iTree - Hydro* under different urban tree canopy scenarios.

Goal 3: Cultivate leadership and opportunity within the urban forestry community.

Objective 3.1: Develop the next generation of community forestry stakeholders.

Strategy 3.1.2: Demonstrate forestry and natural resources as a viable career option to youth and incoming college students.

Strategic Action: TFS, in cooperation with TFA, hosted the first-ever Urban Teacher Conservation Institute.

Strategic Action: TFS assisted in the development of a community forestry class at the University of Texas – Rio Grande Valley campus.

Objective 3.2: Support statewide, regional, and local tree advocacy and trade groups.

Strategy 3.2.1: Provide education and support to tree boards, non-profit groups, and councils.

Strategic Action: TFS established the TFS Leadership Institute to strengthen and enhance partner organizations by providing access to formal leadership training. The Institute consists of two, 3-day sessions for up to 25, hand-selected individuals representing a broad and diverse set of perspectives.

Goal 5: Improve urban and community forest management, maintenance, and stewardship.

Objective 5.1: Establish and increase the skills of municipal tree care managers through effective tree care and protection practices.

Strategy 5.1.1: Provide technical and financial support to increase the number of municipal tree managers who are ISA Certified Arborist and Municipal Specialists.

Strategic Action: TFS assists in the coordination of the annual Texas Tree Conference. TFS is a primary sponsor and provides scholarships to municipal tree managers to attend.

Goal 6: Diversify, leverage, and increase funding for urban and community forestry.

Objective 6.1: Educate and engage leaders and citizens in urban forestry projects and issues.

Strategy 6.1.1: Assist local leaders to ensure the elected officials are aware of the importance and value of urban forest resources in their communities, districts, and state.

Strategic Action: TFS conducted the first-ever, urban forest economic contribution study. This study used IMPLAN data and county vegetation management budgets to estimate an annual direct contribution of \$2.5 billion annually to the Texas economy.

Goal 7: Increase public awareness and environmental education to promote stewardship.

Objective 7.2: Embrace new technologies to create self-directed learning opportunities for citizens, teachers, and students.

Strategy 7.2.2: Expand the use of social media and online learning platforms.

Strategic Action: *The Trees are Key* podcast recently reached over 150,000 listens and is now available on *iHeart Radio*.

Issue Addressed: Water Resources

Goal 1: Promote the role of trees and forests in maintaining watershed health.

Objective 1.1: Integrate trees, forests, and woodlands in watershed planning.

Strategy 1.1.2: Raise the awareness of the value of forested watersheds and urban tree canopy.

Strategic Action: TFS, in cooperation with SGSF and the Southeastern Partnership for Forests and Water, produced [seven videos](#) describing the forest and drinking water relationship.

Strategic Action: TFS developed a [story map](#) on the forest and drinking water connection.

Strategy 1.1.3: Engage in watershed and resource planning efforts in priority watershed.

Strategic Action: TFS worked with Houston-Galveston Area Council to incorporate i-Tree Hydro Model into the Cypress Creek Watershed Protection Plan. This model estimates the benefits of tree cover in mitigating stormwater runoff.

Goal 3: Protect drinking water supply in priority watersheds.

Objective 3.1: Advance source water protection in priority water supply watersheds.

Strategy 3.1.1: Provide leadership and support to the *Texas Forests and Drinking Water Partnership*.

Strategic Action: TFS continues to provide staff support to the *Texas Forests and Drinking Water Partnership*. A statewide forum was hosted in February 2019 at McKinney Roughs.

Goal 4: Increase the effective management of water resources in communities.

Objective 4.1: Work with communities to manage water resources in urban environments.

Strategy 4.1.1: Provide education and technical assistance on green infrastructure.

Strategic Action: TFS continues to provide staff support to the Partnership. A statewide forum was hosted in February 2019 at McKinney Roughs.