

## Chapter II. Monitoring Findings & Recommendations

### Issue A. Ecosystem Condition, Health and Sustainability

#### Sub-Issue 1. Biological Diversity

#### a. Vegetation Management

##### (1) Prescribed Burning

**Monitoring Item Description** – Determine if prescribed burning is occurring at required levels to meet the *Plan*'s goals and objectives and the DFCs for vegetation.

**Variability** - Achieve 80 percent of forest assigned targets, unless weather or other extenuating circumstances prevent this accomplishment. If the forest falls below the 80 percent target, reassess the target.

**Finding(s)** - The *Plan* set an annual objective of approximately 100,000 acres of prescribed burning per year. This is calculated on a land base of about 500,000 acres for which fire should play an ecological role. The desired return interval for fire is in a three-to-five year range. In FY 10, the forest burned 148,903 acres. The average acres burned over the last ten years is about 107,383 acres. Table 1 displays acres burned each year (by objective) for the past ten years. Most burns accomplish multiple objectives.

**Table 1. Prescribed Fire – Acres Burned Annually**

FY	Fuel Reduction	Brownsport Control (Longleaf)	Site Prep for Regeneration	Control of Understory	Range Improvement	T&E*	Other Wildlife	Total
2001	40,656	80	92	563	0	3,535	14,230	59,156
2002	50,926	0	704	2,893	0	16,726	4,796	76,045
2003	23,750	0	1,472	0	0	4,360	1,400	30,982
2004	89,392	219	0	1477	0	31,722	4,401	127,211
2005	87,720	0	133	0	0	12,872	65	100,790
2006	95,770	0	479	0	0	435	0	96,684
2007	110,219	0	856	0	0	15,808	2,735	129,618
2008	158,701	0	179	0	0	6,510	0	165,390
2009	139,053	0	0	0	0	0	0	139,053
2010	124,683	0	103	0	0	16,621	7,496	148,903

\*Threatened and Endangered

**Recommendation(s)** – No change needed. Maintain prescribed burning targets at 100,000 acres per year in order to meet vegetation management objectives.

**(2) Seral Stages**

**Monitoring Item Description** - Progress in achieving the *Plan’s* DFC (Desired Future Condition) for vegetation and a determination that desired diversity for plant communities is being achieved is measured through an evaluation of data obtained from internal reviews and surveys.

**Variability** - Changes in any seral stage greater than one percent per year should be evaluated to determine the cause.

**Finding(s)** - Age-class distributions was evaluated by reviewing data obtained from FSVeg (Field Sampled Vegetation).

Table 2 illustrates the trends in age class among the four seral stages on the four National Forests.

**Table 2. Seral Stage Distribution**

<u>Seral Stage</u>	<u>Age Class</u>	<u>1992</u>	<u>2004</u>	<u>2006</u>	<u>2008</u>	<u>2010</u>	<u>Trend</u>
<b>Early Succession</b>	0-20 years	22%	13 %	11 %	10 %	5%	decreasing
<b>Mid Succession</b>	21-50 years	11%	15 %	17 %	17 %	22%	increasing
<b>Late Succession</b>	51-90 years	61%	53 %	50 %	49 %	40%	decreasing
<b>Very Late Succession</b>	91+ years	6%	18 %	22 %	24 %	34%	increasing

The table and charts show the steady increase in very late succession stage since 1992. The decrease in the late succession is due primarily to stands growing into the very late stage. The decrease in acreage in the early succession stage is due to a decline in regeneration harvests resulting in a reduction in the number of acres in younger age classes.

The FSVeg age-class distribution report for the end of 2010 shows a continuing trend towards an older forest. For instance, the acres in stands over 100 years old have increased from 15,037 acres in 1992 to 79,591 acres in 2010. The acres in young stands age 0 to 10 years old were 83,612 acres in 1992 and have decreased to just 4,659 acres in 2010.

Table 3 indicates trends in key forest type groups identified in the *Plan*.

**Table 3. Forest Type Group Trends**

<i>Forest Type Group</i>	<i>1992</i>	<i>2004</i>	<i>2006</i>	<i>2008</i>	<i>2010</i>	<i>Trend</i>
<b>Longleaf Pine Woodlands</b>	5.6%	5.7%	5.2%	5.2%	4.9%	-0.7 %
<b>Dry-Xeric Oak Pine Forests</b>	25.8%	25.1%	25.2%	25.4%	25.5%	-0.3 %
<b>Mesic Oak-Pine Forests</b>	58.6%	58.4%	58.6%	59.2%	60.3%	+1.7%
<b>Mesic Hardwood Forests</b>	2.9%	3.9%	3.9%	3.8%	3.8%	+0.9 %
<b>Bay-Shrub Wetlands</b>	0.4%	0.4%	0.4%	0.4%	0.4%	No Change
<b>Bottomland/Streamside Forest</b>	6.7%	6.5%	6.7%	6.0%	6.2%	-0.5%

**Recommendation(s)** - Continue to work towards restoring Longleaf and Shortleaf Pine ecosystems as directed by the *Plan*.

(3) Regeneration of Desired Tree Species

**Monitoring Item Description** - Restoration of longleaf and shortleaf pine ecosystems is monitored by checking regeneration areas at one and three years to determine if any additional treatments are needed to achieve sufficient stocking. The third-year check will be used to certify that successful stand reestablishment has taken place.

**Variability** - Longleaf stands should have stocking of at least 400 trees per acre, while shortleaf stands should have stocking of at least 300 trees per acre. When stocking levels of longleaf or shortleaf stands are less than these, each deficient stand must be evaluated to determine if there is sufficient stocking in other desirable species or if remedial treatments are needed. Each silviculturist evaluates these stands and determines what action(s) is needed to correct the deficiencies. Many times stands will be replanted to bring the stands up to adequate stocking levels.

**Finding(s)** – Third-year stocking exams conducted in 2010 found that 23.4 percent of the seedlings had survived. First-year survival exams found that 40.2 percent of the seedlings had survived. Seedling survival was adversely impacted in 2010 by inadequate rainfall. The Angelina County weather station recorded below average rainfall in 2010. Angelina County receives 51.55 inches of rain on average. In 2010, the county received only 30.01 inches of rainfall. Since the NFGT is at the extreme western edge of the natural range for pine species, lack of adequate precipitation makes seedling establishment difficult.

**Recommendation(s)** – No change needed. Emphasis needs to be placed on planting seedlings in late fall/early winter (November through January) when there is sufficient soil moisture to allow

seedlings more time to become established before warmer and drier spring conditions occur. Continue established regeneration checks to assure adequate restocking occurs at required *Plan* levels.

## **b. Management Indicators**

### (1) Diversity of Plant and Animal Communities

**Monitoring Item Description** - Plant and animal communities are defined through the descriptions of community components by vegetation group in the *Plan*, Chapter V (pgs 306-307). These forest and grassland communities, as defined in the ECS (Ecological Classification System) in *Plan* Appendix A, form the ecological groups monitored through time. Through an evaluation of data obtained from internal reviews and surveys, as well as reports obtained from other state and federal sources, the Forest Service determines if the desired diversity and objectives for plant and animal communities (MI- management indicators, TES-threatened and endangered, and sensitive species) are being maintained.

**Variability** - Trends, as determined through monitoring, are based on one-to-five years or more of population change. Natural populations fluctuate through time; however, if five or more consecutive years of downward trends are documented, this trend would indicate a need for closer evaluation and possible change in management strategies. Where species populations cannot be tied directly to forest management, consider removing these species from the Management Indicator Species list.

**Finding(s)** - The majority of management indicators have indicated stable or increasing trends (see Appendix A). The red-cockaded woodpecker population is at 383 active clusters, a new milestone for the NFGT. Many of the NFGT management indicator species are not good indicators of forest management. In FY 2010, the NFGT began collaborating with the public to revise the list of management indicators. A series of public meetings were held in 2010 to discuss the current list of management indicators and work towards a list that would better meet the needs of the NFGT and the public. The NFGT would need to prepare an environmental assessment to revise the list of MI. This EA would be initiated in FY 2011.

**Recommendation(s)** – Change needed. Revise the current list of Management Indicators to those that reflect the effects of forest management.

### (2) Habitat for Management Indicator Species (MIS)

**Monitoring Item Description** – Annual evaluation of forest habitat change is documented through levels of forest and grassland management actions such as prescribed fire, regeneration cutting and forest thinning. These activities are described in acres within forest compartments or allotments in the GIS (Geographic Information System) spatial database. This database, as well as other USFS (U.S. Forest Service) database information, is updated regularly and evaluated annually. Changes in habitat will directly and indirectly affect management indicator species population trends.

**Variability** - Five years or more of undesirable trend in any management indicator species habitat would indicate a need for some change. Changes needed could include either modification of habitat described and desired for any particular species in question, or implementation of different management actions.

**Finding(s)** - Habitat for management indicator species is generally improving throughout the forests and grasslands. Increased prescribed fire efforts are revealing greater improvements in both the number of certain element occurrences and quality of each occurrence for fire-dependent species. Most species habitat and trends appear to be stable or increasing (see Appendix A).

**Recommendation(s)** – No change needed. Continue forest management activities such as thinning, prescribed burning, and native vegetation restoration.

### **c. Threatened, Endangered, and Sensitive Species**

**Monitoring Item Description** – Surveys for each T&E and Sensitive Species known to reside on the forests or grasslands are conducted forest-wide and project based. Periodic surveys for some species, such as the American burying beetle that may have the potential to occur but have not been found to date, are conducted if conditions warrant or as indicated in the updated Appendix G Summary Table in the Forest *Plan* (see Appendix B). Through an evaluation of data obtained from these surveys, as well as reports obtained from other state and federal sources, a presence or absence determination can be made for potential species and a judgment can be made whether recovery objectives for resident T&E and Sensitive Species are being met.

**Variability** - Confirming the presence of potential T&E and Sensitive Species would identify the need to manage habitat accordingly to facilitate population expansion.

**Finding(s)** - Most resident T&E and Sensitive Species populations are increasing. RCW populations are at an all-time high. Habitats for other sensitive species appear to be stable.

**Recommendation(s)** – No change needed. Continue annual monitoring and periodic surveys for presence to determine if progress is being made towards recovery objectives.

## **Sub-Issue 2. Forest and Range Health**

### **a. Air Quality**

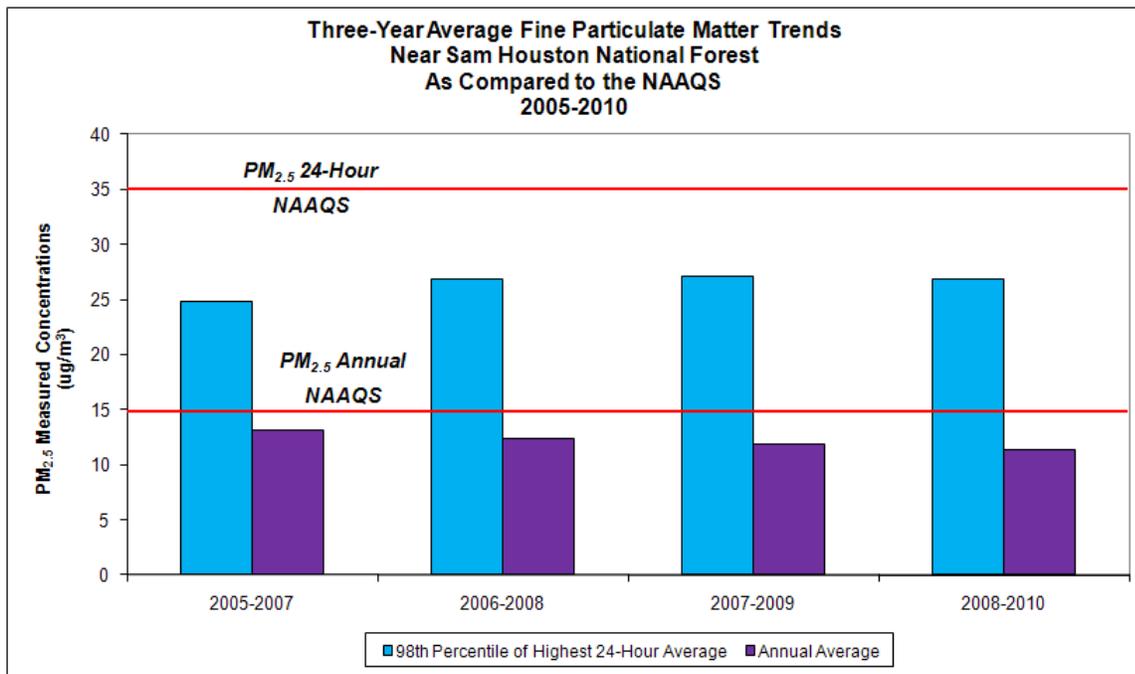
#### (1) General Forest Air Quality

**Monitoring Item Description** - Determine if NFGT management activities are being conducted to maintain air quality within appropriate standards. Ensure air quality control and compliance activities are being conducted in a manner consistent with all Federal, State, local standards or regulations and *Plan* guidelines.

**Variability** - Documented fine particulate matter levels in NFGT areas that reach or exceed the National Ambient Air Quality Standards (NAAQS) PM (particulate matter) 2.5 level during state or federal monitoring. The Environmental Protection Agency has established PM<sub>2.5</sub> NAAQS to protect public health and the environment; the daily standard is set at 35 µg/m<sup>3</sup>, while the annual standard is set at 15 µg/m<sup>3</sup>. If PM<sub>2.5</sub> levels are exceeded, reduce the size of prescribed burns or reduce the size of the fuels consumed (through mulching) until appropriate levels are met.

**Finding(s)** – The National Forests and Grasslands in Texas consist of four National Forests in east Texas and the Caddo-Lyndon B. Johnson National Grasslands in northeast Texas. The distance from the eastern-most edge of the Sabine National Forest to the western-most boundary of the Lyndon B. Johnson National Grasslands is nearly 300 miles. Because air quality concentrations can vary based on local industry and nearby roads and highways, an assessment of air quality at each individual National Forest and Grassland is warranted. It is generally accepted that air quality monitoring values at a particular location may be representative of the air quality within 40 kilometers (25 miles) of that site. Unfortunately, there are not air quality monitoring sites located within 40 kilometers of each Forest or Grassland. In fact, only one fine particulate matter monitoring site is located within 40 kilometers of any of the National Forests or Grasslands in Texas. The Harris County PM<sub>2.5</sub> monitor (EPA Site ID #482010024) is located 40 kilometers south of Sam Houston National Forest. The graph below shows the 3-year average of 24-hour and annual fine particulate matter concentrations at that monitoring site as compared to the NAAQS. Data are taken from the EPA AirData and AirExplorer websites ([www.epa.gov/air/data](http://www.epa.gov/air/data) and [www.epa.gov/airexplorer/index.htm](http://www.epa.gov/airexplorer/index.htm)).

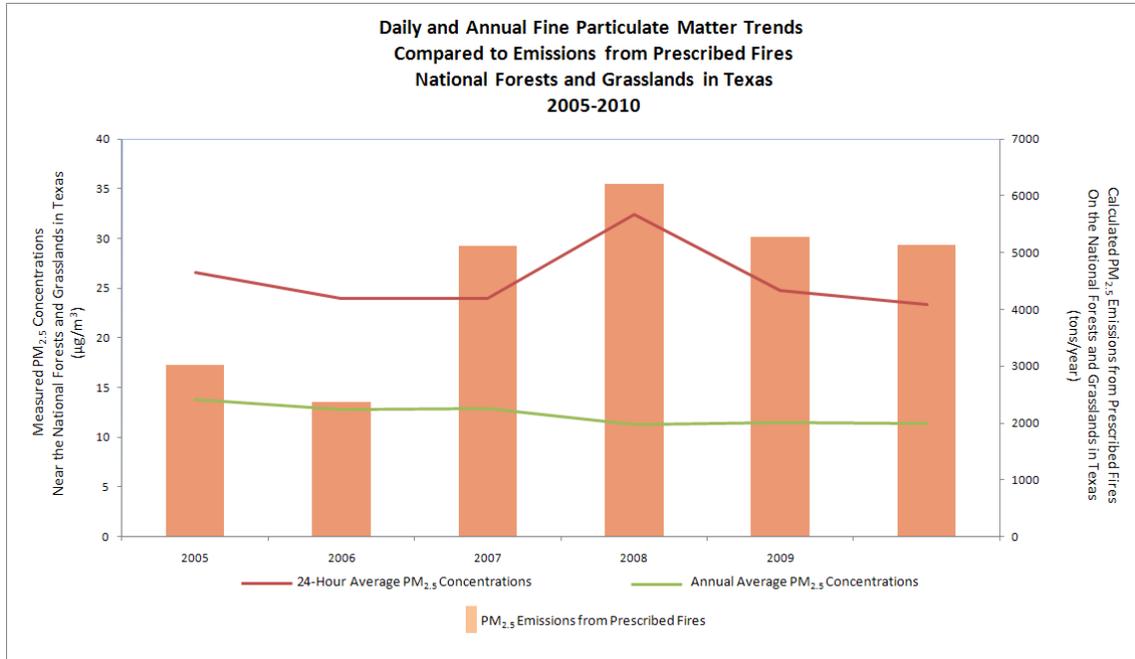
**Table 4. Three-Year Average Fine Particulate Matter Trends**



As shown, fine particulate matter levels near the Sam Houston National Forest are below both the 24-hour and annual air quality standards, as averaged on a three-year basis. The graph below

shows the yearly monitoring data as compared to annual fine particulate matter emissions from prescribed fires on the Forest.

**Table 5. Daily and Annual Particulate Matter Trends**



The NAAQS is not being exceeded, and emissions from prescribed fire do not appear to be strongly correlated with ambient concentrations. Therefore, it appears that prescribed burning activities have not caused or contributed to any exceedances of the PM<sub>2.5</sub> NAAQS at this location.

Within the state of Texas, there are at least 30 air quality monitors that measure fine particulate matter in the air. There are no areas within the state which have been designated as nonattainment with either the 24-hour or annual average PM<sub>2.5</sub> air quality standard.

The NFGT coordinated with TCEQ (Texas Commission on Environmental Quality) on air quality monitoring issues. This is an ongoing process. Air quality was addressed during prescribed burning by operating within the burn plan perimeters for smoke dispersion.

**Recommendation(s)** – No change needed. However, the NFGT needs to work with CENRAP (Central Regional Air Planning Association) and also the TCEQ to have prescribed fire emissions added to the emissions inventory used in any State Implementation Plans (SIPs) to insure that activities are accounted for in any general conformity requirements. Continue to review monitoring data from the EPA (Environmental Protection Agency) monitoring stations to determine if counties are out of compliance with air quality standards and ascertain whether any NFGT actions, especially prescribed burning, could be the cause (based on timing of the activity verses when air quality was found to be out of compliance).

(2) Class I and Class II Lands Air Quality

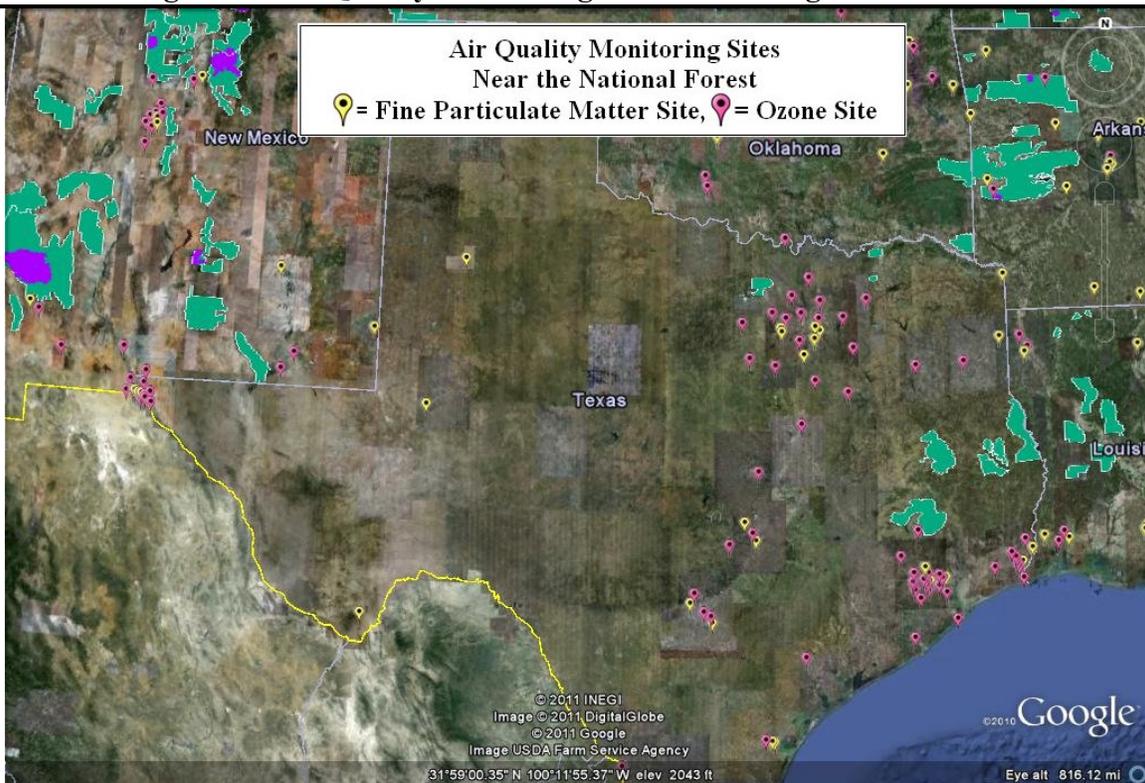
**Monitoring Item Description** - Determine if management activities are being conducted in a manner that protects the air quality on Class II lands. Currently there are no Class I Lands on the NFGT. All land in Texas is considered Class II. The EPA lists six criteria pollutants and maximum concentration levels that should not be exceeded. These pollutants are carbon monoxide, nitrogen dioxide, ozone, sulfur dioxide, particulate matter and lead. National Ambient Air Quality Standards (NAAQS) have been established for each of these pollutants; measured ambient concentrations can be compared to the respective NAAQS to determine whether harmful impacts to either human health or the environment are expected due to elevated levels of pollution.

Monitoring air quality at stations established in the state will indicate pollutant occurrences.

**Variability** - Air quality pollutant occurrences should be identified and investigated to determine their cause. If an occurrence is related to NFGT activities, appropriate actions should be taken.

**Finding(s)** – There are air quality monitoring stations throughout the state of Texas that measure the ambient concentrations of each of the criteria air pollutants. The map below shows the location and type of all of the air quality monitoring stations within the state.

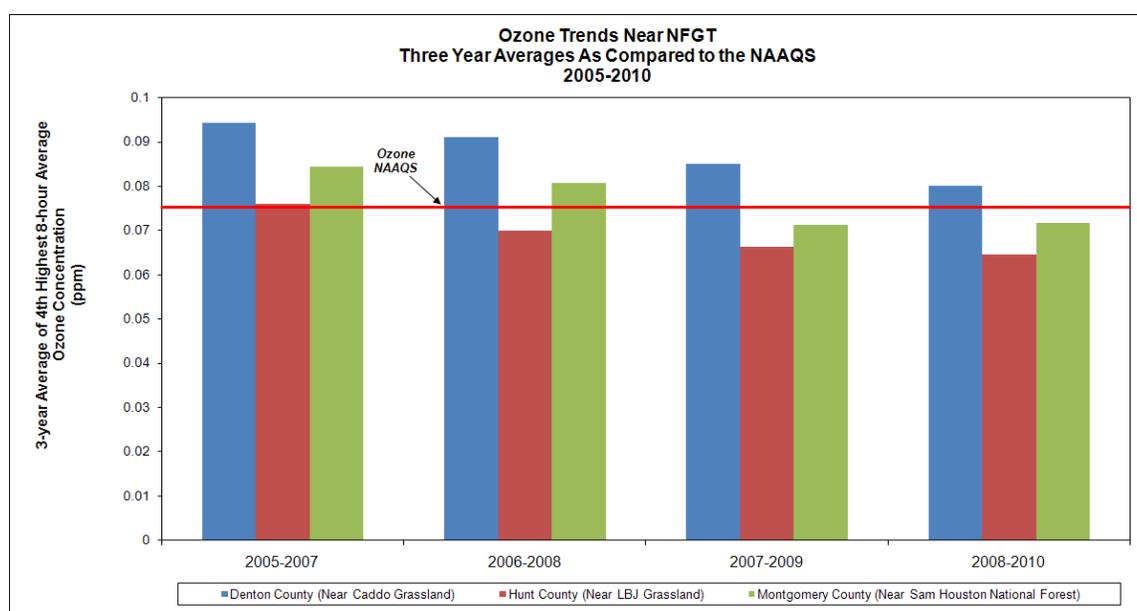
**Figure 1. Air Quality Monitoring Stations Throughout Texas**



As discussed above, PM2.5 concentrations near the National Forests and Grasslands are not exceeding the NAAQS.

Ozone is monitored extensively throughout Texas, and there are two metropolitan areas that exceed the NAAQS for this pollutant: Dallas-Fort Worth, and Houston-Galveston-Brazoria. A portion of Sam Houston National Forest falls within the nonattainment area near Houston. The ozone monitor located in Montgomery County is only 4 kilometers from the nearest Forest boundary. Ozone is also monitored near both the Caddo and LBJ Grasslands, in Hunt and Denton Counties, respectively. The Hunt County monitor is located 22 kilometers southwest of the closest Grassland boundary, while the Denton County monitor is located 26 kilometers east of the closest Grassland boundary. The graph below shows the ozone trends at all three monitoring sites as compared to the NAAQS. Data are taken from EPA AirData and AirExplorer websites ([www.epa.gov/air/data](http://www.epa.gov/air/data) and [www.epa.gov/airexplorer/index.htm](http://www.epa.gov/airexplorer/index.htm)).

**Table 6. Ozone Trends Near the NFGT**



Although the ozone standard is currently being exceeded at one of the three monitors, activities on the Forest are not anticipated to exacerbate ozone concentrations. Ozone is a secondary pollutant formed when emissions of nitrogen oxides (mainly from automobiles and power plants) combine with emissions of volatile organic compounds (again from automobiles as well as naturally occurring sources) in the presence of heat or sunlight. Research suggests that prescribed fire activities do not generate a significant amount of emissions of either pollutant.

Other criteria pollutants monitored in Texas include carbon monoxide, sulfur dioxide, nitrogen dioxide, and lead. The respective NAAQS are not being exceeded for any of these pollutants. Although large amounts of carbon monoxide (CO) are emitted from prescribed fires, concentrations are highest within the burn unit and readily dissipate a short distance beyond the burn. The CO monitor closest to a National Forest is in Harris County, 40 km south of the Sam Houston National Forest; concentrations at this site are well below the CO NAAQS.

**Recommendation(s)** – No change needed. Continue to monitor the air quality index and the emissions per county per year, as reported on EPA’s website (<http://www.epa.gov/air/data>).

[Note: This does not indicate how much of the emissions are from NFGT; it just shows if there is any change.]

## **b. Forest Pests**

### (1) Pine Beetles

**Monitoring Item Description** – Includes actions to protect forest health by reducing the potential impacts of expanding SPB (southern pine beetle) infestations in forest stands and minimizing the threat of other pine bark beetles. Protection will be accomplished through prevention (such as thinning stands with high SPB hazard ratings) and beetle population monitoring. All National Forests must monitor southern pine beetle population levels.

**Variability** - Reduction of high hazard rated areas should exceed 1,000 acres per year on the NFT (National Forests in Texas.)

**Finding(s)** – No SPB infestations were detected on the NFT in FY 10. The NFT participated in the spring southern pine beetle survey, and results from the survey predicted extremely low populations, as no SPB were captured. The number of the SPB insects, clerids and predators collected fell from the previous year. The NFT also participated in fall SPB trapping, a new program designed to provide early warning of SPB outbreaks. No SPB were collected in the fall. No detection fights were made due to the low level of SPB activity predicted.

The forests thinned 2,801 acres of dense pine stands as part of their SPB prevention program. Many scattered pines were affected by the prolonged drought, and increased tree mortality due to the combined effects of the drought and *Ips* bark beetles occurred. No other major insect or disease problems or outbreaks occurred on the NFGT in FY 10.

**Recommendation(s)** – No change needed. Continue SPB monitoring and hazard reduction by thinning densely stocked pine stands in advance of the next outbreak.

### (2) Non-Native Invasive Plants (NNIPS)

**Monitoring Item Description** - Identify and protect forests and rangelands by preventing the introduction of NNIPS, controlling their spread and eradicating any known NNIPS from priority areas.

**Variability** - If significant growth occurs in areas of existing NNIPS or if new areas of NNIPS are identified that threaten forest or grassland ecosystems, recommendations for control or eradication will need to be developed and (once approved) implemented.

**Finding(s)** - In FY 10, 503 acres were treated for noxious weeds. Table 7 lists the acres treated in 2010. In addition, NNIPS surveys were conducted forest-wide. This survey focused on primary vectors for infestations such as utility rights-of-ways, special use sites, recreation sites, and road right-of-ways.

**Table 7. NNIS Treatment Acres by Forest.**

<b>FISCAL YEAR</b>	<b>DISTRICT</b>	<b>ACRES ACCOMPLISHED</b>	<b>ACRES MONITORED</b>	<b>AVERAGE CONTROL</b>
2010	Angelina	0	0	N/A
2010	D. Crockett	50.0	45.0	0.85%
2010	Sam Houston	264.0	264.0	0.80%
2010	Sabine	0	0	N/A
2010	Caddo/LBJ	189.0	189.0	0.85%

**Recommendation(s)** – Continue implementing the forest-wide NNIPS Management Strategy.

### Sub-Issue 3. Watershed Conditions

#### a. Soil and Water Conservation

**Monitoring Item Description** - Conduct periodic reviews/inspections of project areas and environmental documents to avoid permanent impairment of site productivity and ensure conservation of soil and water resources.

**Variability** - Appendix F of the *Plan* “Erosion and Sediment Coefficients” will be used during project planning and monitoring to assure the NFGT does not exceed allowable soil loss tolerance levels that would result in permanent impairment of site productivity. Texas Forest Service BMPs (Best Management Practices) inspection reports will be analyzed and if the overall inspection results fall below 90 percent, forest specialists will identify the reason and recommend corrective actions that need to be taken.

**Finding(s)** - No soil and water disturbances occurred that were identified by NFGT personnel as exceeding the soil loss tolerance levels set out in the *Plan*. In 2010, TFS (Texas Forest Service) conducted a BMP (Best Management Practices) compliance review on the National Forests and Grasslands in Texas. The compliance reviews were conducted on the Angelina/Sabine National Forest. All units were 100% in compliance except one unit on the Angelina National Forest. TFS made recommendations to remediate a stream crossing that could potentially cause water quality issues if not repaired. The stream crossing was brought back into compliance in the fall of 2010 by district personnel.

In June 2010, the NFGT Soil Scientist transferred to another region. The position was not filled due to budget constraints. The NFGT hopes to fill the position with a Hydrologist in FY 2011.

As part of the NFGT’s endeavors to protect soil and water resources in FY 10, the Caddo and LBJ NGs continued to implement an active Watershed Improvement Program. The objective of

this program is to repair active soil erosion that is the result of weather and poor management activities that have existed for many years. Most of the initial damage predates the establishment of the unit. These accomplishments help the grasslands meet the intent of Section 319 of the Clean Water Act. Actions in FY 10 included the completion of 58 acres of watershed improvement. Table 8 displays accomplishments on the NFGT for the past ten years.

**Table 8. Caddo/LBJ Watershed Improvement Accomplishments**

Year	Acres Treated for Erosion Control	Grade Stabilization Structures	Feet of Terraces Constructed	Number of Gully Plugs Installed
2000	*	0	0	0
2001	58	1	3,004	8
2002	100	3	6,884	14
2003	*	0	0	0
2004	95	3	7,007	17
2005	*	0	0	0
2006	50	1	3,850	8
2007	50	0	0	0
2008	22	0	0	0
2009	50	0	0	0
2010	58	0	0	0

\* No budget allocation received.

**Recommendation(s)** – Change needed. Continue to monitor projects, environmental documents and follow up on other requests made by districts to review areas to assure the *Plan’s* Standards and Guidelines are being used to protect soil and water resources. Increase the amount of on-the-ground monitoring being performed by the Forest Soil Scientist/Watershed Specialist. Continue to monitor Rights-of-Way for erosion. Also request that the TFS increase the frequency of BMP compliance reviews on the NFGT.

## b. Water Quality

**Monitoring Item Description** - Ensure vegetative manipulation prescriptions and other management actions on the NFGT provide the desired effects on water quality. Water quality will be monitored by routine sampling of the conductivity in streams.

**Variability** - Identify elevated conductivity levels during routine stream sampling. If conductivity levels reach above 200uS (micro siemens, this is the established unit of measure for conductivity), a forest specialist will investigate the cause and recommend appropriate action.

**Finding(s)** - There were no identified adverse soil and water occurrences from activities on NFGT lands or to impaired stream segments identified in FY 10. Today, the TCEQ is the

primary agency responsible for water quality management in Texas, although it shares the responsibility with other state agencies such as the Texas Parks and Wildlife Department, the General Land Office and the Railroad Commission of Texas.

**Recommendation(s)** – Change needed. Continue to monitor projects, environmental documents and follow up on other requests to review areas to assure the *Plan's* Standards and Guidelines are being met to protect water quality. Increase the amount of on-the-ground monitoring being performed by the Forest Soil Scientist/Hydrologist.

### **c. Watershed Condition Classification**

**Monitoring Item Description** – Conduct periodic reviews/inspections of project areas and environmental documents to avoid permanent impairment of site productivity and ensure conservation of soil and water resources.

**Variability** – The condition of ninety-seven 6<sup>th</sup>-level watersheds within and adjacent to national forest lands in Texas were assessed using protocols from the Forest Service Watershed Condition Classification Technical Guide. Emphasis in the analyses was placed on twelve watershed indicators that directly or indirectly impact soil and hydrologic and associated riparian and aquatic ecosystems. The results of the assessment will be used to prioritize watersheds for improvement activities and to develop watershed action plans.

**Finding(s)** – The results indicated that seven of the watersheds were in Class 1 – Functioning Properly, eighty-three watersheds were in Class 2 – Functioning at Risk, and seven watersheds were in Class 3 – Impaired Risk.

**Recommendations(s)** –The National Forests and Grasslands in Texas will follow Washington Office established national guidelines to identify an appropriate number of watersheds (approximately one to five) for maintenance or improvement that correspond to a reasonable and achievable program of work over the next 5 years within current budget levels. For example, current direction priorities are to maintain high value watersheds and to improve degraded watersheds, with an emphasis on:

- Maintaining watersheds that have important ecological values.
- Improving impaired ecosystems such as those with Clean Water Act § 303(d) - listed waters, threatened or endangered species, poor air quality, invasive species, or degraded vegetation conditions.

After the watersheds are prioritized for restoration, the next steps will be to develop and implement action plans for each watershed and to track and monitor restoration accomplishments.

## **Issue B. Sustainable Multiple Forest and Range Benefits**

## Sub-Issue 1. Outdoor Recreation Opportunities

### a. Recreation Uses and Opportunities

**Monitoring Item Description** - Review recreation opportunities provided by the NFGT and compare them to what the public demands, considering what is feasible based on expected budgets and what is environmentally sustainable. The NFGT is expected to align its recreation program so that it is offering the public recreation opportunities that they desire (within the above parameters). This alignment is tracked annually.

**Variability** - Recreation construction, reconstruction or decommissioning performed on trails or developed/dispersed recreation areas must follow the NFGT's alignment philosophy. If monitoring identifies deviation from this philosophy, necessary changes must be made to bring the project back into alignment.

**Finding(s)** – The NFGT provides for diverse types of recreational uses including OHV riding, horseback riding, hiking, hunting, fishing, camping and bird watching. Most of these activities can be done on the NFGT with no charge to participants.

**Recommendation(s)** – No change needed.

### b. Visual Quality Objectives

**Monitoring Item Description** - Visual character is considered during development of project plans by including *Plan* guidance for the protection of scenic resources. Reviews of project plans occur to assure visual character is protected. Monitoring will also occur on the ground for actions such as timber sales, road projects and other ground-disturbing activities.

**Variability** - If the on-the-ground post activity monitoring reveals that project implementation fails to meet *Plan* guidelines and objectives, the responsible line officer will be notified and appropriate actions taken to correct instances where the project departs from its original design.

**Finding(s)** – The *Plan* contains direction for VQO instead of the more current Scenery Management System (SMS) which is tied to GIS. To begin working toward SMS, the Forest decided to staff a Landscape Architect position in the Supervisor's Office beginning in FY 10.

**Recommendation(s)** – Move toward implementing SMS. Implementation of SMS would be addressed in the next Forest Plan revision.

### c. Off-Road Vehicle Use

**Monitoring Item Description** - Off-road vehicle, (ORV) or off-highway vehicle, (OHV) use and trails are to be monitored to assure no unacceptable damage is occurring that would affect the sustainability or integrity of any resources.

**Variability** - If unacceptable resource damage is not corrected in a timely manner, consider trail closure.

**Finding(s)** - The TMR was finalized and published on November 9, 2005 (70 FR 68264) This regulation recognizes OHVs as a legitimate use of the National Forest System lands, but requires that OHV use be carefully managed. The TMR restricts the use of motorized vehicles to designated roads, trails, and areas. The Rule requires the designations be made at the local level, with public involvement, in order to continue to provide the citizens of the country with the use and enjoyment of these public lands, while protecting the important environmental resources, services, values and uses of these public lands.

The TMR requires that each unit of the NFGT (the Sam Houston, Davy Crockett, Sabine, and Angelina NFs as well as the Caddo/LBJ National Grasslands) determine which roads, trails, and areas would be open for motorized vehicle use in a separate process and publish a Motor Vehicle Use Map (MVUM) designating those roads, trails and areas open for motorized vehicle use on each unit. Amendment # 9 was signed on January 4, 2008 which implemented the TMR. MVUM maps have been produced for each unit and distributed to Forest users.

**Recommendation(s)** – Continue to monitor the road and trail system on the NFGT. Update MVUM maps annually and have new maps ready for distribution in January.

## Sub-Issue 2. Infrastructure

### a. Road Construction, Reconstruction, and Maintenance

**Monitoring Item Description** - Ensure that any roads constructed or reconstructed are designed according to their planned uses and in accordance with all *Plan* guidelines, as well as other required specifications. Road maintenance is monitored to insure compliance with the *Plan* Standards and Guidelines.

**Variability** - Inspections must assure construction and reconstruction follow technical specifications as set out in Table 203-1 of the Forest Service Standard Specifications for Roads and Bridges and that tolerance levels are not exceeded. All roads are designed in accordance with applicable road management objectives and road design criteria. Culverts are designed in accordance with applicable road design criteria. Fish passage design is included in all culvert designs where applicable. Road maintenance is performed according to the “Standard Specifications for Road Maintenance Activities” that is in all road maintenance contracts. Deviations from the above specifications will be documented and approximate actions taken.

**Finding(s)** - All road construction in FY 10 was in compliance with contract specifications and *Plan* Standards and Guidelines. In FY 10, no road construction was accomplished.

In FY 10, a total of 41.1 miles of road reconstruction was accomplished. All of these miles included wing ditches with appropriately designed J-hooks.

The number of miles of roads constructed/reconstructed for the past eleven years is displayed in Table 9.

**Table 9. Miles of Road by Activity**

Year	Constructed	Reconstructed	Decommissioned	Unauthorized Roads Decommissioned	Unauthorized Roads Added to System	Maintained	Total System
2000	1.1	17.8	23.0	0.0	0.0	662.0	2358.0
2001	1.5	18.5	22.0	2.0	0.0	935.0	2330.0
2002	0.0	14.2	9.4	3.1	0.0	850.5	2335.0
2003	1.0	20.5	14.6	4.0	0.0	672.0	2321.4
2004	0.0	0.0	41.0	2.0	0.0	682.0	2280.4
2005	0.0	16.7	0.0	0.0	0.0	543.3	2288.9
2006	0.7	*83.0	2.9	0.0	8.5	602.6	2295.2
2007	1.85	*98.25	0	0	0	884.2	2390.8
2008	1.0	32.1	1.0	1.0	0	771.27	2389.4
2009	0	21.1	1.8	0.2	0.0	2139.29	2408.7
2010	0.80	41.1	0.0	0.0	0.0	806.10	2395.12
Total	7.95	363.25	115.7	12.3	8.5	9548.26	N/A

\* This number is high due to the impacts from Hurricane Rita.

\*\* This number is high due to impacts from Hurricane Ike.

Note: The word “Unauthorized” is synonymous with the word “Unclassified”.

One hundred percent of National Bridge Inspection System (NBIS) major culverts (those having an end area of 35 square feet or more) were inspected in FY 10. This inspection indicated all road bridges and major culverts are structurally stable; however, low maintenance applications due to funding levels will continue to accelerate their deterioration. These structures have inspection cycles of two-to-four years. Engineering unit employees will continue to report deficiencies to the RO and work towards a replacement program that will not allow catastrophic failures.

**Recommendation(s)** – No change needed. Continue road construction, reconstruction and maintenance in accordance with road management/road design criteria and *Plan* provisions.

## b. Facilities

**Monitoring Item Description** – Safety and maintenance items noted in inspections of administrative facilities are accomplished and administrative facilities are replaced as needed for health and safety of employees.

**Variability** – Facilities are required to be inspected every five years and entered into the INFRA data base. The *Plan* list three facilities that were scheduled for replacement and states that one facility will be replaced per *Plan* year.

**Finding(s)** – In FY 10, approximately twenty percent of the NFGT facilities were inspected and the data was entered into the INFRA data base.

Construction of the new Supervisor's Office on federally-owned land in Lufkin, Texas began in the fall of 2008 and construction continued throughout FY 10. This new facility will be owned by the NFGT, thus eliminating the current situation of having to rent a facility. This will improve efficiency and provide more funding for on-the-ground project work.

**Recommendation(s)** – No change needed. The NFGT will continue inspections of its facilities, as required, and will continue to replace the facilities mentioned in the *Plan*.

## **c. Lands**

### (1) Property Boundary Maintenance

**Monitoring Item Description** – Boundary lines will be monitored through activity reviews and management attainment reports to determine if the *Plan* Standards and Guidelines are being met.

**Variability** – If boundary line maintenance falls below the *Plan's* required 10-year rotation for maintenance, the responsible line officer will be notified and appropriate action taken.

**Finding(s)** – The Hurricane Rita Boundary Line Contract which started in Fiscal Year (FY) 2006 is now complete at the end of FY 2010. On the Angelina National Forest a total of 221 miles of Land Line boundaries were resurveyed, 889 corners were maintained and 71 corners were re-monumented or re-set. On the Sabine National Forest a total of 224 miles were resurveyed, 890 corners were maintained and 51 corners were re-monumented or re-set.

On September 13, 2008, Hurricane Ike made landfall and again did damage to Forest Service property boundaries but this time impacted mostly the Davy Crockett and Sam Houston National Forests. Additional Funding came to the NFGT in the form of Hurricane Ike relief dollars for boundary lines re-survey work and restoration of damaged boundary lines.

A new contract was awarded to a local Surveying Company that started resurveying and maintaining land lines on the Davy Crockett and Sam Houston National Forests in FY 2009 to re-established damaged boundary lines. This contract is planned to accomplish 175 miles of re-surveyed boundary lines and 130 miles of standard land line maintenance miles on the Davy Crockett National Forest. A total of 50 corners are to be re-established through new corner monumentation and approximately 1436 corners should be maintained. On the Sam Houston National Forest the damage was not as severe. A total of 10 miles will require resurveying while approximately 60 miles of boundary lines will be maintained to standards. It is estimated that 50 corners will need to be re-established and 324 corners will require maintenance.

At the end of FY 2010 progress on this contract on the Davy Crockett N.F. has been very good with 31 monuments being re-established, 498 corners were maintained and 156 miles re-surveyed and 41 miles maintained boundary lines. On the Sam Houston National Forest a total of 9 monuments were re-established, 117 boundary corners were maintained and 44 miles of boundary lines were maintained.

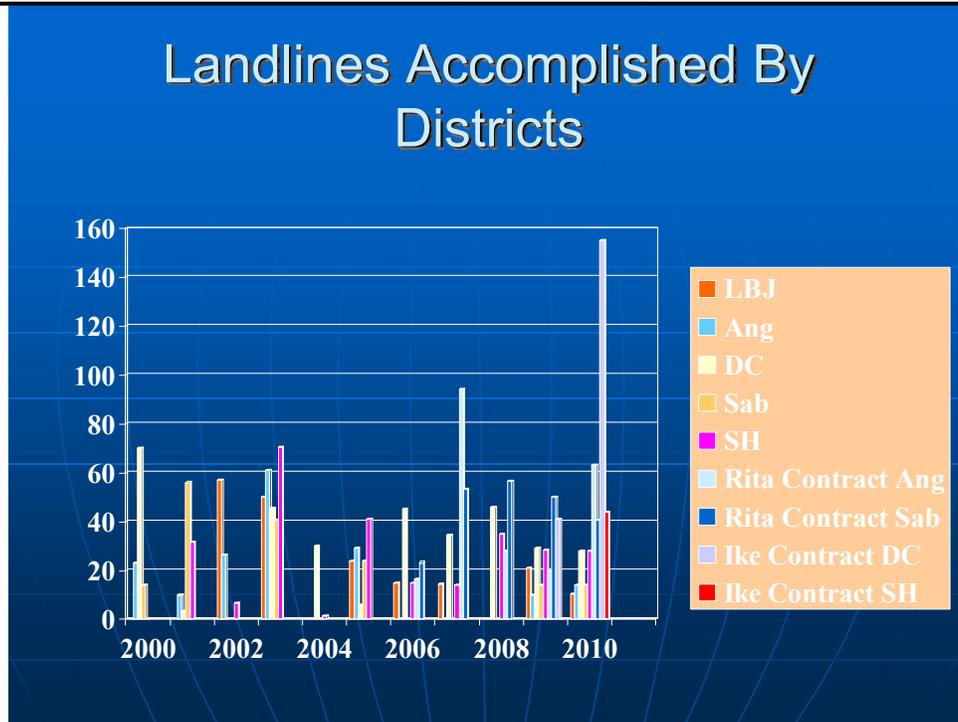
Table 10 displays: the amount of boundary lines accomplished in miles over a 10 year period by National Forest Target and by Hurricane Rita Contract and Hurricane Ike Contract.

**Table 10. NFGT Boundary Line Accomplishments 2000-2010**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
LBJ	0	9.8	56.9	50.13	0	24	15	14.3	0	20.84	10.32
Angelina	23	3.4	26.5	61.1	0	29.08	0	0	0	10.0	14.0
Davy Crockett	70.1	55.9	0	45.45	30	6	45	34.5	46.09	29.28	29.28
Sabine				40.45	0	24	0	0	0	14.0	14.0
Sam. Houston	14.6	31.7	6.6	70.38	1.4	41	15	14	35	28.25	28.00
Hurricane. Rita Contract Angelina							16.52 Resurvey	93.95 Resurvey	27.9 Resurvey	19.7 Resurvey	62.93 Resurvey Complete
Hurricane Rita Contract Sabine							23.25 Resurvey	53.35 Resurvey	56.71 Resurvey	49.94 Resurvey	40.75 Resurvey Complete
Hurricane Ike Contract Davy Crockett										41 Resurvey	S=122 M=33
Hurricane Ike Contract Sam Houston										0	S= 0 M=44
Total (Miles)	108	101	90	268	31	124	115	210	166	213	S=251.95 M=172.6

S= Surveyed Land Lines, M = Maintained Land Lines

**Table 11. Boundary Line Accomplishments**



With the completion of this contract it has helped tremendously to keep up with the Landline Maintenance rotation and regain the ground we had lost in monumenting property boundaries.

On August 3<sup>rd</sup> 2009 the NFGT hired a forest cadastral surveyor. NFGT has been without a licensed surveyor since 1995. Since his arrival to Texas, he has been heavily involved in monitoring and conducting inspections on these two Hurricane landline contracts and trespass land cases. With these two hurricane contracts and the resurveying of the boundary lines what has surfaced is the amount of trespass and encroachment that is occurring on the National Forests which we are trying to resolve through contacting the private landowners or through building a case file and preliminary surveying reports for the files and for District Offices to respond to.

**Recommendation(s)** – Change needed. Additional funding is needed to meet the *Plan’s* Standards and Guidelines for boundary management. Continue monitoring and request increased funding allocations to address boundary maintenance needs.

(2) Land Ownership Adjustments

The NFGT is working to develop a Lands Adjustment Strategy, focusing on its goals and objectives. This document will show the direction the Forest Service is headed and by using maps giving detailed information and reasoning as to why it is necessary to pick up valued properties. This strategy plan will be used and tiered along with the Forest Plan when making land management decisions.

In looking at our budgets and overall land program direction given through reviews and audits the recommendation is to prioritize and focus on land exchanges and tripartite land exchanges since there is no pending legislation or current LWCF purchasing monies for land acquisition in Texas. The NFGT is continuing to gain public support along with congressional and third parties.

(a) Acquired Right-of-Ways

**Monitoring Item Description** – Acquired right-of-ways are monitored to assure they facilitate more efficient management of NFGT lands.

**Variability** – All acquired right-of-ways are appropriate to meet access or other public objectives.

**Finding(s)** – No acquisition of any right-of-ways were obtained through land acquisitions although protection of existing right's-of-ways were made to prevent private landowners from blocking access of forest roads to larger tracts of National Forests system lands. This was accomplished through law enforcement actions. In a small tracts act case the access road is protected whereby the new landline location or what will be conveyed in the deed will be to the centerline of the road. This protects the right-of-way access for the general public using Forest Service system lands or for the private landowner.

**Recommendation(s)** – No change needed. Continue to monitor and take actions to hold and secure public access. Address possible new right-of-way needs as projects develop.

(b) Land Exchanges, Acquisitions, Interchanges, and Donations

**Monitoring Item Description** – Land exchanges, acquisitions, interchanges and donations are monitored to assure they are improving management, consolidating ownership and result in a net boundary reduction.

**Variability** – All exchanges, acquisitions, interchanges and donations will comply with land ownership adjustment Standards and Guidelines in the *Plan* and be coordinated with the landownership adjustment map.

**Finding(s)** – The Polk land exchange is one of the best proposals that the NFGT is currently pursuing. The land exchange involves exchanging 172.57 acres of Federal lands for 174.34 acres of non-Federal lands. This land exchange was proposed to help move the site specific desired conditions described in the *Plan* and to meet land acquisition and consolidation goals and objectives of the *Plan*. As proposed it consists of two federal tracts on the Davy Crockett National Forest (DCNF) (Tract K-58 being approximately 118.57 acres, and Tract K-1f, being approximately 54 acres), in exchange for one non-federal tract owned by the proponent (Tract A-55, being approximately 174.34 acres) within the boundaries of the Angelina National Forest (ANF). The non-federal tract contains seeps, bogs, riparian and wetland areas and contains sensitive plant species such as pitcher plants and suitable habitat for T&E species. The more drained portions of the tract support a good stand of mixed hardwood and conifer species. Tract acquisition creates a more favorable ownership pattern by consolidating the land base, reduces

surveys and land line costs for boundary maintenance, and provides a greater buffer for the Upland Island Wilderness Area. Since the tract lies within the Longleaf Ridge area, acquisition will facilitate management prescriptions which would promote prescribed burning efforts and the restoration of a longleaf pine ecosystem.

The primary focus for the Lands Program in FY 10 was to acquire lands by implementing a land for land exchange. This will help consolidate national forest lands, improve Forest management and reduce boundary line maintenance.

**Recommendation(s)** – Change needed. Focus on acquisitions by implementing Tripartite Land Exchanges that use timber sale receipts to purchase land in holdings and traditional land exchange processes to gain desirable land ownership for the public’s benefit. This will help consolidate national forest lands, improve management and reduce boundary line maintenance.

### Sub-Issue 3. Human Influences

#### a. Law Enforcement

**Monitoring Item Description** - Evaluate the ability to provide sufficient levels of visitor protection, enforcement of resource regulations and facility protection.

**Variability** - Activities being conducted are within the administrative boundaries of or are near NFGT lands and are consistent with Federal, state and local laws.

**Finding(s)** - Activities and conditions presented in the last report remained consistent in FY 10. There is a constant rise in use of NFGT lands that are near large urban areas (such as Dallas, Fort Worth and Houston.) The Sam Houston NF, near Houston, experienced increased use by OHVs - specifically all-terrain vehicles (ATVs) - from people living in nearby subdivisions. This created unauthorized trails and associated resource damage on the forest. Due to this increase of violations, one additional LEO (Law Enforcement Officer) was added and assigned to the Sam Houston NF. There is also the need for an education program for Forests visitors that would make them aware of the resource damage that can be caused OHV use on unauthorized trails.

Illegal trash dump sites have been a continual problem on the entire NFGT for many years. Law Enforcement Officers actively monitor sites to enforce trash dumping regulations.

**Recommendation(s)** – Change needed. Maintain Law Enforcement staffing at 100% to handle increased OHV use, illegal drug issues, trash dumping and other illegal uses on NFGT lands. Have the Conservation Education Coordinator develop an OHV education program for Forest visitors. This could be done by working with the Trails Coalition and the Sierra Club.

#### b. Land Use Authorizations

**Monitoring Item Description** – Utilize the land use authorization (special use permits) screening protocol to ensure that only projects that pass the standards are approved. One of these standards is to limit access across National Forests lands where other alternatives are possible.

Assure required mitigation measures are a binding part of the authorization to implement proposals on National Forest lands. With the implementation of Cost Recovery, the NFGT have a responsibility to process accepted applications that are complete within 60 days, or request an extension in writing.

**Variability** – Violations of permit conditions will not be allowed and when discovered, the violations will be addressed with the permit holder for compliance with the terms of their permit. The Forest Service will work with the holder to gain compliance and if the corrections are not performed in a timely manner, a Notice of Non-compliance will be issued. If the problem continues, NFGT personnel will pursue revocation/termination of the permit.

**Finding(s)** – Inspections in FY 10 indicated that most activities were in compliance with the terms of authorization. Table 12 displays the activities that occurred in FY 10, with trends starting in 2004.

**Table 12. Special Use Land Authorizations**

Use	2004	2005	2006	2007	2008	2009	2010
Utility ROWs (Power, water, Telephone, Fiber, Sewer)	158	148	149	152	152	147	152
Road ROWs, Private & Public (DOT, FRTA, FLPMA)	489	500	498	499	507	500	499
Recreation-related permits (Rec Event, Concess., Filming)	43	47	43	54	63	23	20
Churches & Cemeteries	17	17	17	17	16	15	15
Agriculture & Residence (Apiaries)	9	11	11	10	10	7	7
Watershed, reservoir & supply.	7	8	8	8	8	11	11
Mineral – pipelines, etc.	134	135	132	128	136	127	134
Mineral - seismic	3	3	1	1	4	4	3
Communication Sites	4	4	4	4	4	4	4
Research	4	2	4	4	8	26	31
Other Misc. (mailboxes, Signs, glidepath, svc bldg)	23	23	26	28	29	23	19
<b>Total</b>	<b>891</b>	<b>898</b>	<b>893</b>	<b>905</b>	<b>937</b>	<b>887</b>	<b>895</b>

At the end of FY 10, the NFGT had 895 active lands special use permits. Also in FY 10, the NFGT issued 20 recreation special use permits. These permits include one day events such as trail rides, motorcycle races, fishing tournaments, and youth camps.

**Recommendation(s)** – No change needed. Continue monitoring special use permits at existing frequencies.

## Sub-Issue 4. Roadless Areas/Wilderness/Wild and Scenic Rivers

**Monitoring Item Description** - Visitor use in wilderness areas should leave only limited and short-term evidence of passing. This is evaluated through national surveys performed every five years. Locally, visitors are given access to Wildergram cards to report their experiences. Some visitors have noted that often when visiting the Wilderness, Wildergram cards are not available or are left for periods of time without being picked up by NFGT personnel.

**Variability** - Do not exceed maximum allowable limits of visitors, as determined by observation, NVUM (National Visitor Use Monitoring) surveys, or other inventories.

**Finding(s)** – A NVUM survey was conducted by Stephen F. Austin University in FY 09. The results (released in FY 10) found that visitor use of wilderness areas remains low. The report can be found on the internet at the following web address:

[http://www.fs.fed.us/recreation/programs/nvum/nvum\\_national\\_summary\\_fy2009.pdf](http://www.fs.fed.us/recreation/programs/nvum/nvum_national_summary_fy2009.pdf).

**Recommendation(s)** - No change needed nationally. Continue NVUM in coordination with Stephen F. Austin University. Locally, the Forest should consider another means of acquiring information from visitors about their experiences in Wilderness. Wildergram cards are not often available or not routinely picked up by NFGT personnel.

## Sub-Issue 5. Timber

### a. Timber Sale Allowable Sale Quantity

**Monitoring Item Description** – The *Plan* specifies the quantity of timber that may be sold from an area of suitable land during a specified period. This quantity is usually expressed as the ASQ (average annual allowable sale quantity). The NFGT should ensure that the maximum amount of ASQ projected in the *Plan* is not surpassed.

**Variability** - Do not exceed the maximum ASQ of 1,134 MMBF (million board feet) for the first decade of *Plan* implementation.

**Finding(s)** – See Table 13 for Timber Volume Sold vs. ASQ Volume (shown in MMBF). The ASQ remains low due to reduced budgets and timber targets.

**Table 13. Harvested Timber Volumes**

Fiscal Year	Total Volume Sold*	Volume Sold Excluding Salvage*	ASQ Volume**	Volume Sold as a Percent of ASQ	Difference Between Volume Sold & ASQ
2004	7.7	7.3	113.4	6%	-106.1
2005	26.4	19.7	113.4	15%	-93.7
2006	63.6	3.6	113.4	3%	-109.8
2007	34.0	31.1	113.4	27%	-82.3
2008	39.4	38.3	113.4	34%	-75.1
2009	34.4	8.5	113.4	30%	-79.0
2010	37.6	36.4	113.4	32%	-78%
Total	243.1	144.9	793.8	21% (Avg.)	-624.3

\*

Volume from *Timber Cut & Sold* report.

\*\*ASQ Volume does not include timber volumes sold from salvage sales.

For the last ten years, an average of 21.0 percent of the *Plan* specified ASQ has been sold. Since the probability of exceeding ASQ is unlikely, this is not a real issue for the NFGT.

**Recommendation(s)** – Change needed. Identify areas of concern and develop associated project plans to build up the timber harvesting program in order to meet *Plan* target levels. This will help the NFGT move toward meeting its *Plan* management objectives for habitat improvement, forest health, age-class distribution and restoration needs.

## b. Silvicultural Practices

**Monitoring Item Description** - Determine if silvicultural practices are in compliance with the *Plan* by reviewing project plans, prescriptions, environmental assessments and other decision documents. Conduct inspections of silvicultural activities (either during or post treatment).

**Variability** - General practices determined to be out of compliance with the *Plan* are to be documented and corrected as soon as practicable. Document necessary deviations from *Plan* direction authorized by line officer.

**Finding(s)** - Project plans, prescriptions, environmental assessments and decision documents that were developed in FY 10 were reviewed and found to be in compliance with the *Plan*. On-site inspections of silvicultural practices, including site preparation and tree planting, found no violations of *Plan* standards.

**Recommendation(s)** – No change needed. Continue reviews and inspections to assure these activities are performed in compliance with *Plan* direction.

## c. Restocking Harvested Lands

**Monitoring Item Description** –Beginning in FY 2007, regeneration treatments will be incorporated into the Forest Service Activity Tracking System (FACTS). The results of first-year and third-year stocking and survival exams are now be entered into FACTS. The third-year check is used to certify that successful stand reestablishment has taken place. The *Plan* Forest-wide Standard FW-204-1 identifies the target level and lower and upper levels of desirable stems per acre for pine and hardwood species.

**Variability** - Stands not meeting the lower level of desirable stems per acre must be evaluated after the third-year survival exam is completed and a determination made whether additional treatments to improve stocking warrants the additional cost and site disturbance.

**Finding(s)** – Third-year stocking exams conducted in 2010 found that 84.6 percent of the stands exceeded the lower level of the FW-204-1 standard for the planted species. Stands that were below minimum survival levels (for planted seedlings) were checked for stocking. Enough natural seedlings were established to increase the total stand stocking levels (planted and natural seedlings) above the *Plan* minimum level for most of the deficient stands. The remaining deficient stands will be monitored to see if sufficient suitable natural seedlings become established to adequately stock the stands. Only in cases where stands are grossly deficient in suitable stocking will additional site preparation and planting be considered.

**Recommendation(s)** – No change needed. However, emphasis does need to be put on plant seedlings in late fall/early winter (November through January) when there is sufficient soil moisture to allow seedlings more time to become established before warmer and drier spring conditions occur. Continue established regeneration checks to assure adequate restocking occurs at required *Plan* levels.

#### **d. Maximum Harvest Acres**

**Monitoring Item Description** - Harvest unit sizes are monitored by the Forest Service Activity Tracking System (FACTS).

**Variability** – Do not deviate from limitations on the size of openings created by even-aged regeneration harvests that are found in the *Plan*'s Forest-wide Standard FW-198, which provides that the maximum size opening is 80 acres for the southern yellow pine types and 40 acres for all other species. Document necessary deviations from *Plan* direction authorized by line officer.

**Finding(s)** - The FY 10, a FACTS report indicated that 107 acres of even-aged regeneration harvests were completed. These harvests took place on two separate stands, the largest of which was 77 acres. Therefore, all individual cutting units conformed to the maximum size limits established in the *Plan*.

**Recommendation(s)** – No change needed. Continue monitoring FACTS to assure *Plan* limitations are not exceeded.

#### **e. Timber Harvesting on Land Not Classified as Suitable**

**Monitoring Item Description** - Use FACTS to determine if timber harvesting has occurred on lands classified as “not suited” for timber production. The FACTS database is used to report silvicultural accomplishments and includes land suitability classification information.

**Variability** - No harvesting should occur on lands classified as unsuitable, except for salvage sales or sales necessary to protect other multiple-use values where the *Plan* establishes that such actions are appropriate. Document cases where necessary deviations from *Plan* direction are authorized by a line officer.

**Finding(s)** - No timber was harvested on unsuitable lands solely for timber management purposes.

**Recommendation(s)** - No change needed. Continue reviews to assure that no timber is harvested from unsuitable lands (unless the special need is authorized by a line officer.)

## **f. Classification of Lands as Suitable for Timber Production**

**Monitoring Item Description** - The NFGT uses FSveg (Field Sampled Vegetation) database, which is part of the NRIS (Natural Resource Information System). The FSveg database captures timber suitability information through land class codes. Changes in timber suitability are identified through project plans, prescriptions, environmental assessments and other decision documents.

**Variability** - Minor changes in land suitability, such as stand boundary changes resulting from improved mapping, may be approved via the National Environmental Policy Act process by a line officer. Large acreage changes in land suitability must be documented and approved in a *Plan* amendment.

**Finding(s)** – Acres of suitable and unsuitable lands continue to remain constant.

**Recommendation(s)** – No change needed. Keep the FSveg database current with any changes that may occur in land suitability classification

### **Sub-Issue 6. Forage**

**Monitoring Item Description** - Forage production and composition is assessed annually on all grassland allotments through general allotment inspections and in some cases more specific vegetation sampling. Monitoring of the condition of rangeland provides information so specialists can develop management options for prescribed fire, grazing or land deferral. Allotments are classified as either poor, fair, good, or in excellent condition.

**Variability** – A significant downward trend in range condition for five years or more would indicate a need for change.

**Finding(s)** - Grassland allotments are being managed to a satisfactory condition of fair to good. In FY 10, the grassland units continued to implement a fundamental change in grazing schemes that began in 1998. The focus changed from year round grazing to a seasonal grazing system. This implemented a high intensity/low duration grazing system which resulted in a higher number of cattle grazing for a shorter grazing period. The change resulted in fewer total AUMs (Animal Unit Months - this is equal to a cow and a calf grazing for one month); however, it still provided for the desired grazing results.

**Recommendation(s)** - Change needed. The grasslands are adequately monitoring AUMs. However, prior to 2010 the annual monitoring of forage production and composition was not at the desired level due to a shortage of personnel. In 2010, the grasslands hired a Range Conservationist to accomplish this much-needed monitoring.

## Sub-Issue 7. Other Products

**Monitoring Item Description** –Assure implementation of required mitigation measures for ongoing activities for federal mineral rights and private minerals where the U.S. owns the surface rights. This is to be done while adhering to the National Energy Policy of 2005. Ensure that operators are in compliance with the terms of their permit. At a minimum, the NFGT must provide every other day inspections during active drilling operations and annual inspections of additional ongoing activities. The NFGT will inspect problem areas as needed.

**Variability** – Violations of permit conditions will not be permitted and if discovered, the violations will be addressed with the operator to gain compliance. If the corrections are not performed within a timely manner, a Notice of Non-compliance will be issued and any performance bonds will be collected by the Forest Service to ensure problems are corrected.

**Finding(s)** – Minerals activities on the NFGT have effects at the national and local levels. These effects include adding additional jobs, increasing revenues to local shops and businesses, providing royalties to local residents, impacting local roads, increasing or decreasing payments in lieu of taxes to local counties.

Inspections in FY 10 indicated activities were in compliance with operating plans. There was 1 reported oil spill on the LBJ National Grasslands (LBJNG) in 2010. On June 22, 2010, the LBJ became aware of a broken oil/gas gathering line in the northern section of Unit 41 in Wise County, TX. Aspen Oil Company is the responsible party for this pipeline. Approx. 3,000 barrels of a mixture of oil/saltwater had spilled into the unnamed creek. The environmental firm of Eagle Environmental conducted soil and water sampling. Sampling occurred every 200 feet of affected streambed and conformed with approved USFS NFGT testing guidelines.

**Recommendation(s)** – No change needed. Continue monitoring mineral operations at existing frequencies. Respond to new requests for operating permits and lease offerings in a timely manner.

## Sub-Issue 8. Heritage Resources

**Monitoring Item Description** - Through project reviews, field surveys, coordination with other resource managers and active monitoring of projects, ensure the protection of significant cultural (heritage) resources (historic properties) from degradation and destruction. A historic property is any archeological or historical site that has been listed on the National Register of Historic Places, or that has been formally determined eligible through consultation under 36 CFR 800.4-800.6.

**Variability** – No evidence of disturbance or destruction to historic properties is allowed as a result of the implementation of *Plan* guidelines, or as the result of human-caused actions or acts of nature.

**Finding(s)** - In FY 10, there were no projects which implemented *Plan* Standards and Guidelines that adversely affected historic properties.

In 2010, crews from the Caddo Nation completed a year-long assignment with the National Forests and Grasslands in Texas where they did field technician work in archeology. Thirteen members of the Caddo Nation were trained by the Forest Service to conduct shovel test surveys, assisting district archeologists in laying out survey transects, GPSing and field data collection. They worked on the Davy Crocket and Sabine National Forests and accomplished thousands of acres of proposed project work. In the Davy Crockett, they worked on the Groveton Phase II and Phase III projects and worked on the Tenaha project and North Moore project in the Sabine.



**Figure 2. Caddo crew conducting shovel tests.**



**Figure 3. PIT volunteers conduct archaeological surveys at Ratcliff Lake.**

From April 10-24, 2010 the NFGT hosted a Passport in Time (PIT) project at the Ratcliff Lake Recreation Area 4 C's Sawmill Site. A PIT project enlists volunteers throughout the United States to conduct excavation of a historic site to document its historic properties. The 2010 PIT project hosted 28 volunteers from 11 different states. These volunteers completed 153 acres of archaeological survey.

**Recommendation(s)** – No change needed. Continue heritage resource coordination and consultation for all projects which implement *Plan* Standards and Guidelines.

## **Issue C. Organizational Effectiveness**

### **Sub-Issue 1. Economics**

**Monitoring Item Description** – The *Plan* projects the amount of funds needed to accomplish its goals and objectives. Annually, the NFGT should evaluate how well *Plan* projections for funding are being met and whether the NFGT is receiving sufficient monies to meet its *Plan* obligations.

**Variability** – Receiving allocations less than 100 percent of the *Plan*'s average projected budget can prevent full implementation of the *Plan*.

**Finding(s)** – Since the NFGT is no longer allocated funds based on a percent of its need (as identified in the *Plan* as funds needed to accomplish its goals and objectives), tracking actual expenditures and comparing them to the average projected budget shown in the *Plan* is the only

way the NFGT has to determine how much less than *Plan* projected dollars are received. Table 14 displays this type comparison for the past seven years. The total expenditures include the normal operations on the NFGT and do not include emergency funding (such as fire severity, hurricane recovery, and shuttle recovery operations).

**Table 14. Forest Expenditures by Fiscal Year**

<b>Fiscal Year</b>	<b>Expenditures</b>	<b>Percent of <i>Plan</i> Projected Average Budget*</b>
2000	\$14,491,972	54
2001	\$14,363,604	54
2002	\$17,925,012	67
2003	\$14,080,375	52
2004	\$18,084,902	68
2005	\$21,177,789	79
2006	\$19,356,826	73
2007	\$21,975,842	82
2008	\$25,134,618	94
2009	\$23,810,173	89
2010	\$22,186,747	83

\**Plan* projected average budget is \$26,657,400.

**Recommendation(s)** – No change needed. Continue to monitor expenditures to determine where shortfalls may be creating an inability to achieve *Plan* Goals and Objectives.

## Sub-Issue 2. Evaluating New Information

### a. Emerging Issues, Concerns and Opportunities

Below is information about lawsuits affecting the NFGT. Action has been taken to address and/or adhere to final rulings that have been issued, and lessons learned while continuing litigation support efforts are taken into consideration when planning new projects for implementation of *Plan* Objectives.

#### (1) National Forest System Litigation Affecting the NFGT

**2001 Roadless Area Conservation Rule** – During FY 2010, activity continued in this on-going lawsuit, but it mostly involved the Colorado and Idaho. In addition, the following events occurred because the Secretary wanted to assure the careful evaluation of actions in inventoried road less areas while long term roadless policy is being developed and relevant court cases move forward.

- On May 28, 2010, Secretary’s Memorandum 1042-155 reserved to the Secretary the decision making authority over the construction and reconstruction of roads and the cutting, sale, or removal of timber in inventoried roadless areas on certain lands administered by the Forest Service.
  - In addition, the Under Secretary was re-delegated authority concerning road construction, road reconstruction, and incidental timber cutting within inventoried roadless areas that was associated with operations of locatable mining activities undertaken pursuant to the United States Mining Laws.
  - The Chief of the Forest Service was re-delegated authority to approve:
    - Any necessary timber cutting or removal or any road construction/reconstruction in emergency situations involving wildfire suppression, search and rescue operations, or other imminent threats to public health and safety in inventoried roadless areas.
    - Timber cutting, sale, or removal in inventoried roadless areas incidental to the implementation of an existing special use authorization. Road construction/reconstruction is not authorized through this re-delegation without further project specific review.
    - The cutting, sale, or removal of generally small diameter timber when needed for one of the following purposes:
      - To improve threatened, endangered, proposed, or sensitive species habitat;
      - To maintain or restore the characteristics of ecosystem composition and structure, such as to reduce the risk of uncharacteristic wildfire effects within the range of variability that would be expected to occur under natural disturbance regimes of the current climatic period; or,
      - For administrative and personal use, as provided for in Title 36, Code of Federal Regulations 223, where personal use includes activities such as Christmas trees and firewood cutting and where administrative use includes providing materials for activities such as construction of trails, footbridges, and fences.

In the event employees decide to plan projects for any of the designated roadless areas located on the Sam Houston NF forest, they will follow the above established protocols.

Visit the Forest Service website at <http://www.fs.fed.us/> and look for a direct link to the Roadless website for the most up-to-date information.

**Forest Service Employees for Environmental Ethics (FSEEE) vs. USFS, USFWS and National Marine Fisheries Service** - In response to a 2010 court decision, the U.S. Forest

Service is preparing a draft environmental impact statement that will help inform the agency's decision whether to continue aerial application of fire retardant and, if so, under what conditions.

In July 2010, a U.S. District Court in Montana directed the Forest Service to develop the environmental impact statement after an organization sued the agency claiming that fire retardant drops were harming waterways. The release of the draft environmental impact statement is planned for FY 2011 and it will have a 45-day public comment period. There will be opportunities in several locations across the country for the public to interact with Forest Service specialists and learn more about fire retardant and the document.

For more information, see this topic under National News at <http://www.fs.fed.us/>.

## **b. Changes in Policy or Other Direction**

**National Forest System Land and Resources Management Planning Rule** – Throughout 2010, the USDA Forest Service hosted a series of public meetings and conducted Tribal consultation to provide opportunities for input and dialogue on the development of a new planning rule. The Forest Service is considering the feedback received through these efforts, and using public input, the results of Tribal consultation, science, and agency expertise to develop the proposed rule and a draft environmental impact statement.

The public can visit <http://www.fs.fed.us/> and look for the link to information about the Planning Rule to find out more about this continuing process.

## **c. Effects of National Forest Management to and from Private Lands**

National Forests and Grasslands in Texas management actions affect its lands, resources and adjacent communities. Management activities conducted on nearby lands that are managed by other Federal, State, local governmental agencies, or individuals can also affect NFGT lands and resources as well. These interactions need to be carefully considered and are discussed in the following issues.

### **(1) Wildland-Urban Interface**

The NFGT is a very fragmented forest and there is an abundance of private land intermingled with its lands. This creates a serious wildfire situation where a fire that starts on the NFGT can easily spread to private land. Conversely, a fire that starts on private land can easily spread to federal lands.

In FY 10, the NFGT conducted numerous prescribed fires that, among other benefits, reduced the potential of wildfire to spread. In addition to prescribed fire, mechanical treatments were performed to reduce fuels to address reducing the potential for damaging wildfires to occur. In FY 11, the NFGT will continue its prescribed fire program and increase efforts to mechanically treat strips of land along federal property boundaries to help mitigate the potential for the spread of wildfire.

(2) Payments to Counties

In FY 10, the NFGT made payments to counties in Texas that contain NFGT lands through Title I of the Secure Rural Schools Act. Table 15 displays the amounts that were paid by the U.S. Treasury to the involved counties.

Title II funds from the Secure Rural Schools Act (SRS) can be used for special projects on federal lands. These projects are developed with the assistance of a Resource Advisory Committee (RAC). The Davy Crockett National Forest (DCNF) and the Angelina/Sabine National Forest (ASNF) have partnered with the local county officials to develop a RAC. Projects developed by the RAC include watershed restoration and maintenance, infrastructure maintenance, treatment of non-native invasive plant species, and the improvement of wildlife habitat.

**Table 15. Payments to Counties in 2010**

<b>Counties</b>	<b>Payments</b>
Angelina	\$217,995
Houston	\$613,670
Jasper	\$78,244
Montgomery	\$189,255
Nacogdoches	\$34,977
Newton	\$12,553
Sabine	\$620,406
San Augustine	\$272,789
San Jacinto	\$238,602
Shelby	\$386,001
Trinity	\$440,454
Walker	\$214,836
<b>Total</b>	<b>\$3,319,786</b>

**d. Community Outreach**

Three of the top ten largest cities in the United States are located in Texas- Houston (# 4), San Antonio (# 7), and Dallas (# 9). All three are within a 2-4 hour drive of a National Forest or National Grassland in Texas. The population of Texas is urban and becoming more diverse (<http://www.window.state.tx.us/specialrpt/tif/population.html>). The NFGT wants to reconnect Forest visitors with their National Forests.

(1) Conservation Education

- Our conservation education program is a dynamic, innovative program reaching diverse audiences in forest, rural and urban setting. Working with Urban Connections, Forest for Every Classroom and Latino Legacy, Texas Forest Service, and Stephen F. Austin University, the NFGT reaches an outstanding number of youth and their families.
- The NFGT participates extensively in hands-on educational programs for children, adults, and special needs groups including at Deer Fest, a sponsored hunt with the Wheelin' Sportsman, Kids in the Woods, JAKES, Fishing derbies, and non-native invasive species awareness day.

## Chapter III. Evaluation of Outcomes on the Land

The NFGT analyzed the information found in Chapter II and the results are shown below.

### Issue A. Ecosystem Condition, Health and Sustainability

#### Sub-Issue 1. Biological Diversity

- Third-year stocking exams conducted in 2010 found that 23.4 percent of the seedlings had survived. First-year survival exams found that 40.2 percent of the seedlings had survived. Seedling survival was adversely impacted in 2010 by inadequate rainfall. The Angelina County weather station recorded below average rainfall in 2010. Angelina County receives 51.55 inches of rain on average. In 2010, the county received only 30.01 inches of rainfall. Since the NFGT is at the extreme western edge of the natural range for pine species, lack of adequate precipitation makes seedling establishment difficult.
- The FSveg age-class distribution report for the end of 2010 shows a continuing trend towards an older forest. For instance, the acres in stands over 100 years old have increased from 15,037 acres in 1992 to 79,591 acres in 2010. The acres in young stands age 0 to 10 years old were 83,612 acres in 1992 and have decreased to just 4,659 acres in 2010.
- In FY 10, the NFGT prescribed burned approximately 148,903 acres. The *Plan* set an annual objective of approximately 100,000 acres of prescribed burning per year. The average acres burned over the nine years is about 107,383 acres.
- The majority of management indicators have indicated stable or increasing trends through the past five-to-ten years. The RCW population is at 383 active clusters, a new milestone for the NFGT. In the past three years, increased emphasis has been directed at evaluating previous known management indicator plant sites, verifying location, documenting and evaluating status, and identifying protection and management needs. In addition, surveys in potential habitat have found a number of new locations for R8 TES and MIS. All new and relocated occurrences have been inventoried using GPS and added to the corporate database.
- Habitat for MIS (Management Indicator Species) is generally improving throughout the forests and grasslands. Increased prescribed fire efforts are revealing greater improvements in both the number of certain element occurrences and quality of each occurrence for fire-dependent plant species like the Louisiana squarehead. Through an evaluation of GIS data and FSveg, it is evident that communities such as the longleaf pine, shortleaf pine and tallgrass prairie are being restored and increasing. Most species' habitat and trends appear to be stable or increasing.

Most MIS' long-term trends appear to be stable or increasing, with the exception of the Yellow-throated Vireo and the Wood Thrush.

- Most resident T&E and Sensitive Species populations are increasing. The RCW populations are at an all-time high. Habitats for other sensitive species appear to be stable.

## Sub-Issue 2. Forest and Range Health

- Only one fine particulate matter monitoring site is located within 40 kilometers of any of the National Forests or Grasslands in Texas. The Harris County PM<sub>2.5</sub> monitor (EPA Site ID #482010024) is located 40 kilometers south of Sam Houston National Forest. Table 4 shows the 3-year average of 24-hour and annual fine particulate matter concentrations at that monitoring site as compared to the NAAQS. Data are taken from the EPA AirData and AirExplorer websites ([www.epa.gov/air/data](http://www.epa.gov/air/data) and [www.epa.gov/airexplorer/index.htm](http://www.epa.gov/airexplorer/index.htm)).
- No SPB infestations were detected on the NFT in FY 10. The NFT participated in the spring southern pine beetle survey, and results from the survey predicted extremely low populations, as no SPB were captured. The number of the SPB insects, clerids and predators collected fell from the previous year. The NFT also participated in fall SPB trapping, a new program designed to provide early warning of SPB outbreaks. No SPB were collected in the fall. No detection fights were made due to the low level of SPB activity predicted.
- In FY 10, 503 acres were treated for noxious weeds: 189 acres on the Caddo/LBJ NG, 50.0 acres on the Davy Crockett National Forest, and 264 acres on the Sam Houston National Forest.

## ▪ Sub-Issue 3. Watershed Conditions

- No soil and water disturbances occurred that were identified by NFGT personnel as exceeding the soil loss tolerance levels set out in the *Plan*. In 2010, TFS (Texas Forest Service) conducted a BMP (Best Management Practices) compliance review on the National Forests and Grasslands in Texas. The compliance reviews were conducted on the Angelina/Sabine National Forest. All units were 100% in compliance except one unit on the Angelina National Forest. TFS made recommendations to remediate a stream crossing that could potentially cause water quality issues if not repaired. The stream crossing was brought back into compliance in the fall of 2010 by district personnel.
- As part of the NFGT's endeavors to protect soil and water resources in FY 10, the Caddo and LBJ NGs continued to implement an active Watershed Improvement Program. Actions included the completion of 58 acres of watershed improvement.

- The condition of ninety-seven 6<sup>th</sup>-level watersheds within and adjacent to national forest lands in Texas were assessed using protocols from the Forest Service Watershed Condition Classification Technical Guide.

## **Issue B. Sustainable Multiple Forest and Range Benefits**

### **Sub-Issue 1. Outdoor Recreation Opportunities**

- In FY 10 trails data was loaded into the Infrastructure Application (INFRA) database, and trail condition surveys along with the trail bridge survey met protocols. The updating of this data base is an annual and ongoing process. The Recreation Enhancement Act (REA) Fee Legislation (that replaced the Fee Demonstration Program) has been implemented.
- Law enforcement officials continued their patrols of OHV use areas and issued citations to users for violations of riding laws and for creating unacceptable resource damage. In some areas where OHV use has not been deterred by issuing citations, LEOs have arrested the violators and towed away their OHVs to gain compliance.
- To begin working toward the Scenery Management System which is tied to GIS, the Forest decided to staff a Landscape Architect position in the Supervisor's Office beginning in FY 10.
- The TMR was finalized and published on November 9, 2005 (70 FR 68264). This regulation recognizes OHVs as a legitimate use of the National Forest System lands, but requires that OHV use be carefully managed. The TMR restricts the use of motorized vehicles to designated roads, trails, and areas. The Rule requires the designations be made at the local level, with public involvement, in order to continue to provide the citizens of the country with the use and enjoyment of these public lands, while protecting the important environmental resources, services, values and uses of these public lands.

The TMR requires that each unit of the NFGT (the Sam Houston, Davy Crockett, Sabine, and Angelina NFs as well as the Caddo/LBJ National Grasslands) determine which roads, trails, and areas would be open for motorized vehicle use in a separate process and publish a Motor Vehicle Use Map (MVUM) designating those roads, trails and areas open for motorized vehicle use on each unit. MVUM maps have been produced for each unit and distributed to Forest users.

### **Sub-Issue 2. Infrastructure**

- All road construction in FY 10 was in compliance with contract specifications and *Plan Standards and Guidelines*.
- A total of 41.1 miles of road reconstruction was accomplished. All of these miles included wing ditches with appropriately designed J-hooks.

- Approximately twenty percent of the NFGT facilities were inspected and the data was entered into the INFRA data base.
- Ground was broken for the new NFGT Supervisor's Office at the old administrative site in Lufkin, Texas in November 2008. Work continued on the building during FY 10. The 18,000 square-foot facility will be constructed using the agency's new "green" standards. The building should be ready for occupancy in early 2011.
- Because of Hurricane damage by storms, Rita and Ike and the amount of land line boundary re-survey work that has and will be accomplished under the hurricane contracts, the National Forests are catching up with the 10 year rotation criteria in the Forest Plan. The National Forests in Texas (Angelina, Sabine, and Davy Crockett) are in much better shape as far as the 10 year boundary line rotation criteria. These contracts are still on-going and have helped tremendously to keep up with the Landline Maintenance rotation and helps regain the ground that we had lost in monumenting and maintaining property boundaries.

### Sub-Issue 3. Human Influences

- There is a constant rise in use of NFGT lands that are near large urban areas such as Dallas, Fort Worth and Houston.) The Sam Houston NF, near Houston, experienced increased use by OHVs - specifically all-terrain vehicles (ATVs) - from people living in nearby subdivisions. This created unauthorized trails and associated resource damage on the forest. Due to this increase of violations, one additional LEO (Law Enforcement Officer) was added and assigned to the Sam Houston NF.
- Law enforcement agents are still encountering an increased amount of controlled substance use activity on the NFGT.
- Inspections of land use authorizations in FY 10 indicated that most activities were in compliance with the terms of authorization.

### Sub-Issue 4. Roadless Areas, Wilderness, Wild and Scenic

- A National Visitor Use Monitoring (NVUM) survey was completed in FY 09. The final report was released in FY 2010. The survey revealed that visitor use of wilderness areas remains low.
- The NFGT prepared an Environmental Assessment to allow prescribed burning for fuel reduction in Upland Island Wilderness on the Angelina National Forest. The burns will be implemented in FY 2011.

### Sub-Issue 5. Timber

- For the last ten years, an average of 21.0 percent of the *Plan* specified ASQ has been sold. Since the probability of exceeding ASQ is unlikely, this is not a real issue for the NFGT.
- The NFGT needs to identify areas of concern and develop associated project plans to build up the timber harvesting program in order to meet *Plan* target levels. This will help the NFGT in moving toward meeting its *Plan* management objectives for habitat improvement, forest health, age-class distribution and restoration needs.
- Project plans, prescriptions, environmental assessments and decision documents that were developed in FY 10 were reviewed and found to be in compliance with the *Plan*. On-site inspections of silvicultural practices, including site preparation and tree planting, found no violations of *Plan* standards.
- Third-year stocking exams conducted in 2010 found that 84.6 percent of the stands exceeded the lower level of the FW-204-1 standard for the planted species. Stands that were below minimum survival levels (for planted seedlings) were checked for stocking. Enough natural seedlings were established to increase the total stand stocking levels (planted and natural seedlings) above the *Plan* minimum level for most of the deficient stands. The remaining deficient stands will be monitored to see if sufficient suitable natural seedlings become established to adequately stock the stands. Only in cases where stands are grossly deficient in suitable stocking will additional site preparation and planting be considered.
- No timber was harvested on unsuitable lands solely for timber management purposes.

## Sub-Issue 6. Forage

- Grassland allotments are being managed to a satisfactory condition of fair to good. In FY 10, the grassland units continued to implement a fundamental change in grazing schemes that began in 1998. The focus changed from year round grazing to a seasonal grazing system. This implemented a high intensity/low duration grazing system which resulted in a higher number of cattle grazing for a shorter grazing period. The change resulted in fewer total AUMs (Animal Unit Months - this is equal to a cow and a calf grazing for one month); however, it still provided for the desired grazing results.

## Sub-Issue 7. Other Products

- Minerals activities on the NFGT have effects at the national and local levels. These effects include adding additional jobs, increasing revenues to local shops and businesses, providing royalties to local residents, impacting local roads, increasing or decreasing payments in lieu of taxes to local counties.

Inspections in FY 10 indicated most activities were in compliance with operating plans. There was 1 reported oil spill on the LBJ National Grasslands (LBJNG) in 2010. On June 22, 2010, the LBJ became aware of a broken oil/gas gathering line in the northern section of Unit 41 in Wise County, TX. Aspen Oil Company is the responsible party for this pipeline.

Approx. 3,000 barrels of a mixture of oil/saltwater had spilled into the unnamed creek. The environmental firm of Eagle Environmental conducted soil and water sampling. Sampling occurred every 200 feet of affected streambed and conformed with approved USFS NFGT testing guidelines.

## Sub-Issue 8. Heritage Resources

- In FY 10, there were no projects which implemented *Plan* Standards and Guidelines that adversely affected historic properties.

## Issue C. Organization Effectiveness

### Sub-Issue 1. Economics

- Since the NFGT is no longer allocated funds based on a percent of its need (as identified in the *Plan* as funds needed to accomplish its goals and objectives). tracking actual expenditures and comparing them to the average projected budget shown in the *Plan* is the only way the NFGT has to determine how much less than *Plan* projected dollars are received. In FY 10, NFGT expenditures were \$22,186,747 compared to the *Plan*'s projected average budget needs of \$26,657,400.

### Sub-Issue 2. Evaluating New Information

- **2001 Roadless Area Conservation Rule** – During FY 2010, activity continued in this on-going lawsuit, but it mostly involved the Colorado and Idaho. In addition, the following events occurred because the Secretary wanted to assure the careful evaluation of actions in inventoried road less areas while long term roadless policy is being developed and relevant court cases move forward.

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  - To improve threatened, endangered, proposed, or sensitive species habitat;
  - To maintain or restore the characteristics of ecosystem composition and structure, such as to reduce the risk of uncharacteristic wildfire effects within the range of variability that would be expected to occur under natural disturbance regimes of the current climatic period; or,
  - For administrative and personal use, as provided for in Title 36, Code of Federal Regulations 223, where personal use includes activities such as Christmas trees and firewood cutting and where administrative use includes providing materials for activities such as construction of trails, footbridges, and fences.

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The public can visit <http://www.fs.fed.us/> and look for the link to information about the Planning Rule to find out more about this continuing process.

- **Wildland Urban Interface-** To deal with a wildland urban interface issue, the NFGT conducted numerous prescribed fire and mechanical fuel treatment activities to reduce the potential for damaging wildfires occurring and spreading to intermingled private lands. In FY 11, the NFGT will continue its prescribed fire program and increase efforts to mechanically treat strips of land along federal property boundaries to help mitigate the potential for the spread of wildfire.
- In FY 10, the NFGT made a total of \$3,319,786 in payments to counties that contain NFGT lands.

## Chapter IV. FY 2011 Action Plan

### A. Actions Not Requiring Forest Plan Amendment or Revision

Activity	Recommendation(s)	Person(s) Responsible	Proposed Accomplishment Date
1. Seral Stage Distribution	Emphasis needs to be placed on regeneration harvesting to restore longleaf and shortleaf pine. Provide training to employees to assure that the required information is added to FSVeg database.	Forest Silviculturist	Increase to regeneration harvests will be ongoing until desired trend is established.
2. Control of Non-Native Invasive Plant Species	Continue to develop a forest-wide Non-Native Invasive Plant Species Management Strategy.	Forest Botanist	Continue to implement in 2011.
3. Road Maintenance	Address backlog of annual and deferred maintenance needs found in recent assessments.* Continue to decommission roads to reduce maintenance costs.	Forest Road Engineer	Ongoing
4. Boundary Line Management	Address backlog of landline maintenance needs before current investment is lost. If public safety concerns develop, consider closure. Request additional funding.*	Forest Lands Staff	Ongoing
5. Grasslands Range Management	Improvements are needed in monitoring forage production and composition so a more accurate assessment can be made on range condition and vegetation trends.	Grasslands District Ranger	Ongoing
6. Designated OHV trails, roads, and areas for the NFGT.	Each unit on the NFGT will determine which roads, trails and areas will be open for motorized vehicle use. A Motorized Vehicle Use Map will be published for each unit.	District Rangers	Update for 2011.

\* Previous requests for additional funding have not been successful.

### B. Actions That May Require Amendment or Revision of the Plan

Activity	Recommendation(s)	Person(s) Responsible	Proposed Accomplishment Date
1. Management Indicator Species.	Amend the <i>Plan</i> to revise the current list of Management Indicator Species according to the recommendations of the Forest Wildlife Biologist, Botanist, and Fisheries Biologist.	Forest Natural Resources and Planning Staff	September 2011.

### C. Actions That May Require Forest Plan Amendment or Revision

The following updates the status of activities identified in the FY 09 M&E Report.

Activity	Recommendation(s)	Person(s) Responsible	Status
1) Visual Quality Objectives/ Scenery Management Reviews	Develop a formal system to include scenery management reviews of project plans. Perform an on-the-ground specialist review of one project per forest, per year.	Forest Landscape Architect	In FY 10 the NFGT assigned the Landscape Architect position back to the Supervisor's Office.