



1999

Monitoring and Evaluation Action Plan & Report

Kisatchie National Forest



Claiborne, Webster, Grant, Rapides, Natchitoches, Vernon, and Winn Parishes of Louisiana

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I. Introduction to Monitoring and Evaluation Report

The Kisatchie National Forest (KNF) annually monitors and evaluates programs and projects to determine whether they are in compliance with management direction in the Revised Land and Resource Management Plan (Plan).



Monitoring and evaluation is an ongoing process, specifically designed to insure that Plan goals and objectives (Plan, pages 2-1 to 2-7) are being achieved; standards and guidelines (S&Gs) are being properly implemented; and environmental effects are occurring as predicted. It also indicates whether the application of management area prescriptions are responding to public issues as well as management concerns; and if the costs of implement-

ing the Plan are on target. The evaluation of monitoring results allows the Forest Supervisor to initiate action to improve compliance with management direction where needed, improve cost effectiveness, and determine if any amendments to the Plan are needed to improve resource management.

Monitoring is conducted by field reviews of projects and by inventory and survey work conducted by Forest Service resource specialists, Forest Service research scientists, universities, State resource agencies, and other co-operators.

This Monitoring and Evaluation Report is structured to correspond to the monitoring items listed in Chapter 5, Monitoring and Evaluation, of the Forest Plan. These items were developed based on the revised Plan's desired future conditions, goals and objectives, and standards and guidelines. Each monitoring item considered in this report references the corresponding monitoring item from Table 5-1 of the Plan.

This report includes the implementation status of the previous fiscal year's monitoring recommendations in addition to the detailed results and action plan for this year's report. The next page contains a certification state-



ment from the Forest Supervisor indicating that he has evaluated the findings and recommended actions, and directs that the action plans developed to respond to the recommendations be implemented.

Certification:

I have evaluated the monitoring results and recommended actions in this Report. I have directed that the action plans developed to respond to these recommendations be implemented according to the timeframes indicated, unless new information or changed resource conditions warrant otherwise. I have considered funding requirements in the budget necessary to implement these actions.

With these completed changes the Forest Plan is sufficient to guide the management of the Kisatchie National Forest for fiscal year 2000, unless ongoing monitoring and evaluation efforts identify further need for change.

Any amendments or revisions made to the current Forest Plan will be made using the appropriate National Environmental Policy Act procedures.

Opportunity for comment:

If you have questions or comments regarding the accomplishments for fiscal year 1999, please call or write and let us know. Telephone: 318-473-7160. Address: USDA Forest Service, 2500 Shreveport Highway, Pineville, LA 71360.

Sincerely,

A handwritten signature in cursive script, appearing to read "Lynn C. Neff".

Lynn C. Neff
Forest Supervisor
Kisatchie National Forest

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Summary of M&E Results and Report Findings

A. ECOSYSTEM CONDITION, HEALTH, AND SUSTAINABILITY

- Stocking surveys were completed on twenty-two planted sites consisting of 542 acres of longleaf and 220 acres of shortleaf pine for a total planted acres of 762. All but one, 19 acres of longleaf pine, had adequate survival.
- Prairie restoration on the Winn District continued. A global positioning system, along with digital ortho photos, provided baseline data on prairie size and condition. In the future, prairie condition can be compared with this baseline data, which includes a subjective assessment of each of 51 prairie remnants.
- The Louisiana Pearlshell mussel was found to occupy a total of 47.09 km of streams on National Forest Land. The 1998 survey results showed 15,740 individuals on National Forest land in Rapides Parish. The 1999 survey results showed 5,606 individuals on National Forest land in Grant Parish.

These numbers are significantly greater than earlier surveys indicated and will serve as a good baseline for these populations.

- During 1999, RCW populations generally maintained their abundance or slightly increased. A major exception was the Vernon population, which decreased significantly. In a Biological Opinion issued by the U.S. Fish and Wildlife Service in March, 2000, the perceived decline is most likely due to reporting errors over several years.
- Current wildfire preparedness funding levels were at about 70% of the most efficient level. This means in simple terms that only about 70% of the resources that were needed to be maximally efficient were being furnished and paid for at a level 30% below what was needed. As a result, wildfire losses were not being minimized due to the funding shortfall.
- The Kisatchie National Forest implemented an insect/disease prevention project in FY99. Four hundred acres of overstocked pine regeneration stands were precommercially thinned with this project

funded by Forest Health Protection (FHP). A Sporax applicator for feller-bunchers was purchased to apply stump treatments for annosum prevention when thinning on high risk sites.

- Timber removal operations were conducted on the Corney Unit blowdown area on the Caney Ranger District during July through November 1999. Five units where tree removal operations were conducted were evaluated on site by a Forest Service team. The units were monitored during and after the tree removal was completed to ensure compliance with Forest standards and guidelines and other specifications for protection of soil resources (Best Management Practices). Photos were taken and the units were scored and rated. All practices met or exceeded the standards and guidelines.

B. SUSTAINABLE MULTIPLE FOREST AND RANGE BENEFITS

- Population levels for game species except

bobwhite quail were stable. Bobwhite population levels were down slightly from the previous year. This is a national trend.

- The overall flow of timber related commodities affecting the local economy was very similar to that of FY 1998. Payment to the State of LA was \$2,126,042 and compares favorably to the previous year.
- The Forest continued outreach to rural forest-dependent communities. In FY 1999, three communities were assisted. Two of these had not received previous grants, including one federally recognized American Indian tribe. One grant project, an educational teaching video of forestry Best Management Practices, was a national award winner in 1999.
- The Forest achieved a timber sale offer volume of 9.68 MMCF. Average annual ASQ estimated for the 10-year Revised Plan period is 9.7 MMCF.
- The Forest completed NEPA documentation for allotments on the Kisatchie and Calcasieu districts, completing the Forest wide updating of such documents. With a decreasing level of grazing, forage resources remain underutilized.
- Approximately 30,000 acres on the Vernon Unit remained under litigation regarding

minerals ownership. The Forest Service/BLM has received another complaint regarding mineral ownership, which may affect 25,000 acres on the Catahoula and Winn Districts.

- No significant heritage properties were damaged by Forest-related activities. However, two prehistoric sites suffered damage due to archaeological vandalism.
- The current number of protected properties needing evaluation respective to eligibility for the NRHP stands at 418. Only 1 site was evaluated during FY99.

C. ORGANIZATIONAL EFFECTIVENESS

- FY99 was the final budget year utilizing the original 1986 Forest Plan direction. A comparison of FY99's annual budget with the expected annual budget under the Revised Plan is shown in Appendix. A.
- The Forest prepared the 1998 M&E Report and made it available to the general public through the Regional website at <http://www.r8web.com>.
- The Forest cooperated with Dr. Wayne Hudnall of Louisiana State University in order to implement a study designed to test

restoration measures for remediation oil spill contamination. The study included test plots on a wetland area that had been impacted by an oil spill.

- The Goldonna Stream Bank Stabilization project was funded by the LA Dept. of Environmental Quality (LA DEQ), Non-Point Pollution Control Program from EPA Clean Water Act Section 319 funding. The project was implemented in 1998 and 1999 as a demonstration project using bioengineering techniques (root wads layered into an eroding bank) and planted with native species. Located on Saline Bayou National Wild and Scenic River the project has been successful so far in withstanding flood flows.

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II. Detailed M&E Results and Report Findings

The following information is the detailed Monitoring and Evaluation (M&E) Report for 1999 with recommended actions. The M&E Report is structured to correspond with Chapter 5 of the *Kisatchie National Forest Revised Land and Resources Management Plan* (Forest Plan; Plan).

THE MONITORING AND EVALUATION PROCESS

This process documents the Forest Plan M&E program for fiscal year 1999. The Kisatchie National Forest annually monitors and evaluates its programs and projects to determine progress toward achieving Forest Plan management goals, objectives, and standards and guidelines.

Monitoring and evaluation is an ongoing process, documented through annual reviews by the Forest Supervisor, Forest staff and district rangers. Information from the reviews is compiled in this comprehensive report after the fiscal year is ended. Monitoring indicates whether management direction in the Plan is being effectively carried out and points out needed modification of that direction. It also shows whether effects of implementing

the Forest Plan are occurring as predicted; whether the application of management area prescriptions responds to public issues as well as management concerns; and if the costs of implementing the Plan are on target.

PLAN AMENDMENTS

The original 1986 Forest Plan was revised in 1999. There are currently no new amendments to it. The Revised Plan contains new or changed monitoring items, more appropriate to meeting the Revised Plan's new direction. These monitoring items are listed in Chapter 5 of the Revised Plan. Implementation of the Revised Plan began November 29, 1999. It is too early to make meaningful recommendations for specific changes. The general recommendation for FY2000 is to begin implementing the Revised Plan using guidance provided in Chapters 2 and 3 of the Plan in order to reach the objectives stated. Long terms goals for the Forest are to reach the Desired Future Conditions (DFC) stated for the Forest and the DFC stated for individual management and sub-management areas.

ORGANIZATION OF THE REPORT

The following results of monitoring and evaluation are presented in accordance with Chapter 5 of the Revised Forest Plan. The specific monitoring requirements are listed in Table 5-1, on pages 5-7 through 5-14 of that document. The table includes goals, objectives, and monitoring questions needed to meet the direction of the Revised Plan. This report is formatted similar to Forest Plan Table 5-1. Additionally, the monitoring items are grouped here into the following categories: *A. Ecosystem Condition, Health, and Sustainability*, *B. Sustainable Multiple Forest and Range Benefits*, and *C. Organizational Effectiveness*. Information for each monitoring element includes a descriptions of the Plan objective, the monitoring question and type (i.e., 'I' for implementation, 'E' for the effectiveness, and 'V' for validation), the results of monitoring, and finally, FY2000 recommended actions if any.

A. ECOSYSTEM CONDITION, HEALTH, AND SUSTAINABILITY

1. Biodiversity

Objective 2-1: Manage to restore or maintain the structure, composition, and processes of the four major landscape forest ecosystems known to occur on the Forest, and unique or under-represented inclusional communities embedded within them. Long-term objectives for each major forest community is as follows:



◆ *Longleaf pine forest: 263,000 acres.*



◆ *Shortleaf pine / oak-hickory forest: 62,000 acres.*



◆ *Mixed hardwood-loblolly pine forest: 27,800 acres.*



◆ *Riparian forest: 181,000 acres*

Are management practices designed to restore or maintain the structure, composition, and processes of the four major landscape forest ecosystems and the embedded plant communities within them being implemented? (I)

FY1999 results: Stocking surveys were completed on twenty-two planted sites consisting of 542 acres of longleaf and 220 acres of shortleaf pine for a total planted acres of 762. All but one, 19 acres of longleaf pine, had adequate survival. The failed nineteen acres will be replanted in FY 2000. The longleaf pine plantations were field checked. Essential cultural treatments were identified and a prescription was prepared for each plantation to assure seedling survival and development.

Prairie restoration on the Winn District continues with the use of mechanical removal of cedars and other invading vegetation with

chain saws and hand tools. Prescribed fire replaces wildfire in maintaining the prairies within the landscape. A global positioning system, along with digital ortho photos, provided baseline data on prairie size and condition. A 1999 conservation assessment of prairies on the Kisatchie National Forest documents the current acreage and provides maps of 51 prairie polygons in GIS totalling 325.8 acres or an average of about 6.5 acres per polygon. This figure included 25 newly discovered acres of prairie habitat which had escaped a 1996 field review. In the future, prairie condition can be compared with this baseline data, which includes a subjective assessment of each of the 51 prairie remnants.

FY2000 recommended actions: Continue field checking keystone plantations for Forest Plan compliance. Districts must implement the prepared prescriptions to assure restoration and/or maintenance of the desired future conditions on the plantation sites.

Continue prescribed fire and mechanical control of vegetation in prairies in order to expand prairie acreage existing on the Forest closer to its historic level.

Are the management practices successfully restoring or maintaining quality forest ecosystems; and, the structure, composition, and processes of the four major landscape forest ecosystems? (E)

FY1999 results: Insufficient time to evaluate.

FY2000 recommended actions: None.

Objective 2–2: Provide for healthy populations of all existing native and desirable nonnative wildlife, fish, and plants by managing major forest ecosystems at the scale and distribution appropriate to maintain species viability. In the next 10 years, management indicator habitat objectives are as follows:

- ◆ *Longleaf pine, all stages: 121,000 acres.*
- ◆ *Shortleaf pine / oak-hickory, early stages: 0 acres.*
- ◆ *Shortleaf pine / oak-hickory, mid-late stages: 16,000 acres.*
- ◆ *Mixed hardwood-loblolly pine, early stages: 42,000 acres.*
- ◆ *Mixed hardwood-loblolly pine, mid-late stages: 252,000 acres.*
- ◆ *Riparian, small streams: 85,000 acres*
- ◆ *Riparian, large streams: 92,000 acres*

Are management practices successfully expanding quality habitats for management indicators? (E)

FY1999 results: Insufficient time to evaluate.

FY2000 recommended actions: None.

Are the habitat objectives for selected management indicators providing for healthy populations of all existing native and desirable nonnative wildlife,

fish, and plants? (V)

FY1999 results: Kisatchie NF Landbird data from 1998, 1999, and 2000 have been forwarded to Region 8 for input; findings should be available late in the summer of year 2000.

FY2000 recommended actions: Once Kisatchie NF Landbird data has been entered by Region 8, query database for analysis and evaluation of population trends.

Objective 2–3: Manage to protect, improve, and maintain habitat conditions for all threatened, endangered, sensitive, and conservation species occurring on the Forest. Manage habitat conditions on 303,000 acres of pine and pine-hardwood within 5 established Red-cockaded Woodpecker (RCW) habitat management areas to achieve a long-term forest-wide RCW population of 1,405 active clusters.

Are management practices designed to protect, improve, and maintain threatened, endangered, sensitive, and conservation species being implemented? Are management strategies designed for Red-cockaded Woodpecker habitat management being implemented within designated habitat management areas? (I)

FY1999 results: All NEPA project deci-

sions reviewed were in compliance with the Forest Plan. No formal field checks were conducted during 1999.

FY2000 recommended actions: Develop a formal field review process for TESC species that will more adequately assess implementation of Forest Plan direction.

Are habitat conditions for threatened, endangered, sensitive, and conservation species improving? (E)

FY1999 results: Habitat conditions for listed plant species which occur in bogs and prairies have been documented by subjective field classification of the status of each habitat area. Work has started in the classification of other habitats. The 1999 prairie conservation assessment noted 64.7 acres of improving conditions for prairies, but also noted a different 64.7 acres of prairie habitat had deteriorated slightly since an earlier evaluation in 1996. As time progresses, comparisons of current and past conditions will be made more easily, but for now insufficient time has past since baseline data was collected to evaluate improvements for other rare plant habitats. The year 1999 saw the initial completion of GIS polygons delineating all rare habitats on the Forest. As time passes this will allow comparisons documenting losses or increases in acreage of rare plant habitat, as well as newly discovered sites.

This is the first year for assessing acreages of preferred habitat of TESC wildlife

species. The estimated acres of preferred habitat of threatened, endangered, sensitive, and conservation wildlife species on Kisatchie NF in FY99 are as follows:

Bald Eagle	Threatened	13,000
Red-Cockaded Woodpecker	Endangered	100,000
Bachman's Sparrow	Sensitive	100,000
Cooper's Hawk	Conservation	17,000
Worm-Eating Warbler	Conservation	40,000
Louisiana Waterthrush	Conservation	39,000
White-Breasted Nuthatch	Conservation	40,000
Warbling Vireo	Conservation	40,000
Louisiana Black Bear	Threatened	15,000
Rafinesque's Big-Eared Bat	Conservation	399,000
Big Brown Bat	Conservation	603,000
Long-Tailed Weasel	Conservation	603,000
Hispid Pocket Mouse	Conservation	100,000

American Alligator	"Threatened"	40,000
Louisiana Pine Snake	Sensitive	100,000
Louisiana Slimy Salamander	Sensitive	79,000
Southern Red-Backed Salamander	Conservation	43,000

FY2000 recommended actions: Continue to document status of rare plant sites and changes in habitat conditions for TESC wildlife species.

Are Red-cockaded Woodpecker and Louisiana pearlshell mussel population trends responding positively to management strategies? (V)

FY1999 results: Viable populations of mussels were found on and off the Forest. Lack of BMP's on private lands negatively impacted some streams. Beavers were the



greatest threat on the Forest.

In 1998 and 1999, Louisiana Natural Heritage Program surveyed 73.26 km of streams on National Forest in Rapides and Grant Paishes. The Louisiana Pearlshell mussel was found to occupy a total of 47.09 km of streams on National Forest Land. The 1998 survey results showed 15,740 individuals on National Forest land in Rapides Parish. The 1999 survey results showed 5,606 individuals on National Forest land in Grant Parish. These numbers are significantly greater than earlier surveys indicated and will serve as a good baseline for these populations.

During 1999, RCW populations generally maintained their abundance or slightly increased. A major exception was the Vernon population, which decreased significantly. No consensus exists as to the cause of the Vernon population decrease. However, in a Biological Opinion issued by the U.S. Fish and Wildlife Service in March, 2000, the decline is most likely a paper decline due to record keeping and reporting errors over several years.

1995 – 1999 RCW Population Survey Results

<u>RCW Population</u>	<u>Year</u>	<u># Act.Clusters</u>
Catahoula	1995	26
	1996	28
	1997	29
	1998	29
	1999	30
Evangeline	1995	64

Kisatchie	1996	67
	1997	68
	1998	70
	1999	72
	1995	65
Winn	1996	63
	1997	54
	1998	56
	1999	56
	1995	12
Winn	1996	12
	1997	12
	1998	14
	1999	17

Vernon	1995	187
	1996	201
	1997	198
	1998	194
	1999	155
Forest Total	1995	354
	1996	371
	1997	361
	1998	363
	1999	330



FY2000 recommended actions: Continue public education efforts to encourage good land stewardship. Ensure adequate erosion control measures on newly constructed bridges. Continue beaver eradication efforts along mussel streams.

In cooperation with Louisiana Natural Heritage Program and US Fish and Wildlife Service continue regularly scheduled surveys on a 5 year interval. Continue Interagency Agreement with USDA APHIS Wildlife Services for beaver control on mussel streams.

Closely monitor Vernon RCW population for signs of stability or continued decline. Continue consultations with U.S. Fish & Wildlife Service, and, if decline continues, initiate formal consultation.

Objective 2–4: Develop or maintain old-growth forest attributes, for their contribution to biological and visual diversity, habitats for plant and animal species, and maintenance of a natural gene pool, within designated patches on approxi-

mately 13 percent of the Forest based upon representation of the major forest ecosystems and old-growth community types. Long-term old-growth forest objectives are as follows:

- ◆ Longleaf pine forest-dominated patches: 48,800 acres.
- Coastal plain upland mesic hardwood: 2,550 acres.
- Upland longleaf, woodland, and savanna: 45,350 acres.
- Southern wet pine forest, woodland, and savanna: 780 acres.
- Dry and xeric oak forest, woodland, and savanna: 120 acres.
- ◆ Shortleaf pine/oak-hickory forest-dominated patches: 13,500 acres.
- Coastal plain upland mesic hardwood: 1,290 acres.
- Dry and dry-mesic oak-pine forest: 11,630 acres.
- Dry and xeric oak forest, woodland, and savanna: 60 acres.
- Xeric pine and pine-oak forest and woodland: 50 acres.
- Seasonally wet oak-hardwood woodland: 350 acres.
- River floodplain hardwood forest: 120 acres.
- ◆ Mixed hardwood-loblolly pine forest-dominated patches: 6,100 acres.
- Coastal plain upland mesic hardwood: 700 acres.
- Seasonally wet oak-hardwood woodland: 300 acres.

- Dry and dry-mesic oak-pine forest: 4,650 acres.
- River floodplain hardwood forest: 450 acres.
- ◆ Riparian forest-dominated patches: 12,700 acres.
- Coastal plain upland mesic hardwood: 1,820 acres.
- River floodplain hardwood forest: 1,180 acres.
- Cypress-tupelo swamp forest: 1,400 acres.
- Eastern riverfront forest: 6,400 acres.
- Seasonally wet oak-hardwood woodland: 1,400 acres.
- Dry and dry-mesic oak-pine forest: 500 acres.

Are management practices designed to develop old-growth forest attributes being implemented? (I)

FY1999 results: Insufficient time to evaluate.

FY2000 recommended actions: None.

Are the management practices successfully developing or maintaining forest attributes similar to those found in old-growth? (E)

FY1999 results: Insufficient time to evaluate.

FY2000 recommended actions: None.

Objective 2–5: Manage to protect or enhance the unique plant and animal communities, special habitat features, habitat linkages and corridors, and aquatic ecosystems associated with streamside habitat and riparian areas.



Are streamside habitat protection zones and riparian area protection zones being delineated and managed as prescribed? (I)

FY1999 results: Insufficient time to evaluate.

FY2000 recommended actions: None.

Are these zones successfully protecting or enhancing unique plant and animal communities, special habitat features, habitat linkages, and aquatic ecosystems? (E)

FY1999 results: Insufficient time to evaluate.

FY2000 recommended actions: None.

Objective 6–2: Utilize prescribed fire in fire-dependent ecosystems, including Kisatchie Hills Wilderness, to maintain natural plant communities by varying the timing, frequency, and intensity of fire. Apply prescribed fire on 80,000–105,000 acres annually, with 10–20 percent of the area burned during the growing season. Focus growing season burning on longleaf pine landscapes.

Are the prescribed fire regimes being



applied to all appropriate landscapes as prescribed, to maintain fire-dependent ecosystems? (I)

FY1999 results: The entire Southeast, including Louisiana, is experiencing a three-year drought. Prescribed burning treatments have been reduced accordingly.

FY2000 recommended actions: Continue to conduct prescribed burns at every opportunity. Strive to maximize the implementation of growing season burns on longleaf pine plant community landscapes.

Are the natural plant communities being maintained by the prescribed fire regimes? (E)

FY1999 results: Insufficient time to evaluate.

FY2000 recommended actions: None.

2. Forest Health

Objective 1–3: Manage for air quality consistent with the Clean Air Act by implementing practices which are designed to meet State air quality standards and are consistent with maintaining the general forest area in Class II air quality.

Are Forest Service and the La. Dept. of Agriculture & Forestry's smoke management guidelines and regulations being applied? Are performance re-

quirements concerning air quality being incorporated in permitted activities? (I)

FY1999 results: The Smoke Management Guidelines and Screening process outlined in R8-Supplement 5100-93-3 to 5142.3 (5/5/93) in conjunction with the Louisiana Office of Forestry Voluntary Smoke Management Guidelines are being followed and applied to EVERY prescribed burn project as a "Go-No Go" decision before a burn is ignited. The few violations that do occur are minor and usually result from sudden unpredictable changes in weather forecasts, specifically the transport windspeed and direction and mixing height.

FY2000 recommended actions: Continue using the smoke management guidelines and screening process in conjunction with the state guidelines.

Does air quality meet NAAQS and State standards? (E)

FY1999 results: Insufficient time to evaluate.

FY2000 recommended actions: None.

Objective 1–4: Provide a level of wild-fire protection which emphasizes cost-effective wildfire prevention and suppression while minimizing loss of resources.

Is wildfire protection being provided in a cost-effective manner? Are losses to wildfire being minimized? (I)



FY1999 results: Wildfire preparedness funding levels were at about 70% of the most efficient level. This means in simple terms that only about 70% of the resources that are needed to be maximally efficient were being furnished and paid for at a level 30% below what is needed. As a result, wildfire losses were not being minimized due to the funding shortfall.

FY2000 recommended actions: Request wildfire preparedness funding at the 100% efficiently level and staff accordingly.

Are resources identified in NFMAS being made available in accordance with budget funding levels? Are acres lost to wildfire within the range identified by NFMAS for the current budget level?

(E)

FY1999 results: Insufficient time to evaluate.

FY2000 recommended actions: None.

Objective 1–5: Manage for productive and healthy forest ecosystems by utilizing comprehensive integrated approaches designed to prevent and minimize resource losses or damage due to insects and disease.

Do management practices provide for correct site/species selection, reduce overstocked stands to optimum levels and insure prompt detection and control of insects and diseases? (I)

FY1999 results: Reforestation consisted of 542 acres planted to longleaf pine and 220 acres planted with shortleaf pine. Containerized longleaf pine seedlings were planted at 807 seedlings per acre. A wider spacing was used with the bareroot shortleaf pine (363 trees/acre) to encourage the development of a mixed pine/oak-hickory stand. Restoration harvests totaled 549 acres in FY 1999 which is short of the desirable range of 3,020 to 9,060 acres per year. Optimum levels of tree stocking was achieved on 13,179 acres through the implementation of pre-commercial thinning, release, control of understory species (CUS) burn, and commercial thinning treatments.

The primary forest pests on the Kisatchie

National Forest are southern pine beetle (SPB), other bark beetles, and annosum root disease (ARD).

The last SPB epidemic on the Kisatchie Forest was in 1985-86. Since that time, there have been scattered incidence of endemic population activity with occasional mortality of 5-15 tree spots within the forest area. Endemic bark beetle populations are brood reservoirs for epidemic SPB outbreaks when forest conditions are optimum for beetle population to expand. Incidences of black turpentine beetle (BTB) and Ips bark beetle also occurred occasionally throughout the pine forest types. Bark beetle attacks are most often associated with lightning strikes, drought and other site stressors within the pine stands. The hazard rating for SPB on the Kisatchie is the N.F. Risk system, which uses age, tree height, and basal area to determine the potential risk of SPB attack within a stand. Pheromone trapping to determine risk of SPB population expansion was accomplished by Forest Health Protection (FHP) and District personnel, during the spring of 1999.

Annosum root disease on the Kisatchie has been identified from the annosum fruiting bodies found in pine stands, 3 to 5 years after thinnings on high risk sites. Endemic annosum occurrences can cause growth loss within the affected pine stands and also to predispose the stands to SPB attacks. There has been little evidence of mortality caused by ARD. The Catahoula, Winn, and Calcasieu Districts have the majority of the high risk sites.

Annosum root disease risk is determined by identifying soil series, soil texture and internal drainage patterns of the pine sites. Risk rating for Kisatchie's pine sites have been completed and reside as an information layer in the Forest's GIS database.

Seedling mortality occurred due to drought conditions and some scattered losses caused by Ips attacks.

The Kisatchie National Forest implemented an insect/disease prevention project in FY99. The objective was to improve forest health and protect, enhance, and restore forest ecosystems. Four hundred acres of overstocked pine regeneration stands were precommercially thinned with this project funded by Forest Health Protection (FHP). A Sporax applicator for feller-bunchers was purchased to apply stump treatments for annosum prevention when thinning on high risk sites.

A list of stands thinned in the past 3 to 5 years on high risk annosum sites was developed from CISCII database. FHP pathologists will use this list to survey for annosum incidence and damage appraisal during FY 2000.

FY2000 recommended actions: Improve forest health by increasing restoration harvest cuts to the desired Plan level. Improve stocking levels within immature stands by applying additional commercial thinning.

Has management resulted in a decrease of susceptibility of southern pine beetle and other pests? Are pest incidents de-

creasing with applied integrated management? (E)

FY1999 results: Insufficient time to evaluate.

FY2000 recommended actions: None.

3. Watershed conditions

Objective 1-1: Maintain or improve the Forest's long-term soil productivity. This is accomplished through land management practices designed to meet requirements for minimizing soil erosion and compaction, by not exceeding allowable soil loss for any given soil, by revegetating disturbed areas, and by restoring degraded areas to a natural condition.

Are management practices designed to minimize soil erosion, compaction and loss of soil productivity being applied? (I)

FY1999 results: Timber removal operations were conducted on the Corney Unit blowdown area on the Caney Ranger District during July through November 1999. Five units where tree removal operations were conducted were evaluated on site by a Forest Service team. The units were monitored during and after the tree removal was completed to ensure compliance with Forest standards and guidelines and other specifications for protection of soil resources (Best Management Practices). Photos were taken and the units



were scored and rated. All practices met or exceeded the standards and guidelines.

The drought conditions during the tree removal allowed operations to proceed when soils were very dry which minimized soil compaction and rutting. Trees were grappled from the side and pulled by cable away from streamside zones to avoid soil exposure in these zones. Due to the extensive blowdown debris it was difficult to see very small stream channels on the stream terrace on the south unit. Streamside zones on the steeper slopes on the north unit were much larger than required and provided maximum protection against erosion and sedimentation. Special care was taken to protect ephemeral streams by avoiding tree removal on these areas on the north unit. Due to the extensive blowdown debris there was some difficulty locating some landings in the best location.

Blowdown debris and slash was left on site or spread over disturbed areas. This material will provide organic matter which will

enhance soil productivity. Preliminary results from the long term soil productivity study indicate that when organic matter (litter, slash, understory) were retained on a logged site, tree growth and volume was more than doubled on low fertility soils. In addition the debris that was left or spread on disturbed areas on slopes will disperse surface water flow minimizing erosion. Disturbed areas and temporary roads were disced, fertilized and seeded and waterbars were constructed within days after the tree removal operations.

FY2000 recommended actions: Develop procedures for assessing implementation of standards and guidelines required by the revised Forest Plan for protection of soil resources. Begin reviewing and evaluating silvicultural activities using these procedures.

Is allowable soil loss being exceeded? Are disturbed and degraded areas being restored and revegetated to a natural condition? (E)

FY1999 results: Insufficient time to evaluate.

FY2000 recommended actions: None.

How do timber management practices, especially timber harvesting and consequent compaction, affect soil productivity? (V)

FY1999 results: Insufficient time to evaluate.

FY2000 recommended actions: None.



Objective 1–2: Maintain or improve the integrity of aquatic ecosystems to provide for high water quality, stream-channel stability, natural flow regimes, water yield, and aquatic resources by managing in accordance with the Clean Water Act and by meeting all State and federal water quality standards.

Are management practices designed to minimize contamination, sedimentation, and maintain stream channel stability being applied? (I)

FY1999 results: Five units where tree removal operations were conducted on the Caney Ranger District were evaluated on site by a Forest Service team. The units were monitored during and after the tree removal was completed to ensure compliance with KNF standards and guidelines and other specifications for protection of water quality. (Soil and Water Best Management Practices). Pho-

tos were taken and the units were scored and rated. The resulting report indicated that all appropriate standards and guidelines were implemented and that all practices met or exceeded the standards and guidelines.

FY2000 recommended actions: Develop procedures for assessing implementation of standards and guidelines for protection of water quality (Best Management Practices) required by the revised Forest Plan. Begin reviewing and evaluating silvicultural activities using these procedures. Include participation by staff from the Louisiana Dept of Environmental Quality Non-point Source Pollution Control Program in reviews.

Are State water quality standards and State anti-degradation policies being met? Is water quality being degraded? (E)

FY1999 results: Insufficient time to evaluate.

FY2000 recommended actions: None.

Objective 2–6: Manage perennial and intermittent streams as well as natural and man-made lakes, reservoirs, and ponds for native and desirable nonnative fish species and aquatic communities.

Are lake predator-prey populations in balance? Are management practices sufficiently protecting stream and lake



habitats? Are primary aquatic food chain organisms being impacted by siltation? (I)

FY1999 results: Electrofishing results for FY99 indicated a need for further monitoring. Renovation and restoration efforts on two lakes included repairing control structures and the benefits of drawdowns.

FY2000 recommended actions: Continue monitoring and renovation and restoration tactics, including stocking, liming and fertilizing.

Are lake populations healthy? Are non-natives and / or generalist-omnivore natives affecting lake biomass and balance? Is lake habitat sufficient? (E)

FY1999 results: Insufficient time to evaluate.

FY2000 recommended actions: None.

B. SUSTAINABLE MULTIPLE FOREST AND RANGE BENEFITS

1. Outdoor Recreation Opportunities

Objective 2-7: Provide quality habitat for game and fish populations.



Are management practices successfully expanding quality habitats for game and fish species? (E)

FY1999 results: Insufficient time to evaluate.

FY2000 recommended actions: None.

Are habitat objectives for selected demand species providing game and fish populations sufficient for quality recreational opportunities? (V)

FY1999 results: Estimated population density of select game species on Kisatchie NF in 1999 are as follows:

White-Tailed Deer (acres/animal)	
Catahoula District	50
Evangeline Unit	75
Kisatchie District	75
Winn District	45
Vernon Unit	75
Caney District	35

Wild Turkey (acres/animal)	
Catahoula District	55
Evangeline Unit	60
Kisatchie District	45
Winn District	55
Vernon Unit	60
Caney District	55

Fox Squirrel (acres/animal in upland hardwoods)	
Catahoula District	5
Evangeline Unit	5
Kisatchie District	5
Winn District	5
Vernon Unit	5
Caney District	5

Gray Squirrel (acres/animal in bottomland hardwood)	
Catahoula District	4
Evangeline Unit	4
Kisatchie District	4
Winn District	4
Vernon Unit	4
Caney District	4

Bobwhite quail (acres/covey)	
Catahoula District	1,300
Evangeline Unit	1,300

Kisatchie District	1,300
Winn District	1,300
Vernon Unit	1,200
Caney District	1,300

Population levels for game species except bobwhite quail were stable. Bobwhite population levels were down slightly from the previous year. This is a national trend.

FY2000 recommended actions: None.

Objective 2-8: Protect, restore, maintain, acquire, and improve habitat on the Forest for waterfowl and wetland wildlife, as stated in the North American Waterfowl Management Plan.



Are management practices designed to protect, restore, maintain, and improve waterfowl and wetland wildlife being implemented? (I)

FY1999 results: All NEPA project decisions reviewed were in compliance with the Forest Plan. No formal field checks were conducted during 1999.

FY2000 recommended actions: Develop a formal field review process that will more adequately address how management practices are protecting, restoring, maintaining, and improving waterfowl and wetland wildlife habitat.

Are these management practices successfully providing for waterfowl and wetland wildlife? (E)

FY1999 results: Insufficient time to evaluate.

FY2000 recommended actions: None.

Objective 4-1: Manage the Forest to create and maintain landscapes having high scenic diversity, harmony, and unity for the benefit of society through the application of the Scenery Management System, and consistent with assigned scenic integrity objectives (SIO). The SIOS are as follows:

- ◆ *Very high: 8,699 acres.*
- ◆ *High: 93,980 acres.*

- ◆ *Medium: 89,155 acres.*
- ◆ *Low: 415,020 acres.*
- ◆ *Very low: 1,278 acres.*



Is the Forest being managed in accordance with the assigned SIOs? (I)

FY1999 results: Monitoring was not accomplished this FY to permit a field transition from the old Forest Plan to the new Revised Forest Plan.

FY2000 recommended actions: Allocate adequate time to accomplish required monitoring tasks during FY 2001.

Objective 4-2: Provide visitors the opportunity to pursue a wide variety of developed and dispersed recreation activities, with a minimum amount of regu-

lation, consistent with the assigned recreation opportunity spectrum (ROS) class. The Forest's ROS class objectives are as follows:

- ◆ *Primitive: 8,700 acres.*
- ◆ *Semiprimitive nonmotorized: 57,269 acres.*
- ◆ *Semiprimitive motorized: 89,963 acres.*
- ◆ *Roaded natural-appearing: 217,152 acres.*
- ◆ *Roaded natural modified: 191,671 acres.*
- ◆ *Rural: 6,162 acres.*



Has class eligibility shifted significantly? (E)

FY1999 results: Insufficient time to evaluate.

FY2000 recommended actions: Allocate adequate time to accomplish required moni-

toring tasks during FY 2001.

Objective 4–3: Develop, maintain, and protect existing and potential developed and dispersed recreation sites and trails consistent with public use and demand through construction, operation, maintenance, and rehabilitation activities.

How satisfied are our recreation customers? Are recreation resources managed in a manner that is responsive to public recreation needs yet as cost effective as possible, in accordance with the negotiated recreation program of work based on Meaningful Measures standards? (I)

FY1999 results: Monitoring was not accomplished this FY to permit a field transition from the old Forest Plan to the new Revised Forest Plan.

FY2000 recommended actions: Allocate adequate time to accomplish required monitoring tasks during FY 2001.

2. Infrastructure

Objective 3–7: Manage the transportation system to ensure that any roads constructed are designed according to standards appropriate to the planned uses.

Is the transportation facility serviceable by the intended user? (E)



FY1999 results: Insufficient time to evaluate.

FY2000 recommended actions: None.

3. Human Influences

Objective 1–6: Manage national forest lands in an efficient manner to provide for the future needs of society by pursuing opportunities to make land ownership adjustments that improve management effectiveness and enhance public benefits through land consolidation; acquiring rights-of-way that facilitate efficient management; issuing land use authorizations necessary to meet public and private needs only when no viable alternative to long-term commitments on Forest land exists; and establishing and maintaining all landline boundaries.

Are non-federal lands being acquired to enhance public benefits and improve

management effectiveness? Are acquired rights-of-way achieving better Forest management? Are land use authorizations being issued only after all other alternatives are explored to provide goods and services? How well are landline boundaries being established, maintained, and protected from obliteration? (I)

FY1999 results: Non-federal lands were acquired in the Drewry Land exchange.

FY2000 recommended actions: None.

Are newly acquired lands compatible with management practices in the Management Area where they are located? Are encroachments discouraged by well-defined property lines? (E)

FY1999 results: Insufficient time to evaluate.

FY2000 recommended actions: None.

Objective 3–1: Provide for long-term sustainable production of commodities for economies, local community stability, and people.

How does the flow of commodity outputs to local economies and people compare with the Forest Plan projections?(I)

FY1999 results: The overall flow of timber related commodities affecting the local

economy was very similar to that of FY 1998. Payment to the State of LA was \$2,126,042 and compares favorably to the previous year.

FY2000 recommended actions: The flow of timber related commodities into the local economy in FY2000 should be much reduced due to the reduction of timber sale offer accomplishment. The accompanying payment to the State will be likewise reduced, although the amount is uncertain at this time.

Objective 3–6: Assist local Forest communities in diversifying and enhancing existing economies with an emphasis on the conservation of natural, cultural, and recreational resources of the Forest and the State.



Are programs and opportunities for improving rural economies and social conditions being developed? (I)

FY1999 results: Yes. Forest continues

outreach to rural forest-dependent communities for participation in the Rural Community Assistance Economic Recovery grant programs under authority of the 1990 Farm Bill. In FY 1999, three communities were assisted. Two of these had not received previous grants, including one federally recognized American Indian tribe. One grant project, an educational teaching video of forestry Best Management Practices, was a national award winner in 1999.

FY2000 recommended actions: In FY 1999, the Forest received over \$140,000 in grant requests, but was able to fund less than \$10,000. This is a clear indication of need among Louisiana's forest-dependent communities. The Forest and Region need to seek additional funds to continue and increase Economic Recovery presence in local communities.

Are programs and opportunities improving sustainable local economies and social conditions? (E)

FY1999 results: Insufficient time to evaluate.

FY2000 recommended actions: None.

4. Roadless Areas/Wilderness/Wild & Scenic Rivers

Objective 5–6: Manage each special interest area (SIA) as an integral part of the Forest, with emphasis on protecting, enhancing, or interpreting its unique

values.

Is Forest Plan SIA direction being applied? (I)



FY1999 results: Monitoring was not accomplished this FY to permit a field transition from the old Forest Plan to the new Revised Forest Plan.

FY2000 recommended actions: Allocate adequate time to accomplish required monitoring tasks during FY 2001.

Objective 5–7: Manage the Kisatchie Hills Wilderness to enhance and perpetuate wilderness as a resource. Avoid resource damage resulting from over-use.

Is Kisatchie Hills Wilderness being managed to enhance and perpetuate wilderness values? Are natural processes allowed to operate freely? Is

Forest Plan direction that would ensure the above being applied? (I)

FY1999 results: Monitoring was not accomplished this FY to permit a field transition from the old Forest Plan to the new Revised Forest Plan.

FY2000 recommended actions: Allocate adequate time to accomplish required monitoring tasks during FY 2001.

5. Timber

Objective 3–2: Offer for competitive bid an average of 9.7 million cubic feet of timber sale volume on an annual basis for the first decade of the Plan.



Is the Forest providing for competitive bid the average annual allowable sale quantity it projected for the first decade? (I)

FY1999 results: The Forest achieved a

timber sale offer volume of 9.68 MMCF. Average annual ASQ estimated for the 10-year Revised Plan is 9.7 MMCF.

FY2000 recommended actions: FY 2000 will likely see an offer of 60% of the FY 1999 offer volume.

Objective 6–1: Manage the Forest to achieve a mixture of desired future conditions using even-aged, two-aged, and uneven-aged silvicultural systems and regeneration methods; and a variety of manual, mechanical, prescribed fire, and herbicide vegetation management treatments. Apply the uneven-aged silvicultural system on a minimum of 32,000 acres.



Are management practices designed to achieve a mixture of desired future conditions being applied? (I)

FY1999 results: Insufficient time to

evaluate.

FY2000 recommended actions: None.

6. Forage

Objective 3–4: Maintain or improve forage resources for domestic livestock grazing on 86,000 acres within designated grazing allotments to meet the needs of local demand.

Are forage resources being maintained or improved on the designated allotments? (I)

FY1999 results: During FY99 the Forest completed NEPA documentation for allotments on the Kisatchie and Calcasieu districts, completing the Forest wide updating of such documents. With a decreasing level of grazing, forage resources remain underutilized, with no threat of overuse at current stocking levels.

FY2000 recommended actions: None.

Are active allotments meeting the needs of the local demand for forage resources? (E)

FY1999 results: The range program continues to lose a permittee every year or two, resulting in a shrinking demand for grazing.

FY2000 recommended actions: None.

7. Other Products

Objective 3–3: Make all U.S. minerals

available for lease except in areas where consent has been legislatively or administratively withdrawn. Development of federal minerals will be allowed within the constraints of the lease and accompanying stipulations and restrictions. To the extent legally possible, manage surface occupancy to avoid or minimize environmental effects where reserved and outstanding mineral rights exist. As allowed by State and federal law and under the terms of the severance deed, ensure that surface resources will not be adversely affected to an unacceptable degree by the exercise of reserved and outstanding mineral rights.

Are parcels being made available for lease according to U.S. ownership and management restrictions? Are applications for minerals exploration and development being processed according to directions and in a timely manner? Are operating plans for exploration of private minerals being reviewed for compliance with existing State and federal laws? (I)

FY1999 results: Parcels are being made available for lease according to U.S. ownership and management restrictions, however, approximately 30,000 acres on the Vernon Unit are under litigation, which may affect minerals ownership. The Forest Service/BLM has received another complaint regarding min-



eral ownership, which may affect 25,000 acres on the Catahoula and Winn Districts.

Applications for minerals exploration and development are being processed according to directions and in a timely manner to the extent possible with decreasing experienced mineral personnel. The time to complete the FS NEPA process is time consuming and with the lack of experienced personnel and District's other natural resource priorities, an inordinate amount of time may be necessary. This may also apply in situations where consultants prepare the draft EA.

Operating plans for exploration of private minerals are being reviewed for compliance with existing State and federal laws.

FY2000 recommended actions: Increase mineral FTE and training for current mineral personnel.

Objective 3–5: Provide other forest products such as firewood and pine straw as available, as long as their use does not impair ecosystem health or the achievement of other resource objectives.

How does management of these products compare with Forest Plan direction? (I)

FY1999 results: The Forest continues to offer specialty forest products (non-wood products) to the public. The primary products are firewood, with a limited amount of pine straw, grapevines and miscellaneous products. This effort is in the form of individual permits, not commercial ones. In the case of pine straw, there were no commercial permits.

FY2000 recommended actions: It is anticipated that this trend will continue.

Is the Forest providing opportunities for other specialty forest products without negatively impacting forest health or other resources? (V)

FY1999 results: Insufficient time to evaluate, however, demand on the Kisatchie National Forest is very low compared to other areas of the Region.

FY2000 recommended actions: None.

8. Heritage Resources

Objective 5-1: Manage the nonrenewable heritage resources of the Forest in a spirit of stewardship for the American public. Include the Louisiana State Historic Preservation Officer (SHPO) and interested federally recognized tribes as primary partners in managing the Forest's heritage resources.

Are significant archeological and his-



torical sites being identified, prior to project decisions, through inventories conducted in consultation with the Louisiana State Historic Preservation Officer (SHPO) according to the National Historic Preservation Act (NHPA), 36 CFR 800, NEPA, and the Southern

Regional Heritage Programmatic Agreements (PA)? (I)

FY1999 results: Yes. In FY99, 12,010 acres were inventoried prior to decisions regarding forest-related projects; of these, 7,855 acres of timber sales, both thinning and regeneration, were inventoried. Also included were 51 acres for special uses. An additional 479 acres were surveyed in non-project areas to comply with section 110 of the NHPA. The LA SHPO concurred with all inventories on the Forest prior to decision. All proposed projects were in compliance with section 106 of the NHPA.

Pursuant to negotiations with the SHPO and Stipulation VB1 of the ratified Regional Programmatic Agreement, 3,625 acres of low impact timber thinnings (intermediate cut) in areas of predicted low site probability were processed as *categorically excluded* from full review procedures of section 106 of the NHPA. This strategy has allowed redirection of limited staff and funds to projects having greater potential impact to historic properties.

FY2000 recommended actions: Add personnel and/or contracting with private sector archeologists should timber harvest levels increase significantly.

Objective 5-2: Provide protection for heritage resource sites which preserves the integrity of scientific data that they contain, for the benefit of the public and scientific communities.

Is law enforcement and heritage support provided at sufficient levels to protect significant heritage sites from internal and/or external activities? (I)

FY1999 results: No significant heritage properties were damaged by Forest-related activities. However, two prehistoric sites suffered damage due to archaeological vandalism.

FY2000 recommended actions: Funding is needed to provide weekend site monitoring of protected heritage resources by district Forest Protection Officers and/or electronic monitoring equipment.

Are protection measures effective at preventing unacceptable damage? (E)

FY1999 results: Insufficient time to evaluate.

FY2000 recommended actions: None.

Objective 5-3: Reduce the existing backlog of heritage sites needing formal evaluation so that the overall number decreases each year.

Are sufficient numbers of significant or potentially significant sites being evaluated so that the number of backlogged properties decreases each year? (I)

FY1999 results: No. Eight sites needing

evaluation respective to eligibility for the NRHP were identified in FY99. Only 1 site was evaluated during FY99. Evaluation results in consultation with the LA SHPO indicated that the evaluated site is not eligible for nomination to the NRHP. Thus, the current number of protected properties needing evaluation respective to eligibility for the NRHP stands at 418.

FY2000 recommended actions: Increased funding and additional personnel are necessary to decrease the number of backlogged, potentially significant heritage properties and fully satisfy our obligations under the NHPA.

Objective 5–4: Enhance and interpret appropriate sites and heritage values to the American public.

Are sites and heritage values being iden-



tified for public interpretation? (I)

FY1999 results: Yes. Public interpretation values are considered when determining whether a site should be protected.

FY2000 recommended actions: Increased funding is needed to fully implement the heritage interpretative program.

Has interpretation enhanced awareness of heritage values among the general public? (E)

FY1999 results: Insufficient time to evaluate.

FY2000 recommended actions: None.

Objective 5–5: Provide an ongoing interpretive services program that accurately and adequately develops an interest in and understanding for the natural and cultural environment of the Forest and the mission of the Forest Service in managing it.

Does the interpretive services program provide usable information to the public about the full scope of forest management practices and philosophy? (I)

FY1999 results: Yes. The full scope of forest management practices and philosophy was incorporated in presentations to the public, schools, and media during FY1999.

FY2000 recommended actions: Provide funding for high-profile and effective interpretive programs such as Passport In Time.

Has interpretive services increased measurable public support of Forest Service resource management goals and objectives? (E)

FY1999 results: Insufficient time to evaluate.

FY2000 recommended actions: None.

C. ORGANIZATIONAL EFFECTIVENESS

1. Economics (see Appendix A)

2. Evaluation of New Information

Objective 7-1: Monitor and document the annual progress towards accomplishment of Forest goals, objectives, and desired future conditions.

Is the Forest preparing and distributing a yearly monitoring and evaluation report to the public? (I)

FY1999 results: The Forest prepared the 1998 M&E Report and made it available to the general public through the Regional website at <http://www.r8web.com>.

FY2000 recommended actions: None.

Objective 7-2: Evaluate new information and monitoring results; adapt management accordingly.

Is the Forest Plan being kept current through timely changes as identified in the annual M&E Report? (I)

FY1999 results: The Forest Plan was revised in 1999.

FY2000 recommended actions: None.

Objective 8-1: Benefit from research

information, technical assistance and technology development by maintaining a close, continuous working relationship with scientists at the Southern Research Station, academic institutions, and Forest Health Protection units.



Are cooperative relationships being developed and maintained? (I)

FY1999 results: A list of cooperative studies with the Southern Research Station Unit FMR-4111 follows:

- Pine Straw Study (#247)
- Longleaf Pine Establishment Study on Upland Pine Sites (#268)
- Longleaf Pine Establishment Study on Wet Pine Sites (#269)
- Comparison Study of Longleaf/Loblolly/Slash Pine Establishment on Upland Pine Sites (#270)
- Comparison Study of Longleaf/Loblolly/Slash Pine Establishment on Wet Pine Sites

(#271)

- Study Comparing Management Intensity Levels Used in The Establishment of Longleaf on Upland Pine Sites (#272)
- Study Comparing Management Intensity Levels Used in The Establishment of Longleaf on Wet Pine Sites (#273)
- Delayed Prescribed Burn Study (#275)
- Croker Study Involving The Kisatchie National Forest and the Southern Research Station Units 4111 and 4501 (#3.4)
- Natural Longleaf Pine Burning Study (#3.7)
- Season of Burning Monitoring (#411262)
- Monitoring of Demonstration Areas (#411262)
- Longleaf Pine Ecosystem Restoration Study (#411262)

A cooperative work-study with the Kisatchie National Forest, Southern Research Station Unit FMR-4111, the forest insect unit FIR-4501, and LSU involving insect attacks on severity burned longleaf pine trees is being conducted.

FY2000 recommended actions: All the above studies are ongoing. Initiate, with the Southern Research Station Forest Products Unit 4701, the collection of data needed for the development of a growth and yield model.

Objective 8-2: Continue to identify research needs as the Forest implements the Plan.

Are research needs being identified in a timely manner? (I)

FY1999 results: The Forest cooperated with Dr. Wayne Hudnall of Louisiana State University in order to implement a study designed to test restoration measures for remediation oil spill contamination. The study included test plots located on the KNF on a wetland area that had been impacted by an oil spill.

The Kisatchie National Forest participated in a Technical Assistance Visit which was held by the Southern Research Station Unit #4111. A research work unit description that sets research goals for the Unit for the next 5 years was developed. Three problems were identified: 1) Forest managers need information concerning seed production and handling, nursery management, and establishment practices to reestablish sustainable conifer ecosystems, 2) We need to better understand the fundamental relationships among atmospheric and soil environments, physiology, and silviculture to allow science-based management decisions, and 3) We need to develop tools that predict the effects of site and management on forest structure, composition, and growth to allow for sustainable management.

FY2000 recommended actions: The Kisatchie National Forest will continue to assist the Southern Research Station in ongoing studies. The Forest will help initiate additional studies when requested and as funding allows.

Objective 9-1: Continue coordination and cooperation efforts with other federal and State agencies, such as the U.S. Department of Interior, Fish & Wildlife Service, the Louisiana Department of Wildlife and Fisheries, the Louisiana Department of Environmental Quality, Louisiana Department of Agriculture and Forestry, and the Louisiana SHPO on issues of mutual concern.

Are coordination and cooperation efforts being conducted with federal and State agencies? (I)

FY1999 results: Yes. The Forest has full consultation with the LA State Historic Pres-



ervation Office (SHPO) and four Tribal Historic Preservation Officers (THPO). We continue our longstanding partnership with the SHPO to produce the annual Louisiana Archaeology Week.

Coordination meetings with US Fish &

Wildlife Service and Louisiana Department of Wildlife & Fisheries personnel are conducted at least annually. Informal coordination sessions with these agencies are conducted on a much more frequent basis.

FY2000 recommended actions: Seek additional partnership opportunities with SHPO and THPOs.

Continue implementing the Kisatchie National Forest's Revised Land and Resource Management Plan.

Objective 9-2: Seek to increase the participation of other federal and State agencies, academic institutions, federally recognized Native American tribes, organizations and individuals in the accomplishment of Forest goals and objectives through the use of memorandums of understanding, cooperative agreements, partnerships, and challenge cost share agreements.

Are memorandums of understanding,



cooperative agreements, partnerships, and challenge cost share agreements being developed? Are we increasing the participation of groups and individuals in the accomplishment of Forest Plan goals and objectives? (I)

FY1999 results: The Goldonna Stream Bank Stabilization project was funded by the LA Dept. of Environmental Quality (LA DEQ), Non-Point Pollution Control Program from EPA Clean Water Act Section 319 funding. The project was implemented in 1998 and 1999 as a demonstration project using bioengineering techniques (root wads layered into an eroding bank) and planted with native species. Located on Saline Bayou National Wild and Scenic River the project has been successful so far in withstanding flood flows.

The KNF continued participation in the Non-point Source Interagency Committee with LA DEQ, NRCS, LA Dept. of Forestry and other agencies under the Forest's Memorandum of Understanding (MOU) with the state of LA on the Clean Water Act's Non-Point Source Pollution Control.

The KNF continues to conduct water quality monitoring on 9 streams on the KNF. The monitoring is being done by arrangement with LA DEQ under the Forest's Non-Point Pollution Control MOU with the state of LA (Clean Water Act, Sect. 319)

Soil and water staff participated in the Clean Water Action Plan process including providing recommendations for watershed

priorities for restoration and municipal source water locations on the KNF.

Soil and Water and GIS staff cooperated with the Southern Bottomland Hardwoods Research Ecosystem study by providing soil characterization of the study area and providing GIS analysis of the site.

The botanical portion of the challenge cost share program continued to develop in 1999. The LSU-Ag center initiated a study of prairie soils in an attempt to delineate where the edge of prairies might have existed before fire suppression allowed woody plants to encroach into rare plant habitat.

The memorandums of understanding with the Louisiana Department of Wildlife and Fisheries, cooperative agreements with Louisiana State University, Stephen F. Austin State University, etc, and challenge cost share agreements with the National Wild Turkey Federation and Quail Unlimited are key components of our functioning.

FY2000 recommended actions: Continue participation by soil and water staff in the Non-Point Source Interagency Committee. Include participation by staff from the Louisiana Dept of Environmental Quality Non-point Source Pollution Control program in KNF implementation monitoring reviews of water quality Best Management Practices. Participate in the state Best Management Practices effectiveness monitoring task force.

Enter into discussions with Louisiana Department of Wildlife and Fisheries to update the existing MOU. Continue to look for

opportunities to partner with others in implementing the Forest Plan.

1999

III. Evaluation of Outcomes on the Land

This section of the Report normally evaluates information taken from all monitoring items for this reporting fiscal year (FY1999). However, because implementation of the Revised Plan began November 29, 1999, it is too early to make meaningful evaluations for many items regarding the effectiveness of Plan direction or validation of Plan assumptions.

Several monitoring items, however, are carried forward from the original 1986 Forest Plan and therefore, can be evaluated. A few observations follow:

- ◆ The transition from the original Plan to the Revised Plan was not a drastic one. Many objectives stated in the Revised Plan were already being considered in project level proposals, usually handled as an alternative to one that would implement the 1986 Plan.
- ◆ Soil and water resource effectiveness monitoring for the 1986 Plan found mitigative measures to be effective. The Revised Plan provides a slightly wider minimum protection zone (50' instead of 33') along stream channels and therefore provide as much or more protection for streamside areas.
- ◆ Restoration of native ecosystems has begun on several of the districts. Areas containing older stands of off-site slash or loblolly pine are being identified as first choices for restoration. Restoration harvesting occurs only after requirements for RCW habitat have been evaluated and its needs can be maintained.
- ◆ Prescribed burning, including growing-season burns, are being used to achieve Plan direction of restoring and maintaining native understory plant communities and sensitive plant habitats.
- ◆ A wide variety of cooperative efforts with the Southern Research Station, Forest Health Protection, academic institutions, other federal and State agencies, and individuals were used to provide baseline data on the components of the Forest's ecosystems. State of the art technology is being used in the restoration and maintenance of native ecosystems, including geographical information and global positioning systems.

1999

IV. Summary of M&E Recommendations Planned for FY2000

This section of the Report normally provides information on all monitoring items that need action during this fiscal year (FY2000). However, because implementation of the Revised Plan began November 29, 1999, it is too early to make meaningful recommendations for specific changes on the effectiveness of Plan direction or validation of Plan assumptions for most monitoring items. In addition to the specific recommended actions listed below, the general recommendation for FY2000 is to begin implementing the Revised Plan using guidance provided in Chapters 2 and 3 of the Plan in order to reach the objectives stated. Long-term goals for the Forest are to reach the Desired Future Conditions (DFC) stated for the Forest and the DFC stated for individual management and sub-management areas. In order to reach our planned goals and objectives, individual project proposals should consider the guidance provided for each management area, use appropriate NEPA procedures to evaluate the site-specific effects of the proposal and alternatives, and reach a decision consistent with Plan direction.

1. ACTIONS NOT REQUIRING FOREST PLAN AMENDMENT OR REVISION

- √ Develop procedures for assessing implementation of standards and guidelines for protection of water quality (Best Management Practices) required by the revised Forest Plan. Begin reviewing and evaluating silvicultural activities using these procedures. Include participation by staff from the Louisiana Dept of Environmental Quality Non-point Source Pollution Control Program in reviews.
- √ Once Kisatchie NF Landbird data has been entered by Region 8, query database for analysis and evaluation of population trends.
- √ Develop a formal field review process for TESC wildlife species that will more adequately assess implementation of Forest Plan direction.
- √ Closely monitor Vernon RCW population for signs of stability or continued decline. Continue consultations with U.S. Fish & Wildlife Service, and, if decline continues, initiate formal consultation.
- √ Request wildfire preparedness funding at the 100% efficiently level and staff accordingly.
- √ Improve Forest health by increasing restoration harvest cuts to the desired Plan level. Improve stocking levels within immature stands by applying additional commercial thinning.
- √ Develop a formal field review process that will more adequately address how management practices are protecting, restoring, maintaining, and improving waterfowl and wetland wildlife habitat.
- √ In FY 1999, the Forest received over \$140,000 in grant requests, but was able to fund less than \$10,000. This is a clear indication of need among Louisiana's forest-dependent communities. The Forest and Region need to seek additional funds to continue and increase Economic Recovery presence in local communities.
- √ Increase mineral staffing and training for current mineral personnel.

- √ Add personnel and/or contracting with private sector archeologists should timber harvest levels increase significantly.
- √ Funding is needed to provide weekend site monitoring of protected heritage resources by district Forest Protection Officers and/or electronic monitoring equipment.
- √ Increased funding and additional personnel are necessary to decrease the number of backlogged, potentially significant heritage properties and fully satisfy our obligations under the NHPA.
- √ Increased funding is needed to fully implement the heritage interpretative program.
- √ Initiate, with the Southern Research Station Forest Products Unit 4701, the collection of data needed for the development of a growth and yield model.
- √ Seek additional partnership opportunities with SHPO and THPOs.
- √ Continue participation by soil and water staff in the Non-Point Source Interagency Committee. Include participation by staff from the Louisiana Dept of Environmental Quality Non-point Source Pollution Control program in KNF implementation monitoring reviews of water quality Best Management Practices. Participate in the state

Best Management Practices effectiveness monitoring task force. Enter into discussions with Louisiana Department of Wildlife and Fisheries to update the existing MOU. Continue to look for opportunities to partner with others in implementing the Forest Plan.

2. ACTIONS REQUIRING FOREST PLAN AMENDMENT OR REVISION

None.

3. AMENDMENTS TO BE COMPLETED

None.

4. RECOMMENDED ACTIONS WHERE NO ACTION WILL BE TAKEN IN FY2000

None.

1999

Status of FY1998 Monitoring & Evaluation Report Recommendations

This section of the Report normally provides information on actions recommended in the 1998 M&E Report that were taken during 1999. However, because implementation of the Revised Plan began in 1999, most of the monitoring items and actions recommended for meeting the objectives of the original 1986 Plan are no longer appropriate. In most cases, the recommendation for FY1999 was to revise the Plan. For other items, the Revised Plan will implement the needed change or recommendation. The ROD for the Revised Plan was signed on August 24, 1999, implementation began November 29, 1999, and the appeal period ended in February 2000.

1999

Appendix A - Comparison of FY99 Budget with Revised Plan Annual Budget

<u>Budget Line Item (BLI)</u>	<u>Plan EBLI</u>	<u>RLMP Budget Estimate</u>	<u>FY99 EBLI</u>	<u>FY99 Budget</u>	<u>Difference</u>
Ecosystem planning, inventory, monitoring					(\$41,757)
Ecosystem management	NFEM	\$600,000	N/A		
Inventory and Monitoring	***		NFIM	\$449,901	
Land Management Planning	***		NFLP	\$108,342	
Recreation use					(\$97,200)
Recreation management	NFRM	\$826,000	NFRM	\$461,600	
Wilderness management	NFWM	\$46,000	NFWM	\$32,700	
Heritage resources	NFHR	\$200,000	NFHR	\$80,000	
Cooperative work - other	CWFS	\$30,000	CWFS	\$0	
Recreation facility maintenance	***		NFRN	\$90,000	
Trail maintenance	***		NFTR	\$45,000	
Recreation fee collection	***		FEFE	\$10,500	
New World fund backlog maintenance	***		NWBM	\$285,000	
Rangeland management					(\$271,000)
Range management	NFRG	\$60,000	NFRG	\$59,000	
Range vegetation management	NFRV	\$140,000	NFRV	\$70,000	
Cooperative work - KV	CWKV	\$200,000	CWKV	\$0	
Wildlife and fish management					(\$1,215,426)
Wildlife habitat operations and improvement	NFWL	\$219,000	NFWL	\$157,000	
Inland fish operations and improvement	NFIF	\$90,000	NFIF	\$100,000	
T&E species operations and improvement	NFTE	\$529,000	NFTE	\$197,100	
Cooperative work - KV	CWKV	\$1,777,000	CWKV	\$961,201	
Cooperative work - other	CWFS	\$25,000	CWFS	\$9,273	
Forestland management					(\$2,124,258)
Timber management	NFTM	\$2,400,000	NFTM	\$2,052,400	
Forest vegetation management	NFFV	\$426,000	NFFV	\$444,843	
Reforestation trust fund	RTRT	\$110,000	RTRT	\$194,511	
Cooperative work - KV	CWKV	\$1,400,000	CWKV	\$788,740	
Timber roads - purchaser election	PEPE	\$53,000	PEPE	\$0	
Timber roads - purchaser construction	PUCR	\$1,200,000	N/A	\$0	
Timber salvage sales	SSSS	\$270,000	SSSS	\$199,560	
Forest health protection	***		SPFH	\$54,688	

Budget Line Item (BLI)	Plan EBLI	RLMP Budget Estimate	FY99 EBLI	FY99 Budget	Difference
Soil, water and air management					(\$181,029)
Soil, water, air operations	NFSO	\$65,000	NFSO	\$61,850	
Soil and water improvement	NFSI	\$91,000	NFSI	\$67,438	
Cooperative work - KV	CWKV	\$47,000	CWKV	\$0	
Cooperative work - other	CWFS	\$200,000	CWFS	\$91,683	
Hazardous waste management	***		HWHW	\$1,000	
Minerals and geology management					\$46,804
Minerals	NFMG	\$320,000	NFMG	\$366,804	
Land ownership management					(\$104,777)
Lands - real estate management	NFLA	\$185,000	NFLA	\$166,700	
Landline location	NFLI	\$140,000	NFLI	\$53,523	
Rural development					\$16,985
Resource conservation and development	***		RCRC	\$5,000	
Economic recovery program	***		SPEP	\$11,985	
Construction					(\$745,838)
Recreation construction	CNRF	\$1,165,000	CNRF	\$481,934	
Trail construction	CNTR	\$53,000	CNTR	\$76,000	
Roads reconstruction and construction	CNRD	\$940,000	CNRD	\$854,228	
Land acquisition					(\$31,172)
Land acquisition - L&W Cons. Fund	LALW	\$50,000	LALW	\$18,828	
Forest Service fire protection					\$338,835
Forest fire pre-suppression	WFPR	\$875,000	WFPR	\$813,335	
Forest fuel reduction	WFHF	\$500,000	WFHF	\$900,500	
Infrastructure management					\$425,046
Road maintenance and decommissioning	CNRM	\$811,000	CNRM	\$870,613	
Cooperative work - other	CWFS	\$350,000	CWFS	\$260,641	
Federal highway program	***		HTAE	\$5,159	
Federal highway program inventory	***		HTPR	\$4,770	
Operations & maintenance - FS quarters	***		QMOM	\$6,863	
Reforestation of forest lands	***		RIRI	\$1,000	
Roads and trails for states (10% Fund)	***		TRTR	\$437,000	
General administration					(\$67,409)
General administration	NFGA	\$1,254,000	NFGA	\$995,200	
Maintenance of facilities	NFFA	\$204,000	NFFA	\$199,902	
Cooperative work - KV	CWKV	\$760,000	CWKV	\$336,225	
Cooperative work - other	CWFS	\$99,000	CWFS	\$35,660	
Timber - salvage sales	SSSS	\$48,000	SSSS	\$17,158	
Operation & maintenance - FS quarters	QMOM	\$20,000	QMOM	\$1,313	
Roads and trails for states (10% Fund)	***		TRTR	\$63,000	
Reforestation trust fund	***		RTRT	\$35,997	

Budget Line Item (BLI)	Plan EBLI	RLMP Budget Estimate	FY99 EBLI	FY99 Budget	Difference
Law enforcement	***		NFLE	\$73,188	
Senior citizens employment program	***		NFSA	\$559,948	
External agreements					\$643,000
External agents	***		NFEX	\$643,000	
Total (in 1999 dollars)		\$18,778,000		\$15,366,804	(\$3,409,196)

***Note: These items are not found in the 1999 Revised Forest Plan, Appendix C. They are either changed budget items resulting from a restructuring of the budget codes, or additions to the list displayed in Table C-1 of the Plan.

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Appendix B - List of Preparers

<u>Name</u>	<u>Title</u>
Cynthia Dancak	Team Leader - Planning, Recreation, Heritage Resources, Soil/ Water/Air, GIS
Thomas M. Webb	Team Leader - Resources
Carl Brevelle	Forester/Resource Planner
Mary Jane Close	Financial Manager
Alan Dorian	Forest Archeologist
John Mayer	Archeologist/Catahoula RD
Michael Miller	Forest Landscape Architect
Mike Dawson	Forester/Timber Sales Specialist
Jim Dukes	Forester/Fire Management Officer
Ken Dancak	Forest Wildlife Biologist
John Novosad	Forest Soil Scientist&Hydrologist
Finis Harris	Forest Silviculturist
Philip Hyatt	Forest Botanist
David Byrd	Forest Fisheries Biologist
Gretchen Hunt	Zone Geologist
Don Ranne	Forester/Lands & Special Uses