

FY2004



Kisatchie National Forest

Monitoring and Evaluation Action Plan & Report

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

Table of Contents

I. Introduction to Monitoring and Evaluation Report 3
 Opportunity for comment: 3
 Certification: 4

II. Summary of M&E Results and Report Findings..... 5
 A. Ecosystem Condition, Health, and Sustainability..... 5
 B. Sustainable Multiple Forest and Range Benefits..... 6
 C. Organizational Effectiveness 7

III. Detailed M&E Results and Report Findings 7
 A. Ecosystem Condition, Health, and Sustainability..... 7
 B. Sustainable Multiple Forest and Range Benefits..... 25
 C. Organizational Effectiveness 36

IV. Evaluation of Outcomes on the Land 41

V. Summary of M&E Recommendations Planned for FY2005 43

VI. Status of FY2003 Monitoring & Evaluation Report Recommendations..... 44

Appendix A..... 52
 Comparison of FY2004 Budget with Revised Plan Annual Budget..... 52

Appendix B..... 59
 Avian Population Trends..... 59

Appendix C..... 63
 Aquatic MIS..... 63

Appendix D..... 64
 List of Preparers..... 64

I. Introduction to Monitoring and Evaluation Report

The Kisatchie National Forest (KNF) annually monitors and evaluates programs and projects to determine whether they comply 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 is responding to public issues as well as management concerns; and if the costs of implementing 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 cooperators.

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

Opportunity for comment:

If you have questions or comments regarding the accomplishments for fiscal year 2004, please call or write and let us know. Telephone: 318-473-7160. Address: USDA Forest Service, 2500 Shreveport Highway, Pineville, LA 71360.

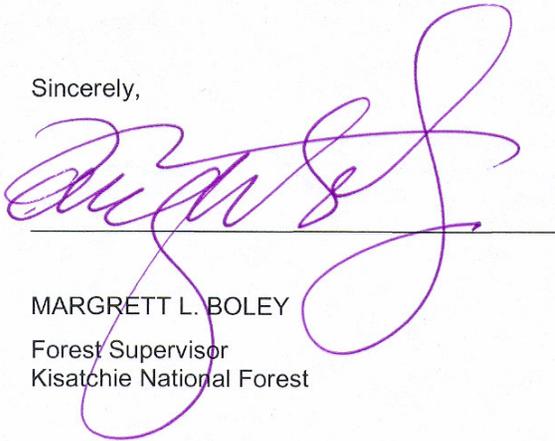
Certification:

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 2005, 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.

Sincerely,



MARGRETT L. BOLEY
Forest Supervisor
Kisatchie National Forest

8/26/05
Date

II. Summary of M&E Results and Report Findings

A. Ecosystem Condition, Health, and Sustainability

- Seven landscape level environmental documents were completed during FY2004, with the focus on longleaf community restoration and RCW management objectives. All projects were designed to restore, maintain or improve the longleaf ecosystem and plant communities of the forest.
- Project decisions for harvest treatment of longleaf community acres increased almost three times the previous year, however limitations in budgets and targets limit implementation.
- In FY2004 MIS plant data collection ceased with the vacancy of the forest botanist position, and has not yet been resumed. A review of the collected data found that the methods being used had two problems. First, data collected by different observers was collected using slightly different methods. Secondly, there were very few occurrences of plant MIS species within plots (Hyatt 2003). Consequently, current baseline data and survey methods have not proven effective for analyzing trends in plant indicator species.
- Forestwide: 0-10 year-old stand acreage significantly decreased from the base year; 11-30 year-old stand acreage significantly increased; 31-80 year-old stand acreage significantly decreased; and 81+ year-old stand acreage significantly increased from the base year.
- One FY2004 project-level decision document involved management practices designed to develop old-growth forest attributes. Thinning activities to enhance RCW and old-growth characteristics were planned on 386 acres. Actions meet Plan standards and guidelines for longleaf pine dominated old growth patches.
- The prescribed burning goals were accomplished due to having sufficient burning windows. The Forest accomplished 130,801 acres; of which 88,432 acres were dormant season and 42,369 acres were growing season burns. Growing Season acres increased 5,000 acres from the previous year.
- 546 acres were planned for longleaf restoration clearcuts in FY2004, or approximately 0.2% of off-site species directly converted to longleaf. There were an additional 13,400 acres planned for RCW/Forest Health thinnings that manage for healthy forest ecosystems and reduce disease and insect losses. Part of the 13,400 acres planned for RCW thinning will result in a change in forest type to predominately longleaf.
- Over 3000 acres of 1st thinnings specific to high hazard SPB stands were planned in Decision Notices signed in FY2004, approximately 3% of high hazard SPB stands. The Kisatchie National Forest did not have any reported SPB spots during FY2004.
- Insect and disease population trends on the Kisatchie National Forest were stable and low in FY2004 and are predicted to be low through 2005.
- Preliminary findings from the Long Term Soil Productivity Study being conducted by the Southern Research Station indicate that when sites located on several soil types with a severe compaction hazard rating were subjected to experimental compaction, bulk densities recovered to near original undisturbed levels within ten years and pine productivity was unaffected. Preliminary results also indicate that soil productivity may be decreased by slash removal or increased by phosphorus fertilization on phosphorus-deficient sites. In general, less productive sites are more susceptible to detrimental harvesting impacts than highly productive sites.

- Presence of forage fish and omnivores were evaluated in Forest lakes. Recent infestations of *hydrilla verticillata* threaten spawning habitat and fish population balance in Caney Lakes. Drawdown structures are in need of repair and alternative methods of weed control are being considered for this intrusive species.

B. Sustainable Multiple Forest and Range Benefits

- In 2004, KNF provided 45,509 acres (525 stands) of riparian/bottomland habitat for waterfowl and wetland wildlife.
- The Forest completed the initial recreation realignment process steps. The Forest was selected to beta test a Regional comment card. The test period began October 1, 2003. The Forest completed pre-work requirements for the National Visitor Use Monitoring project. Customer service response has improved with the assignment of a Customer Service Representative.
- During FY2002 through FY2004, 0.22 miles of local roads were reconstructed. Of this total, 0.22 miles were reviewed. 100.0% of the road length was observed to be serviceable by the intended user and required no significant increase in the level or frequency of maintenance.
- One land exchange with the Collins Camp Association was pursued in compliance with Forest Service Manual and Forest Plan Direction. No right-of-ways were acquired in FY2004. No private land was acquired in FY2004.
- The 480 acre land interchange with the US Army, Fort Polk, that was just finalized by Congress in 2005 will allow more efficient management of National Forest Lands. Landlines continue to be maintained and protected on the established 7-year cycle to discourage encroachments.
- Although still substantially low, the harvest level on the Forest is increasing. Over 52,200 CCF (or 5,220 MCF (26 MMBF)) were harvested, compared to an FY2003 harvest of 16,000 CCF (or 1,600 MCF (8 MMBF)).
- The Forest received Economic Recovery (ER) grant proposals from three communities totaling \$20,800 which is more than the \$18,240 in requests for FY2003. Only two of the proposals were funded. One was not funded as it did not meet the requirements. One community, the Jena Band of Choctaw, had not received ER funds in the past. We also were allowed to offer NEA grants in FY2004. Two were awarded totaling close to \$34,000.
- One FY2004 grant foci was provided to the Jena Band of Choctaw Indians for a Tribal Museum Conceptual Planning Project.
- We are working with the LA Dept of Wildlife and Fisheries to protect the Saline Bayou National Scenic River. The legal description for the Saline Bayou National Scenic River was completed this year.
- An increase in volume of forest products offered for sale was observed in FY2004. A total of 59,800 CCF (or 5,980 MCF (30 MMBF)) was offered. This is an increase over FY2003. To reach the level outlined in the Forest Plan will require a time period of between 2-3 years. Forest Plan projections estimated that the Forest would sell an annual average of 13,158 MCF, from both timber-suitable and timber-unsuitable lands on the Forest.
- Decisions signed in FY2004 include a variety of prescribed treatments. General direction on the Forest has been to concentrate projects within RCW HMAs. As a result, most treatments were limited to mainly longleaf restoration and thinnings. These included:
 - > No acres planned for uneven-age management in FY2004.
 - > Even-age management using clearcut with reserves to restore longleaf on 546 Acres

- > Site preparation treatments using a range of methods, including fire, mechanical and herbicide
- > Commercial thinning (15,797 acres) was used to accomplish a mixture of goals including RCW habitat enhancement, longleaf ecosystem restoration, hardwood enhancement, and forest health/pest prevention.
- Prescribed activities in FY2004 continue to move closer to Forest Plan average estimated outputs. Thinning was within 6% of average in FY2004. Regeneration harvests continue to be far below the anticipated Forest Plan outputs.
- All compliance reviews and consultations pursuant to Section 106 of the National Historic Preservation Act (NHPA) were completed prior to agency decisions. FY2004 saw an increase in request for surveys. Sixteen new sites were added to the KNF heritage database.
- In FY2004, a COR/HRT discovered that a skid route was going through a site. The timber sale immediately ceased and it was decided that the remaining 180 acres should have resurvey before the sale could continue. An additional twenty one sites were discovered and the timber sale was modified and closed.
- Given FY2004 funding and staffing levels, we were not able to satisfy compliance with Section 110 of the NHPA, requiring assessments of NRHP eligibility for all known cultural properties.

C. Organizational Effectiveness

- Amendment #3 (*Sandstone Multiple Use Trail Management Plan* on the Kisatchie Ranger District) and Amendment #4 (*Providing Off Road Vehicle Management* on the Calcasieu Ranger District) were begun in FY2004. They were later signed in FY2005.
- The Memorandum of Understanding between the Kisatchie and the Louisiana Department of Wildlife and Fisheries still needed revision to stress greater cooperation between the two agencies, especially in the establishment of hunting seasons on Kisatchie NF.
- Soil and water staff and GIS staff cooperated with NRCS in developing the 5th level watershed delineations that contain National Forest lands in Louisiana. These watersheds are used to facilitate the evaluation of effects of forest management activities at the watershed level, and to prioritize watershed restoration.

III. Detailed M&E Results and Report Findings

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 are 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)

FY2004 Findings: Seven landscape level environmental documents were completed during FY2004, with the focus on longleaf community restoration and RCW management objectives. All projects were designed to restore, maintain or improve the longleaf ecosystem and plant communities of the forest. There were 546 acres of longleaf restoration cuts planned along with subsequent site preparation and planting to longleaf. Thinning to favor longleaf species and promote longleaf ecosystem structural development was proposed on approximately 13,400 acres. Prescribed burning was also included in several project level decisions that plans for the majority of longleaf LTAs to be rotationally burned. Very little timber harvesting projects that fall under current Plan direction have been completely implemented. Project decisions for harvest treatment of longleaf community acres increased almost three times the previous year, however limitations in budgets and targets limit implementation.

FY2005 Recommended Actions: Every year continue to prepare documents addressing management practices, which will be implemented on approximately 10 percent of the Kisatchie National Forest ownership. Forest Silviculturist should continue to field-check samples of implemented project decisions. Include longleaf and RCW thinning to determine forest type changes.

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)

FY2004 Findings: 308 acres were planted with longleaf pine seedlings in FY2004. Implementation of project decisions under this Plan are only beginning to be completed. Project decisions are more on track with the Plan's longleaf restoration expectations. 546 acres are planned for longleaf restoration clearcuts, however part of the 13,400 acres planned for RCW thinning will result in a change in forest type to predominately longleaf.

93 acres were planted with shortleaf pine seedlings in FY2004. These projects were from decisions made before Plan revision. Currently, direction is to concentrate projects within the RCW HMAs, which will limit shortleaf/hardwood restoration in the upcoming years.

No mixed hardwood-loblolly pine forest areas were planted in FY2004. Species conversion may occur from natural hardwood regeneration. No harvest cuts were planned in this landscape ecosystem in FY2004. Currently direction is to concentrate projects within the RCW HMAs, which will limit hardwood-loblolly restoration in the upcoming years.

Review of FY2004 project decisions and field visits to regeneration areas show that riparian plant communities continue to be maintained in concert with management practices. Typically riparian zones are excluded from silvicultural improvement activities, harvesting, thinning, and mid-story removal activities. Project decisions from FY2004 include 193 acres of selective harvest within riparian areas to release and improve hardwood component.

FY2005 Recommended Actions: Continue to monitor sites for additional treatment needs. While acres planted to longleaf is below planned annual average of 1,400 acres longleaf restoration, project decisions with restoration cuts have increased. Project decisions under the Revised Plan are just beginning to be implemented. Thinning prescriptions within RCW HMAs should provide the needed longleaf stand composition. Post implementation field checks should be done on thinnings to ensure sufficient longleaf emphasis and evaluate species compositions changes.

Monitor shortleaf pine plantation for replanting needs. Continue restoration treatments on shortleaf/hardwood sites where there is high priority for regeneration such as stands damaged by disease, insect or storm damage.

While regeneration harvest treatments were not implemented, mixed hardwood-loblolly forest types exceed long-term desired future conditions by 89%. Prescribe regeneration cuts on off-site stands where there is a high priority for regeneration such as stands damaged by disease, insect or storm damage.

Continue to monitor management practices being implemented within streamside and riparian area protection zones for compliance with the Forest Plan, through timber sale contract administration and field checks. Continue to consider selective thinning treatments within riparian areas to encourage hardwood component.

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)

FY2004 Findings: A botany MIS survey was initiated in FY2002, and surveys were conducted at sites associated with RCW habitat. In FY2004 plant collection for the herbarium database ceased with the vacancy of the forest botanist position, and has not yet been resumed. A review of collected MIS data found that the methods being used had two problems. First, data collected by different observers was collected using slightly different methods. Secondly, there were very few occurrences of plant MIS species within plots (Hyatt 2003). Consequently, current baseline data and survey methods have not proven to be as effective as hoped for analyzing trends in plant indicator species.

The following table compares estimated and actual inventoried acreage by landscape community type:

Landscape Community	Forest Plan Estimate (acres ¹)	FY2001 acres	FY2002 acres	FY2003 acres	FY2004 acres
Longleaf pine, all stages:	121,000	127,415	120,483	122,503	119,245
Shortleaf pine / oak-hickory,	0	1,633	2,897	626	1,149

¹ Note: The Forest Plan acres here are estimates of age and species composition at the end of the first Plan decade (2009) within each community-based landscape type. These estimates may vary for succeeding decades as the Forest reaches its DFC. The acreages shown in the comparison columns are the total acres tabulated in CISC by existing age and forest types across the Forest as a whole, i.e., they may or may not be spatially located within the desired community-based landscape type.

early stages:					
Shortleaf pine / oak-hickory, mid-late stages:	16,000	48,050	34,912	45,610	36,396
Mixed hardwood-loblolly pine, early stages:	42,000	14,351	15,519	6,811	9,720
Mixed hardwood-loblolly pine, mid-late stages:	252,000	261,024	247,710	259,284	253,922
Riparian, small streams:	85,000 (no annual change)	85,000	85,000	85,000	85,000
Riparian, large streams:	92,000 (no annual change)	92,000	92,000	92,000	92,000

Considering Kisatchie NF habitat types and the Forest Plan goals:

Successional Habitat (all Forest Types)	Forest Plan goal (acres)	FY2001 acres	FY2002 acres	FY2003 acres	FY2004 acres
Early (0-10 yrs)	>= 20,000	26,882	24,921	13,189	14,339
Middle (31-50 yrs)	>= 50,000	86,898	55,265	82,780	66,452
Late (71+ yrs)	>= 75,000	163,120	151,111	179,201	175,024

At this point in the first 10-year Plan period, Kisatchie NF still has a surplus of shortleaf pine/oak-hickory (mid-late stages) and a deficiency of mixed hardwood-loblolly pine (early stages). Other habitat types/successional stages are within Forest Plan estimates.

FY2005 Recommended Actions: The management indicator species list should be modified to include more commonly occurring native plants that occupy a wider range of forest habitat types. Additionally, the survey protocol needs to be reexamined and possibly revised. It is recommended that successful botany MIS programs from other forests in R8 be considered as models, and that statisticians and vegetation ecologists participate in the review of a new KNF

MIS protocol. This should be done on a schedule so that active surveys could be resumed in the 2006 field season.

Continue to adhere to Revised KNF Plan guidance.

Are the habitat objectives for selected management indicators providing for healthy populations of all existing native and desirable nonnative wildlife, fish, and plants? (V)

FY2004 Findings: It is likely that these objectives are being met mainly as a result of the effective forest prescribed burning program; however, current baseline data and survey methods have not proven effective for analyzing trends in plant indicator species. There is no statistical evidence showing that management objectives have been met.

Southeast regional abundance trends of Kisatchie NF Terrestrial Management Indicator Species (total number of birds observed / total number of visits):

Management Indicator (terrestrial)	KNF 2004 Number ²	KNF 1998-1999 Average ¹	KNF 2002-2004 Average ³	Found in Habitat Types ⁴
Bachman's Sparrow	0.04	0.12	0.11	A
Northern Bobwhite	0.07	0.15	0.10	A
Prairie Warbler	0.15	0.30	0.17 ^a	A,B
Red-Cockaded Woodpecker	0.03	0.10	0.03 ^a	A,C,E
Red-Headed Woodpecker	0.04	0.11	0.10	A
Cooper's Hawk	0.00	0.00	0.00	C
Eastern Wood-Pewee	0.16	0.37	0.09 ^a	C
Pileated Woodpecker	0.28	0.25	0.37 ^b	C,E,G
Summer Tanager	0.67	0.67	0.56 ^a	C
Hooded Warbler	0.94	0.91	0.77 ^a	E
Wood Thrush	0.09	0.06	0.09	E
White-Eyed Vireo	0.55	0.42	0.50	D,F

² Cumulative number of individuals observed per District / number of points surveyed per year per District) / 5 Districts.

³ Cumulative number of individuals observed per District / number of points surveyed per year per District) / 5 Districts) / the number of years in the range; ^apossible decreases from baseline years; ^bpossible increases from baseline years.

⁴ A = longleaf pine habitat (early, mid & late successional stages); B = shortleaf/oak-hickory habitat (early successional stage); C = shortleaf/oak-hickory habitat (mid & late successional stages); D = hardwood – loblolly habitats (early successional stage); E = hardwood – loblolly habitats (mid & late successional stages); F = riparian habitats (small streams); and G = riparian habitats (large streams).

Management Indicator (terrestrial)	KNF 2004 Number ²	KNF 1998-1999 Average ¹	KNF 2002-2004 Average ³	Found in Habitat Types ⁴
Yellow-Billed Cuckoo	0.22	0.54	0.55	E,F
Acadian Flycatcher	0.49	0.51	0.49	F
Louisiana Waterthrush	0.06	0.03	0.04	F
Kentucky Warbler	0.47	0.20	0.41 ^b	G
Northern Parula	0.09	0.12	0.11	G
Warbling Vireo	0.00	0.00	0.00	G
White-Breasted Nuthatch	0.02	0.05	0.06	G
Worm-Eating Warbler	0.06	0.19	0.09 ^a	G

FY2005 Recommended Actions: As stated above, the management indicator species list should be modified to include more commonly occurring native plants that occupy a wider range of forest habitat types. Additionally, the survey protocol needs to be reexamined and possibly revised. It is recommended that successful botany MIS programs from other forests in R8 be considered as models, and that statisticians and vegetation ecologists participate in the review of a new KNF MIS protocol. This should be done on a schedule so that active surveys could be resumed in the 2006 field season.

Continue bird surveys on Kisatchie NF.

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)

FY2004 Findings: No known occurrences of threatened or endangered plant species exist on the Kisatchie National Forest. The Forest’s prescribed burning program is the most effective practice used for restoration of pre-settlement habitats, which is proving to be very effective in protecting, improving and maintaining TESC species. On a small scale some prairies and bogs were managed for the benefit of sensitive and conservation species, by clearing of encroaching shrubs and trees – a result of fire suppression over decades.

The Supervisors Office reviews most environmental documents for compliance with NEPA and Forest Plan consistency. Biological Evaluations for TE&S species are reviewed by Ecosystem Conservation personnel.

FY2005 Recommended Actions: Continue the current prescribed burn program of 125,000 to 150,000 acres per year. Growing season burns are critical for successful gains in our restoration efforts. It is important to increase efforts to remove encroaching woody plants in the Winn district prairies and bogs throughout the forest, as these habitats host many of our TESC species.

Continue increased emphasis on RCW management across the Forest. Identify and prioritize thinning of foraging habitat, improvement and expansion of RCW clusters, and mid-story removal projects. Work with the USFWS to prioritize future projects and identify habitat needs. Identify all Pearlshell mussel beds on the Forest, and develop means of monitoring the number of mussels on a recurring basis.

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

FY2004 Findings: No known occurrences of threatened or endangered plant species exist on the Kisatchie National Forest. The Forest’s prescribed burning program is the most effective practice used for restoration of pre-settlement habitats, which is proving to be very effective in protecting, improving and maintaining TESC species. On a small scale some prairies and bogs were managed for the benefit of sensitive and conservation species, by clearing of encroaching shrubs and trees – a result of fire suppression over decades.

KNF Forest Habitat (Acres) by forest types, current compared to 1999:

Pine Forest Types	Successional Classes							
	0-10 years		11-30 years		31-80 years		81+ years	
Year:	2004	1999	2004	1999	2004	1999	2004	1999
Longleaf	2,597	13,614	31,590	10,179	68,059	95,690	16,704	4,162
Slash	611	618	10,660	7,392	17,399	31,273	6,265	11
Loblolly	7,121	38,880	70,363	81,214	142,227	147,014	47,643	15,382
Shortleaf	321	938	3,134	927	8,809	8,000	1,853	4,799
Sub-Total	10,650	54,050	115,747	99,712	236,494	281,977	72,465	24,354
Sub-Total %	2.4	11.7	26.6	21.7	54.3	61.3	16.6	5.3
Forestwide %	1.9	9.0	20.2	16.6	41.2	47.0	12.6	4.1

Mixed Forest Types	Successional Classes							
	0-10 years		11-30 years		31-80 years		81+ years	
Year:	2004	1999	2004	1999	2004	1999	2004	1999

Pine-Hwd	1,222	1,200	6,158	4,593	13,824	15,024	3,716	4,438
Hwd-Pine	794	371	9,015	2,958	18,090	25,071	5,770	8,229
Sub-Total	2,016	1,571	15,173	7,551	31,914	40,095	9,486	12,667
Sub-Total %	3.4	4.9	25.9	23.7	54.5	125.8	16.2	39.7
Forestwide %	0.4	0.3	2.6	1.3	5.6	6.7	1.7	2.1

Hardwood Forest Types	Successional Classes							
	0-10 years		11-30 years		31-80 years		81+ years	
Year:	2004	1999	2004	1999	2004	1999	2004	1999
Upland	800	522	8,684	2,752	21,766	24,809	3,243	5,480
Bottomland	873	311	12,067	2,664	24,789	29,917	7,780	12,045
Sub-Total	1,673	833	20,751	5,416	46,555	54,726	11,023	17,525
Sub-Total %	2.1	1.1	25.9	6.9	58.2	69.7	13.8	22.3
Forestwide %	0.3	0.1	3.6	0.9	8.1	9.1	1.9	2.9

Forestwide	Successional Classes							
	0-10 years		11-30 years		31-80 years		81+ years	
Year:	2004	1999	2004	1999	2004	1999	2004	1999
Total Acres	14,339	56,454	151,671	112,679	314,963	376,798	92,974	54,546
Forestwide %	2.5	9.4	26.4	18.8	54.9	62.7	16.2	9.1

Early successional (0-10 years) pine habitat has diminished significantly since 1999; older successional pine habitats have increased significantly since 1999. Mixed forest types: 0-10 year-old stand acreage remains approximately the same as the base year; 11-30 year-old stand acreage significantly increased; 31-80 year-old stand acreage decreased; and 81+ year-old stand acreage remains approximately the same as the base year. Hardwood acreage: 0-10 year-old stand acreage remains approximately the same as the base year; 11-30 year-old stand acreage significantly increased; 31-80 year-old stand acreage decreased; and 81+ year-old stand acreage

decreased from the base year. All forest types, Forestwide: 0-10 year-old stand acreage significantly decreased from the base year; 11-30 year-old stand acreage significantly increased; 31-80 year-old stand acreage significantly decreased; and 81+ year-old stand acreage significantly increased from the base year.

FY2005 Recommended Actions: Continue the current prescribed burn program of 125,000 to 150,000 acres per year. Growing season burns are critical for successful gains in our restoration efforts. It is important to increase efforts to remove encroaching woody plants in the Winn district prairies and bogs throughout the forest, as these habitats host many of our TESC species.

Continue to adhere to the land management practices described in the revised Land Management Plan for Kisatchie NF, which calls for relatively older timber stands.

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

FY2004 Findings:

RCW Population Survey Results:

RCW Populations	# Active Clusters					
	Recovery Goal	Year 2005	Year 2004	Year 2003	Year 2002	Year 2001
Catahoula	250	30	31	27	25	36
Evangeline	231	100	100	89	79	73
Kisatchie	292	26	26	29	30	27
Winn	263	23	23	20	17	12
Vernon	350	144	144	149	142	149
Forest Total	1386	323	324	314	293	297

The last surveys conducted for the pearlshell mussel were in 2002 (Grant Parish) and 2004 (Rapides Parish) in accordance to the USFWS Recovery Plan 1989. In both of these surveys, mussel beds were checked that contained 100 mussels or more in previous surveys, or were en route to or near such beds. In 2002, in Grant Parish, 20 beds were checked, 3 previously documented small beds were not found, and one previously documented small bed was found. In the 19 Grant Parish pearlshell beds checked in both years, 3,681 mussels were counted in 1999 and 3,648 mussels were counted in 2002. That is an insignificant net decline overall, but several problem areas were identified.

In 2004, mussels were counted in 59 beds in Rapides Parish. Five beds on private land that were surveyed in 1998 were not surveyed, five previously undocumented beds were counted, and three previously documented beds were not found. In a nearly complete reprise of the 1998 survey, 16,546 mussels were counted in 2004, compared with 16,483 in 1998. Considering the uncounted beds on private land, this indicates an apparent increase in the Louisiana pearlshell population in Rapides Parish but, again, some areas are apparently doing well while others are not. Of the 46 beds counted in both years, 20 beds apparently increased, 20 decreased and 6 remained about the same. Considering both populations together, the latest counts indicate the species is stable if not actually increasing slightly.

FY2005 Recommended Actions: Closely monitor all populations for signs of stability. Prescribe burn the RCW foraging habitat as much as feasible. Engage in RCW translocations to bolster populations, if feasible. Continue consultations with the USFWS.

Continue beaver control, enforcement of Forest Service regulations prohibiting ORVs from riding in streams, and implementation of Best Management Practices (BMPs) and Streamside Habitat Protection Zones (SHPZs) that protect Louisiana pearlshell mussel habitat. Encourage collaboration from other agencies, partners and private landowners to help protect the pearlshell. In accordance with the pearlshell recovery plan (USFWS 1989), survey and monitor mussel beds on the Catahoula Ranger District to assess the population and identify any potential threats.

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 approximately 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)

FY2004 Findings: One FY2004 project-level decision document involved management practices designed to develop old-growth forest attributes. Thinning activities to enhance RCW and old-growth characteristics were planned on 386 acres. Actions meet Plan standards and guidelines for longleaf pine dominated old growth patches.

FY2005 Recommended Actions: Continue to review all project decisions with management practices within old growth patches. Conduct sample field reviews after implementation.

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

FY2004 Findings: Management actions consistent with Forest Plan direction were proposed on 386 acres within longleaf pine dominated old growth patches. Scorecards for evaluating old-growth attributes within these patches have been developed.

FY2005 Recommended Actions: During field examination process, review existing designated old growth patches and use old growth attribute scorecard to rank quality.

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)

FY2004 Findings: Management practices require NEPA documentation prior to being implemented. The application of harvesting techniques consistently included streamside habitat protection zones and riparian area protection. At the present, no broad scale actions have been taken which might impact these areas.

FY2005 Recommended Actions: Every year, conduct silvicultural surveys and prepare documents addressing management practices where needed, on approximately ten percent of the Kisatchie National Forest ownership. Document the streamside habitat protection zones and actions taken to manage in and near these areas.

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

FY2004 Findings: No known occurrences of threatened or endangered plant species exist on the Kisatchie National Forest. No significant changes in acres or site quality of habitat for sensitive and conservation plant species were found. Particular attention is directed at protecting bogs, wetlands and streams on the Forest.

FY2005 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)

FY2004 Findings: The prescribed burning goals were accomplished due to having sufficient burning windows. The Forest accomplished 130,801 acres; of which 88,432 acres were dormant season and 42,369 acres were growing season burns. Growing Season acres increased 5,000 acres from the previous year. Prescribed burning occurred in the following landtype associations (LTAs):

LTA	Dormant Season Acres	Growing Season Acres
1	46,518	22,912
2	11,824	5,206
3	11,589	2,616
4	3,415	0
5	4,633	8,994
6	6,438	2,641
9	3,758	0

FY2005 Recommended Actions: The Forest should continue to monitor the weather and take advantage of every burning opportunity. Strive to maximize the implementation of growing season burns on longleaf pine plant community landscapes. The Forest needs two Regional Fuels Helicopters to increase the production and reduce the cost of CWN helicopters.

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

FY2004 Findings: Research has been ongoing to identify prescribed burn treatments on the longleaf ecosystem (see Objective 8-1).

FY2005 Recommended Actions: Continue to work with research to determine effects.

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

FY2004 Findings: The Kisatchie National Forest followed the direction and parameters as set in the Louisiana Smoke Management Voluntary Guidelines. A burn plan is prepared for each proposed prescribed fire burn unit identifying smoke sensitive areas and targets with existing visibility or air quality problems. In addition, site specific concerns and smoke management criteria for the individual burn unit are identified in the burn plan.

The daily fire weather forecast includes smoke management parameters for transport wind speed, mixing height and dispersal. A burn may not be ignited unless a forecast is obtained and all smoke management prescription parameters are met. A smoke-screening map is required to be attached to the burn plan identifying forecasted wind direction and the projected smoke plume. Smoke dispersal is monitored throughout the burn period of each fire. Smoke plume direction and spread is monitored via helicopter. Post burn evaluation is performed and includes a requirement to note any smoke management violations.

The implementation of standards and guidelines for smoke management activities were reviewed on the KNF. There is a need to model and monitor particulate matter concentrations in the air within the sensitive communities adjacent to and within the boundaries of the National Forest before, during, and after prescribed burning operations.

FY2005 Recommended Actions: Review burn plans to evaluate how Louisiana Smoke Management Guidelines are being followed during reviews of soil, water and air standards and guidelines (Best Management Practices) and report findings. Develop a protocol to monitor particulate matter concentrations in the air within the sensitive communities adjacent to and within the boundaries of the National Forest before, during, and after prescribed burning operations. The first part would be to model the production, dispersion, and transport of PM_{2.5} emissions, and potential impacts of those emissions on local communities. The second part is real-time, localized, particulate matter monitoring using portable samplers. The particulate samplers would be placed at strategic locations within or near smoke sensitive areas identified in the burn plan.

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

FY2004 Findings: All areas of the Kisatchie National Forest are in attainment of the National Ambient Air Quality Standards (NAAQS) including NAAQS for ozone. Monitoring data for ozone is continuously collected at the LDEQ air monitoring station located on the Catahoula Ranger District at the Bentley site in Grant Parish.

The LDEQ has been monitoring particulate matter with a Federal Reference Method PM 2.5 monitor located in Alexandria (Rapides Parish) since 1999. PM 2.5 refers to particulate matter that has a diameter of 2.5 micrometers or less. The monitoring data indicates that the NAAQS for particulates is being met.

FY2005 Recommended Actions: Continue to coordinate with LDEQ Air Quality Dept. on monitoring.

Objective 1–4: Provide a level of wildfire 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)

FY2004 Findings: Wildland fire preparedness was still below the most efficient level. As a result, wildland fire losses were not being minimized due to the funding shortfall. The Forest still could not fill vacant firefighter positions.

FY2005 Recommended Actions: Continue to request wildland fire preparedness funding at the 100% efficient 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)

FY2004 Findings: Resources identified in NFMAS are being made available in accordance with budget funding level. The Forest lost 342 acres to wildland fires in FY2004. The acceptable range in NFMAS was 2,108. The Forest was within the acceptable range. The Forest had 30 statistical fires for 342 acres and no non-statistical fires.

FY2005 Recommended Actions: Manage for productive and healthy forest ecosystems by utilizing prescribed fire to prevent and minimize resource losses to wildland fires.

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)

FY2004 Findings: 546 acres were planned for longleaf restoration clearcuts in FY2004, or approximately 0.2% of off-site species directly converted to longleaf. There were an additional 13,400 acres planned for RCW/Forest Health thinnings that manage for healthy forest ecosystems and reduce disease and insect losses. Part of the 13,400 acres planned for RCW thinning will result in a change in forest type to predominately longleaf.

Over 3000 acres of 1st thinnings specific to high hazard SPB stands were planned in Decision Notices signed in FY2004, approximately 3% of high hazard SPB stands. The Kisatchie National Forest did not have any reported SPB spots during FY2004.

Prescribed burning on longleaf plantations continues to be prescribed and implemented to address brown-spot needle blight.

There has been no reported mortality from Annosus root disease.

FY2005 Recommended Actions: Continue to identify restoration and forest health needs through the inventory process.

Implement backlog of NEPA covered timber stand improvement treatments, including pre-commercial thinning and first thinnings, at an increased rate, while the aid of Forest Health funding opportunities are available.

Has management resulted in a decrease of susceptibility of southern pine beetle and other pests? Are pest incidents decreasing with applied integrated management? (E)

FY2004 Findings: Insect and disease population trends on the Kisatchie National Forest were stable and low in FY2004 and are predicted to be low through 2005.

FY2005 Recommended Actions: Continue to monitor for possible SPB attacks through aerial observations. Field check for increased mortality from Annosus root disease on thinned loblolly stands on high hazard sites.

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 re-vegetating 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)

FY2004 Findings: A field review of fire lines constructed for prescribed burning activities on the Catahoula Ranger District was conducted on August 3, 2004. The use of natural barriers, roads, etc., as much as possible, minimized the length of fire lines on the burned areas. This minimizing of fire lines greatly reduced the amount of soil disturbance and consequent erosion. Bladed lines as opposed to plowed lines were constructed which reduced the potential for erosion. Permanent fire lines and water bars, which can be reused, are being constructed along private land. Training of the district fire and timber staff was conducted as a part of this review. The erosion control

guidelines were discussed. Specific recommendations from the review relating to soil erosion and maintenance of soil productivity are discussed under Objective 1-2.

FY2005 Recommended Actions: Continue monitoring timber silvicultural management activities for implementation of Standards and Guidelines.

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

FY2004 Findings: Watershed improvement work is ongoing. There were 40 acres of watershed improvement work accomplished in FY2004 with watershed improvement funding. Maintenance on FY2003 projects was done, as needed, to shorten recovery times on the 41 acres of projects from the previous year. Projects were located on all districts and all included erosion and sediment control measures. Projects included borrow pit restoration in Compartment 11 on the Evangeline Unit and rehabilitating areas damaged by off road vehicles in Compartment 53. Projects on all districts included erosion/sediment control for ORV-related damage.

FY2005 Recommended Actions: Continue to restore and revegetate disturbed areas.

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

FY2004 Findings: Preliminary findings from the Long Term Soil Productivity Study being conducted by the Southern Research Station indicate that when sites located on several soil types with a severe compaction hazard rating were subjected to experimental compaction, bulk densities recovered to near original undisturbed levels within ten years and pine productivity was unaffected. However, the experimental compaction did not disturb the soils in a manner similar to harvesting, and wet-weather harvesting without remediation may reduce productivity.

Preliminary results also indicate that soil productivity may be decreased by slash removal or increased by phosphorus fertilization on phosphorus-deficient sites. In general, less productive sites are more susceptible to detrimental harvesting impacts than highly productive sites. The Long Term Soil Productivity Study is a national study being conducted to evaluate the effects of various timber management practices on the productivity of soil. Research plots are located at various locations around the U. S. including the Catahoula and Calcasieu Ranger Districts.

FY2005 Recommended Actions: Continue to coordinate with and assist the Southern Research Station with the Long Term Soil Productivity Study.

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)

FY2004 Findings: A field review of firelines constructed for prescribed burning activities on the Catahoula Ranger District was conducted on August 3, 2004. The district had requested recommendations on how to deal with sites on firelines within watersheds containing the threatened Louisiana Pearlshell mussel. The individuals participating in the review were District Ranger, Fire Management Officers, Wildlife biologist and Hydrologist/Soil Scientist. We looked at parts of firelines on three burn units.

Compartment 44 - SE, SE ¼Section T7W, R2W

The bladed fireline ran along the boundary of private land to the west. Most of the line was level with some sloping areas. Although the boundary was straight, most of the fireline was contoured so that runoff would not flow down the line. We observed that the end of the fireline paralleled a

stream and ended near the stream bank. The end of the fireline is eroding into the stream channel.

Recommendations: The bladed fireline should be ended about 50ft to the south before it begins to parallel the stream. At this point the fireline should be hand raked down to the stream channel. The part of the fireline that parallels the stream should be rehabilitated. The eroding area should be carefully shaped with a minimum of soil disturbance. Water bar(s) should be constructed to divert flow off of the rehabilitated part of the line away from the stream. Hay bales could be staked across the site. The site should be seeded with rye grass in the last half of September.

In addition, several waterbars should be constructed on the rest of the line on sloping areas.

Compartment 67 - SE, SE ¼ Section 25 & NE, NW ¼ Section 36 T7W, R2W

The first part of the fireline ran straight along the private land boundary to the south. The line was mostly level with some sloping areas that were eroding. The line crossed an ephemeral stream channel that had been filled in the past to provide a crossing. The berm/crossing now had well established vegetation growing on it. The line turned south and paralleled a large stream in a riparian area. Most of the fireline was greater than 50 feet from the stream but ran within 5 feet of the channel in one area. The end of the line was bladed to a point that was about 20 ft from the stream channel. A berm was constructed and the line was hand raked down to the channel.

Recommendations: The filled in crossing in the ephemeral drainage should not be removed. This fill has been in place many years and is stabilized with vegetation and not eroding. Removal could release a large amount of sediment into the channel.

Water bars should be placed on the sloping parts of the line. Bladed firelines should be kept from paralleling streams and out of streamside habitat protection zones, which extend 50 to 100 feet from the stream channel.

Compartment 88 - SW, SE ¼ Section 18 T6N, R1W

A large gully was observed close to the fireline. The gully was eroding towards the fireline and the adjacent private land. The gully was eroding due to runoff from adjacent cleared private land and water flow from culverts on Racetrack Rd. Waterbars were constructed on the slope of the fireline down to a stream. Waterbars were well constructed and were diverting runoff and sediment off of the fireline onto undisturbed forest vegetation. A berm was constructed about 33 feet from the channel and the line was hand raked down to the stream.

In addition, we observed another large gully some distance from the fireline. We also observed an old restored road or fireline next to the stream channel. This old road contained a berm that was in danger of being destabilized from runoff coming from above. This disturbance is within a sub-watershed of Gray's Creek.

Recommendations: Riprap should be placed at the head of the gully that is eroding towards the fireline. The gully and the area immediately above the gully that drains into it should be fertilized to promote the growth of vegetation to slow runoff and help stabilize the gully. The landowner should be notified to stop mowing the fireline adjacent to his yard to allow for greater vegetative growth above the area that is eroding.

General recommendations: Insure that guidelines designed to prevent erosion and sedimentation of streams are followed. One problem has been the need for an additional dozer operator. Having another operator would allow more time for proper planning and construction of lines.

It should be noted that the sites that were looked at were sites that had been identified. Past reviews have indicated that the district is following standards and guidelines for protection of soil and water resources dealing with constructing of firelines and protection of streams. The lines are being bladed, not plowed, which greatly reduces the impact to soil and water resources. Firelines are often contoured which allows runoff to flow off of lines reducing the need for waterbars. Natural barriers instead of firelines are normally used whenever practical, which is important in reducing impacts.

FY2005 Recommended Actions: Continue to monitor silvicultural management activities for implementation of Best Management Practices.

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

FY2004 Findings: The water quality of nine streams on the KNF continued to be monitored quarterly in cooperation with the La. Dept. of Environmental Quality (LDEQ). The data is being incorporated into the State's Clean Water Act Sect. 305b Water Quality Inventory www.deq.state.la.us/surveillance/wqdata/wqnsites.stm.

Streams / Site Numbers are: Cress Creek / 0556, Beaver Creek / 0570, Bayou Clear / 0554, Loving Creek / 0555, Long Branch / 0572, Castor Creek / 0573, Little Bayou Clear / 0574, Brown Creek / 0571, Saline Bayou / 0553

The monitoring is being done according to a cooperative arrangement with LDEQ under the KNF's Non-Point Source Pollution Control Memorandum of Agreement with the State. The measured parameters include suspended solids and turbidity. The monitoring data indicates that all these streams meet the criteria for designated uses, including propagation for fish and wildlife. Almost all samples from these streams have turbidity levels well below 25 NTU, which is the criterion for natural and scenic streams. The stream are being monitored for metals (arsenic, chromium, cadmium, copper, lead, mercury, and nickel), nutrients (carbon, phosphates, potassium, nitrogen, nitrites, and nitrates) and sulfates, suspended solids etc. The monitoring data indicates minimal or trace levels of some of these substances but no contamination that would affect fish or wildlife.

In addition, in FY2002 thru FY2003, water samples were collected monthly at sites on three of the streams on the Calcasieu District that are habitat of the threatened La. Pearlshell mussel. (Little Bayou Clear, Long Branch, Loving Creek). Most of the watersheds draining into these streams were burned by the Forest Service in January 2002. The data from the streams is being analyzed and will be related to LDEQ/US EPA water quality standards and other water quality criteria. The study will address any effects on water quality due to the burning activities in these watersheds and any potential effects on the threatened La. Pearlshell mussel.

Bi-weekly testing of fecal coliform levels at Stuart Lake, Kincaid Lake and Caney Lake swim beaches indicated that water quality standards for protection of public health and safety were met.

FY2005 Recommended Actions: Continue to coordinate with LDEQ on monitoring the water quality of streams on the KNF. Continue monitoring on streams draining watersheds where management burning was conducted to determine any impacts on water quality. Continue required monitoring of water quality of KNF swim beaches.

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?

(U)

FY2004 Findings: Predator/prey populations across the Forest are sufficient for a sustainable recreational fishery. To maintain and enhance the resource, supplemental stocking of 3,500 largemouth bass fingerlings (provided by the USFWS) were stocked in Caney Lakes, the Bombing Range Pond, and Highline Pond.

Forty-five miles of FS streams were surveyed to assess the fish assemblage, measure water quality and characterize habitat. Water quality was within acceptable norms (LDEQ), and

population trends of MIS (see 2004 MIS report) suggest that BMPs and SHPZs are adequately protecting the integrity and quality of watersheds within the Forest.

Young-of-year and recruitment of all age classes provided evidence that sediment has not inhibited reproduction of fishes or altered habitat beyond natural conditions.

The Blue Hole habitat restoration project is still being monitored to measure the rate of success in preventing sediments from entering the pond. Partial bank stabilization was achieved by planting vegetation through a cooperative effort with the Natural Resource Conservation Service.

Artificial reefs (castles and logs) were placed in the Blue Hole and Valentine Lakes with the help of Louisiana College students through a Challenge Cost Share Agreement. The artificial reefs will be monitored and are expected to increase overall standing crop of fishes, both forage and prey.

A track-hoe was rented to restore the banks and levees at the Bombing Range Pond, which will also reduce the amount of nuisance aquatic weeds.

FY2005 Recommended Actions: Establish size and creel limits on the Forest to ensure recruitment and sustainability of the resource. Continue to monitor and collect data.

Continue to monitor and assess (analyze and interpret data) the effectiveness of management strategies on the Forest concerning aquatic resources.

Continue to monitor and identify any future restoration projects, which may include renovation of older ponds when funds are available.

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

FY2004 Findings: Relative weights of largemouth bass indicated healthy populations and adequate forage bases and there was no evidence of primary or secondary infections and disease.

Presence of forage fish and omnivores were evaluated in Forest lakes. Recent infestations of *hydrilla verticillata* threaten spawning habitat and fish population balance in Caney Lakes. Drawdown structures are in need of repair and alternative methods of weed control are being considered for this intrusive species.

Channel catfish fingerlings (7,498) were stocked in Fullerton, Stuart and Caney Lakes to improve the sport fishery and fill a habitat niche that would otherwise be filled by undesirable species (ex. bullheads).

Water quality on Forest lakes was within the norms associated with infertile oligotrophic systems of the sandy coastal plains. Restoration projects were prescribed to maintain and enhance lake productivity and habitat. Applications of lime and fertilizer (fourteen ponds and lakes totaling 180 acres) were applied to increase and maintain pH and alkalinity, increase primary production; therefore increasing survival rates of young-of-year fish, and suppressing unwanted aquatic weeds.

FY2005 Recommended Actions: Continue monitoring.

Stock catfish fingerlings when available. Catfish spawning cavities will be constructed and placed in Forest lakes to enhance reproductive success and potentially decrease a need for continual stockings. Continue to monitor.

Continue restoration and enhancement projects.

B. Sustainable Multiple Forest and Range Benefits

1. OUTDOOR RECREATION OPPORTUNITIES

Objective 2–7: Provide habitat for game and fish populations. Population levels will be measured by the Louisiana Department of Wildlife and Fisheries and agreed upon by the Forest.

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

(E)

FY2004 Findings:

Successional Habitat (all Forest Types) ⁵	Forest Plan goal (acres)	FY2001 acres	FY2002 acres	FY2003 acres	FY2004 acres
Early (0-10 yrs)	>= 20,000	26,882	24,921	13,189	14,339
Middle (31-50 yrs)	>= 50,000	86,898	55,265	82,780	66,452
Late (71+ yrs)	>= 75,000	163,120	151,111	179,201	175,024

FY2005 Recommended Actions: Continue to adhere to Revised Plan guidance.

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

FY2004 Findings:

Estimated population densities of select game species on Kisatchie NF are as follows:

White-Tailed Deer (acres/animal)	2000	2001	2002	2003	2004
Catahoula District	60	90	90	100	110
Evangeline District	75	90	90	100	120
Kisatchie District	75	90	90	100	110
Winn District	55	75	75	85	90
Vernon District	75	75	75	75	75

⁵ The monitoring items are the same as for the MIS displayed earlier. Here, however, the evaluation applies to "... quality habitats for game and fish species" instead of "... quality habitats for management indicators."

	Caney District	40	50	50	50	50
Wild Turkey (acres/animal)		2000	2001	2002	2003	2004
	Catahoula District	100	200	200	200	200
	Evangeline District	200	300	300	300	300
	Kisatchie District	75	100	100	100	100
	Winn District	75	150	150	150	150
	Vernon District	75	250	250	250	250
	Caney District	200	300	300	300	300
Fox Squirrel (acres/animal in upland hardwoods)		2000	2001	2002	2003	2004
	Catahoula District	5	5	5	5	5
	Evangeline District	5	5	5	5	5
	Kisatchie District	5	5	5	5	5
	Winn District	5	5	5	5	5
	Vernon District	5	5	5	5	5
	Caney District	5	5	5	5	5
Gray Squirrel (acres/animal in bottomland hardwood)		2000	2001	2002	2003	2004
	Catahoula District	3	3	3	3	3
	Evangeline District	3	3	3	3	3
	Kisatchie District	3	3	3	3	3
	Winn District	3	3	3	3	3
	Vernon District	3	3	3	3	3
	Caney District	3	3	3	3	3

Northern Bobwhite (acres/covey)		2000	2001	2002	2003	2004
	Catahoula District	1,300	1,800	1,800	1,800	1,800
	Evangeline District	1,300	1,800	1,800	1,800	1,800
	Kisatchie District	1,300	1,800	1,800	1,800	1,800
	Winn District	1,300	1,800	1,800	1,800	1,800
	Vernon District	1,200	1,200	1,800	1,200	1,800
	Caney District	1,300	1,800	1,800	1,800	1,800

Populations of squirrels were stable. Deer populations are and have been considerably below the habitats' carrying capacity; herd densities are too low to provide adequate aesthetic enjoyment for non-consumptive users. Bobwhite populations are low region-wide.

FY2005 Recommended Actions: Attempt to restrict hunting seasons to lengths comparable to those of Louisiana Department of Wildlife and Fisheries' Wildlife Management Areas with similar habitat in central and northern Louisiana. Attempt to restrict the training of free-ranging hunting dogs during spring and summer.

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)

FY2004 Findings: The Supervisors Office reviews most environmental documents for compliance with NEPA and Forest Plan consistency. Biological Evaluations for TE&S species are reviewed by Ecosystem Conservation personnel.

FY2005 Recommended Actions: To be determined by KNF Management Team, if any.

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

FY2004 Findings: In 2003, KNF provided 48,483 acres of riparian/bottomland habitat for waterfowl and wetland wildlife. In 2004, KNF provided 45,509 acres (525 stands) of riparian/bottomland habitat for waterfowl and wetland wildlife.

FY2005 Recommended Actions: Continue to adhere to Revised KNF Plan guidance.

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)

FY2004 Findings: Consultations with district staff reveal recent management actions are in compliance the SIOS.

FY2005 Recommended Actions: Continue to review proposed projects for SIO compliance.

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

FY2004 Findings: Comparisons were not made due to staffing limitations. However, shifts in ROS class eligibility are not likely to have occurred because only minor road construction or decommissioning was planned and accomplished. ROS class eligibility changes are dependant, primarily, on changes in road density and OHV management status.

FY2005 Recommended Actions: Evaluate the feasibility of developing an automated GIS system that would periodically determine the ROS class eligibility of forest lands.

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)

FY2004 Findings: Meaningful Measures costing data was updated to the corporate INFRA database. Critical standards are being met. Full compliance with all Meaningful Measures standards is not possible at current funding level. The Forest completed the initial recreation realignment process steps. The Forest was selected to beta test a Regional comment card. The test period began October 1, 2003. The Forest completed pre-work requirements for the National Visitor Use Monitoring project. Customer service response has improved with the assignment of a Customer Service Representative. The Customer Service Representative receives requests, questions, or complaints. She then answers or refers to appropriate district or source for best response.

FY2005 Recommended Actions: Continue the update of the spreadsheet data converted to INFRA. Continue management of the recreation program using the Meaningful Measures system and the Recreation Realignment Process. The Forest will continue to participate in the Regional comment card beta test which was extended through FY2005. The Forest should complete assigned National Visitor Use Monitoring interview dates. Continue to improve customer service through the customer service representative.

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)**

FY2004 Findings: During FY2002 through FY2004, 0.22 miles of local roads were reconstructed. Of this total, 0.22 miles were reviewed. Of the roads reviewed, 100.0% of the road length was observed to be serviceable by the intended user and required no significant increase in the level or frequency of maintenance.

Functional Class	FY2001		FY2002		FY2003		FY2004		Totals
	Local	Collector	Local	Collector	Local	Collector	Local	Collector	
Road Reconstruction/Construction (miles)	4.2	0.0	0.0	0.0	0.0	0.0	0.22	0.0	0.22
Roads Monitored (miles)	4.2	0.0	0.0	0.0	0.0	0.0	0.22	0.0	0.22
Roads requiring increased level/frequency of maintenance or not serviceable by use (miles)	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

FY2005 Recommended Actions: Continue use of appropriate design standards for road reconstruction and construction. Continue monitoring road condition and use.

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)**

FY2004 Findings: One land exchange with the Collins Camp Association was pursued in compliance with Forest Service Manual and Forest Plan Direction. No right-of-ways were acquired in FY2004. No private land was acquired in FY2004.

We evaluated 22 new applications for a variety of special uses including roads, utilities, recreation events and group use. 19 authorizations were granted or renewed in FY2004 after private occupancy alternatives were examined. 60 permits were closed either because the uses were no longer needed or the term of use expired. A total of 460 permits were administered on the Forest.

250 miles of landline was maintained in FY2004 to standard.

FY2005 Recommended Actions: Pursue prioritized land acquisitions and exchange program as funding allows. Four land exchanges have been identified altogether: Collins Camp, Foster, Griffin and Vidrine. The Plum Creek Acquisition is doubtful due to funding constraints nationally.

Continue to manage and monitor the lands program to the level that funding will allow.

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)

FY2004 Findings: The 480 acre land interchange with the US Army, Fort Polk, that was just finalized by Congress in 2005 will allow more efficient management of National Forest Lands. Landlines continue to be maintained and protected on the established 7-year cycle to discourage encroachments.

FY2005 Recommended Actions: After an initial figure of 231 miles of landline maintenance was planned, an additional landline target of 70 miles was accepted by the Forest to further enhance our property line maintenance. Continue to manage and monitor the lands program to the level that funding will allow.

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)

FY2004 Findings: Although still substantially low, the harvest level on the Forest is increasing. Over 52,200 CCF (or 5,220 MCF (26 MMBF)) were harvested, compared to an FY2003 harvest of 16,000 CCF (or 1,600 MCF (8 MMBF)). This was driven more by prices and markets and the changing macro-economic climate of the Southern marketplace. Plus, this increase in harvest volume is a result of an increase in timber offered for sale. Another measurement of commodity flow that has been used in the past is payments to states. The measurement of commodity flow can no longer be used due to the 'disconnect' between payments to the parishes and the harvest of forest products.

The effect on jobs continues to be more difficult to measure. It can be estimated that an increase in timber sale offerings does have a positive impact on the potential number of local jobs and income. Whether or not this trend continues will remain to be seen.

FY2005 Recommended Actions: Continue to monitor this situation. Strive to implement the Forest Plan and accompanying harvest levels.

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)

FY2004 Findings: The Forest received Economic Recovery (ER) grant proposals from three communities totaling \$20,800 which is more than the \$18,240 in requests for FY2003. Only two of the proposals were funded. One was not funded as it did not meet the requirements. One

community, the Jena Band of Choctaw, had not received ER funds in the past. We also were allowed to offer NEA grants in FY2004. Two were awarded totaling close to \$34,000.

FY2005 Recommended Actions: None. Funding has been cut for this program.

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

FY2004 Findings: One FY2004 grant foci was provided to the Jena Band of Choctaw Indians for a Tribal Museum Conceptual Planning Project.

FY2005 Recommended Actions: Continue emphasis on new communities and capacity-building projects that result in increased local job opportunities and local incomes. Stress environmental concerns for the future.

4. ROADLESS AREA/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)

FY2004 Findings: The realignment process is assisting the Recreation Staff in identifying projects that may be associated with SIAs. The public is learning more about these areas through education efforts. We are working with the LA Dept of Wildlife and Fisheries to protect the Saline Bayou National Scenic River. The legal description for the Saline Bayou National Scenic River was completed this year.

FY2005 Recommended Actions: Continue to increase efforts in this area through the alignment process and education to the public. Continue to monitor the triploid carp release into Saline Lake for any possible effects on Saline Bayou. Install a monitoring device on the Bayou to assist with the monitoring of the triploid carp. Work with the District to complete fifteen miles of the Saline Bayou Scenic River boundary maintenance by sign placement and paint.

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

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)

FY2004 Findings: National Meaningful Measures standards for wilderness management have been completed. Management of Kisatchie Hills Wilderness is in compliance with Forest Plan standards and guidelines. The Kisatchie District increased awareness to the public by hosting a Kisatchie Hills Wilderness Day.

FY2005 Recommended Actions: Strive to manage Kisatchie Hills Wilderness in compliance with the new national Wilderness Meaningful Measures Standards. Continue to promote the area and educate users.

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)

FY2004 Findings: Forest Plan projections estimated that the Forest would sell an annual average of 13,158 MCF, from both timber-suitable and timber-unsuitable lands on the Forest.

An increase in volume of forest products offered for sale was observed in FY2004. A total of 59,800 CCF (or 5,980 MCF (30 MMBF)) was offered. This is an increase over FY2003. To reach the level outlined in the Forest Plan will require a time period of between 2-3 years.

FY2005 Recommended Actions: In FY2005, continue to monitor this situation for an anticipated improvement.

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)

FY2004 Findings: Decisions signed in FY2004 include a variety of prescribed treatments. General direction on the Forest has been to concentrate projects within RCW HMAs. As a result, most treatments were limited to mainly longleaf restoration and thinnings.

These included:

- No acres planned for uneven-age management in FY2004.
- Even-age management using clearcut with reserves to restore longleaf on 546 Acres
- Site preparation treatments using a range of methods, including fire, mechanical and herbicide
- Commercial thinning (15,797 acres) was used to accomplish a mixture of goals including RCW habitat enhancement, longleaf ecosystem restoration, hardwood enhancement, and forest health/pest prevention.

Prescribed activities in FY2004 continue to move closer to Forest Plan average estimated outputs. Thinning was within 6% of average in FY2004. Regeneration harvests continue to be far below the anticipated Forest Plan outputs.

FY2005 Recommended Actions: Continue to complete field exams and prescriptions to meet Forest Plan goals.

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)

FY2004 Findings: Grazable acreage on the Forest is in decline, and less than the 86,000 acres targeted above; however, demand for grazing resources is so low that the KNF is more than able to meet all public demand. It should be noted that serviceable fencing and handling facilities are declining annually.

FY2005 Recommended Actions: Deactivate all permits not being used, and assess current acreage needed to meet public demand. Revise downward the target acreage mentioned above. Begin removing fence and handling facilities at unused allotments in accordance with the Revised Forest Plan.

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

FY2004 Findings: A 25-year trend of decreasing demand from the public for grazing resources continues. Only two grazing allotments were actively used for cattle grazing, with numerous permittees taking "non-use". Otherwise, grazing resources are declining in acreage available due to the lack of management and lack of use. Management practices require NEPA documentation prior to being implemented. No documents were approved for implementation during FY2004. The two active allotments are meeting the current demand for allotment based forage resources.

FY2005 Recommended Actions: Given the continued non-use of the majority of KNF allotments, carefully scrutinize future expenditure as to their cost-effectiveness. Deactivate all permits not being used, and assess current acreage needed to meet public demand. Revise downward the target acreage mentioned above. Begin removing fence and handling facilities at unused allotments in accordance with the RLMRP. All district EA's are current; the Catahoula RD needs to draft a range EA to go into effect for 2007.

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)

FY2004 Findings: Parcels were made available for lease according to the latest U.S. ownership (based on court judgments) and management restrictions. The Forest is having its first lease offering in many years.

Applications were processed according to direction and in a timely manner. One new gas well was drilled on the Winn District. Operations of private minerals were reviewed for compliance with existing state and federal laws.

All operations were inspected to ensure compliance with state and federal environmental laws.

FY2005 Recommended Actions: Continue to improve working relationship with BLM, Eastern States in responding to Expressions of Interest in a timely manner. Work to streamline responses to BLM Expressions of Interest and other leasing questions by upgrading the Minerals database on the Forest.

Objective 3–5: Provide other forest products such as firewood and pinestraw 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)

FY2004 Findings: The level of special forest products continued at about the same level of interest as in FY2003. There was still insufficient supply of firewood, but that varies with the severity of the winter.

FY2005 Recommended Actions: None.

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

FY2004 Findings: Low demand for special forest products continued. There were no known negative impacts on forest health or resources noted.

FY2005 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 historical 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)

FY2004 Findings: All compliance reviews and consultations pursuant to Section 106 of the National Historic Preservation Act (NHPA) were completed prior to agency decisions. FY2004 saw an increase in request for surveys. In FY2004, a total of 4,072 acres were inventoried. All these acres were in support of timber, recreation or special use. Sixteen new sites were added to the KNF heritage database. In FY2004, the Forest continued government-to-government relations with six federally recognized tribal nations. These include the Caddo Tribe of Oklahoma, the Chitimacha Indian Tribe, the Coushatta Indian Tribe, the Jena Band of the Choctaw, the Tunica Biloxi Tribe, and the Choctaw Tribe of Oklahoma.

FY2005 Recommended Actions: Continue the current course of pre-decisional inventories and consultations. Continue working with interested tribes to establish required government-to-government relations and partnerships. Develop a Programmatic Agreement with the SHPO and Tribes.

Objective 5–2: Provide protection for heritage resource sites that 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)

FY2004 Findings: Four heritage sites were revisited to determine the extent of internal or externally caused damage. No evidence of damage due to Forest activities at these sites was noted, but external damage (unauthorized site looting) was recorded in a number of instances. No formal Law Enforcement case reports were generated. Nineteen new historic properties were discovered in post review. One of these saw damage and the timber sale was modified and closed. The SHPO and the Caddo Nation were notified.

There are still insufficient funds for Law Enforcement Officers and Heritage Specialists to physically monitor all sites at risk.

FY2005 Recommended Actions: Continue current course of physical monitoring. The Forest still needs to request and receive funding to increase monitoring efforts, with an eye towards using remote sensing-technology to supplement physical monitoring.

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

FY2004 Findings: In FY2004, a COR/HRT discovered that a skid route was going through a site. The timber sale immediately ceased and it was decided that the remaining 180 acres should have resurvey before the sale could continue. An additional twenty one sites were discovered and the timber sale was modified and closed.

FY2005 Recommended Actions: Current strategies for site and buffer zone delineation appear effective and should be continued. COR's and HRT's are doing an effective job of monitoring projects.

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)

FY2004 Findings: The Forest began to evaluate one potentially significant heritage site for eligibility to the National Register of Historic Places, and the number of backlogged sites remains at 416. Given FY2004 funding and staffing levels, we were not able to satisfy compliance with Section 110 of the NHPA, requiring assessments of NRHP eligibility for all known cultural properties.

FY2005 Recommended Actions: Continue to request additional funds needed to conduct cultural site evaluations for all sites in backlogged status.

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

Are sites and heritage values being identified for public interpretation? (I)

FY2004 Findings: The Forest Service was a contributor to Louisiana Archaeology Week for the 15th year. Heritage Specialists visited primary and secondary level classrooms to make presentations on Louisiana history and archeological ethics. Additionally, Heritage Specialists made presentations at society meetings promoting the heritage work performed on the Forest. Specialists also taught continuing education to the Louisiana Forest Association.

FY2005 Recommended Actions: Continue to offer PIT projects as possible given funding constraints, and remain as a primary partner with the LA SHPO in Louisiana Archaeology Week.

Continue to strengthen the relationship between Recreation and Heritage Resources to provide interpretive opportunities between the two resources, such as the LSU Site trail and interpretive area.

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

FY2004 Findings: Public responses from public presentations indicate a general increase in awareness and sensitivity about the nonrenewable cultural resource base.

FY2005 Recommended Actions: Continue to offer PIT projects, classroom and civic organization presentations, and partner with the LA SHPO in Louisiana Archeology Week.

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)

FY2004 Findings: The full scope of forest management practices and philosophy was incorporated in presentations to the public, schools and media.

Numerous Forest tours, fairs, and festivals were attended providing presentations on National Forest management activities.

Numerous school visits were made by Recreation staff to increase awareness about recreation and how it is incorporated with other resources such as heritage resources, timber, etc.

FY2005 Recommended Actions: Continue to provide funding for high-profile and effective interpretive programs such as Passport In Time, Audubon Zoo Earthfest, Audubon Nature Center Demonstration, Tensas Wildlife Refuge Fire Demonstration, Outdoor Education Classroom with Louisiana School for the deaf.

Continue to expand types of audiences reached with educational presentations. Groups such as schools from the larger cities and the Louisiana School for the Deaf.

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

FY2004 Findings: The Kisatchie National Forest enjoys public support on a wide range of issues and management activities including silvicultural work, prescribed fire, recreation management, transportation management, and a host of other activities.

FY2005 Recommended Actions: Provide increased funding for environmental education projects, printed materials, and video productions. Increase presentations to civic groups, increase participation with non-profit organizations such as Boy Scouts and Girl Scouts; travel to destinations outside Forest boundary to reach various user groups and work with nontraditional audiences.

C. Organizational Effectiveness

1. ECONOMICS

FY2004 Findings: (See Appendix B)

FY2005 Recommended Actions: Continue providing funds as needed to meet Plan objectives.

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)

FY2004 Findings: Yes, this report documents monitoring results for FY2004 activities and shows recommendations for FY2005. This report will also be used along with past reports to compile the 5-Year Review of the Revised LRMP. This report will be posted at the Region 8 public web site (<http://www.southernregion.fs.fed.us>) and internally at the Kisatchie's web site (<http://fsweb.kisatchie.r8.fs.fed.us>).

FY2005 Recommended Actions: Continue producing this report annually. Target audience continues to be the Forest line officers, the Regional Forester, and any others who may request a copy of this report or wish to access it over the Internet.

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)

FY2004 Findings: The Forest Plan had its first amendment during FY2003. Amendment #1 to the Plan came about as a result of the ROD for the *Supplement to the Final Environmental Impact Statement, Vegetation Management in the Coastal Plain/Piedmont (October 2002)*. This amendment provided clarification of direction for the preparation of site-specific Biological Evaluations (BEs) including inventory requirements for Proposed, Endangered, Threatened, and Sensitive (PETS) species for the KNF. The new amendment makes the process of conducting BEs more efficient and consistent throughout the Southern Region and removes/adds specific language to Forestwide standard FW-009.

Amendment #2 was signed in May, 2003. That amendment, *Increased Utilization and Expansion of the Claiborne Air-to-Ground Weapons Range, LA*, re-allocated some of the land in the RCW HMA on the Calcasieu RD, Evangeline Unit, and authorized re-issuance of a Special Use Permit to the US Air Force for use of the Claiborne Range.

Amendment #3 (*Sandstone Multiple Use Trail Management Plan* on the Kisatchie Ranger District) and Amendment #4 (*Providing Off Road Vehicle Management* on the Calcasieu Ranger District) were begun in FY2004. They were later signed in FY2005.

FY2005 Recommended Actions: Amend the Forest Plan to add new RCW direction provided in the USFWS' Red-cockaded Woodpecker (*Picoides borealis*) Recovery Plan. Continue to add amendments as new direction is needed or new allocations are required for changing land uses. Collect monitoring data from the first half of the planning period and compile it for the 5-Year Review.

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)

FY2004 Findings: 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 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)
- Joint Fire Science Program Demonstration Sites (#98-IA-189)

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 severely burned longleaf pine trees was conducted.

Southern Research Station Unit FMR 4111 has established research plots in young longleaf and loblolly pine plantations to monitor changing management practices on growth and yield.

The Forest Service and LSU completed its challenge cost share agreement to help one another accomplish mutually beneficial objectives related to the impacts of off road vehicles (ORV) on soil, water and other resources of the Kisatchie National Forest. The current KNF ratings were refined in order to classify the suitability of areas. Reports were prepared containing maps showing suitability ratings for ORV traffic and for the Kisatchie, Catahoula and the Calcasieu Ranger Districts. This study will help the Forest Service determine how to best manage these areas. The following are some of its findings:

- Predicted ORV ownership in LA would double in next 10 yrs.
- Results mainly confirm/support the existing KNF ORV soil suitability ratings
- Most soils are suitable within the Catahoula District (Livingston) and Evangeline unit (Claiborne) and trails can be maintained.
- User-created and designated trails within Kisatchie RD should be closed due to poor soil suitability for ORVs (49% have severe erosion potential; 11% severe rutting potential).
- Trails in areas where there is potential erosion and rutting during wet conditions should be closed.
- Close trail if 2 inches of rainfall within about 1 day; keep trail closed a week after there is no ponded water.
- Closures, based on seasonal soil moisture data, should occur from December through March or April
- Low KBDI values could be used as a basis for closing the trails in the forest.

San Dimas Technology and Development Center is conducting a study of ATV impacts on the natural environment. Kisatchie National Forest was selected as a test site.

The Forest Supervisor has approved a cooperative project with San Dimas TDC to evaluate "Blanket 510" for use as an odor & insect abatement treatment in our "SST's".

A Challenge Cost Share Agreement between Kisatchie NF and Louisiana State University, begun in 2001, to ascertain quail abundance and distribution on the Winn and Caney Districts, continued in FY2004. Kisatchie conducted a Challenge Cost Share Agreement with Louisiana State University to estimate deer abundance on the Kisatchie districts. Kisatchie maintained a Challenge Cost Share Agreement with the National Wild Turkey Federation to enhance wildlife habitat. Kisatchie maintained a strong rapport with the Louisiana Department of Wildlife and Fisheries.

FY2005 Recommended Actions: All the above studies are ongoing except the LSU ATV study, which was completed. Continue with such cooperative relationships.

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

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

FY2004 Findings: Future research needs are listed below:

- Effects of prescribed burning on bark beetle populations
- Fire effects on the growth and yield of longleaf pine
- Effects of prescribed burning on forest sustainability
- Longleaf pine restoration techniques
- Management impacts on soil productivity and the resulting longleaf pine ecosystem
- Effectiveness of the Kisatchie National Forest standards and guidelines in reducing non-point source pollution
- Effectiveness and suitability of poultry litter amendments in restoring disturbed and degraded sites.
- Reducing soil loss due to burning on erosive soils particularly the Kisatchie severely eroded soil type

FY2005 Recommended Actions: The Kisatchie National Forest should continue to assist the Southern Research Station in ongoing studies. The Forest will help initiate additional studies when requested and as funding allows.

The effects of deer dog training and hunting on Kisatchie NF, while all other Louisiana public lands remain closed to these activities, should be assessed.

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)

FY2004 Findings: Federal and state agencies were consulted as new proposals were developed and underwent the NEPA process. SHPO and THPO (Tribal Historic Preservation Officials) contributed during the preparation and analysis done for EAs. The USFWS and LDWF provided consultation and effects analysis for game and non-game animals potentially affected by project proposals. The Natural Heritage Program (with the LDWF) provided comment on the effects of proposed actions on plants in general, and/or at known locations.

FY2005 Recommended Actions: Coordinate with federal and state agencies as needed.

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)

FY2004 Findings: The Memorandum of Understanding between the Kisatchie and the Louisiana Department of Wildlife and Fisheries still needed revision to stress greater cooperation between the two agencies, especially in the establishment of hunting seasons on Kisatchie NF. Additionally, KNF finished Challenge Cost Share Agreements with Louisiana State University to ascertain quail abundance and distribution on the Winn and Caney Districts and to estimate deer abundance on the Kisatchie NF Districts. Also, Kisatchie NF maintained a Challenge Cost Share Agreement with the National Wild Turkey Federation to enhance wildlife habitat.

The KNF continued participation in the Non-point Source Interagency Committee with LDEQ, NRCS, LA Dept. of Forestry and other agencies under the Forest's Memorandum of Agreement (MOA) with the State of Louisiana on Non-Point Source Pollution Control. (Clean Water Act Section 319)

The KNF continued to conduct water quality monitoring on 9 streams. The monitoring was done by arrangement with LDEQ under the Forest's Non-Point Pollution Control Memorandum Of Agreement with the State of Louisiana. The data is incorporated into the State's Clean Water Act Sect. 305b Water Quality Inventory www.deq.state.la.us/surveillance/wqdata/wqnsites.stm. Soil and water staff cooperated with LSU staff to initiate a study of the water quality of three Louisiana pearlshell mussel streams.

Soil and water staff and GIS staff cooperated with NRCS in developing the 5th level watershed delineations that contain National Forest lands in Louisiana. These watersheds are used to facilitate the evaluation of effects of forest management activities at the watershed level, and to prioritize watershed restoration.

The soil and water and GIS staff cooperated with the LDEQ Source Water Protection program to protect water supply wells on the Forest. KNF cooperated with LDEQ on the inventory of water well data. The well data was placed in the KNF Geographical Information System to use in ensuring protection of these water sources.

The Kisatchie National Forest has a Participating Agreement with Northwestern State University (NSU). This partnership agreement coordinates one or more graduate level/advanced undergraduate Intern position in NSU's Masters Program in History with Cultural Resource Management emphasis or anthropology program. NSU has a need to provide these Interns with real life experience and training to complement training gained in their academic endeavors while the Forest has need for additional Heritage Resource Management program presence in Natchitoches Parish, specifically the Kisatchie Ranger District. The Forest will achieve an increased level of compliance with NEPA, Sections 106 and 110 of the National Historic Preservation Act and the Southern Regional PA, while NSU will graduate students in Cultural Resource Management with balanced, marketable skills, and experience in the workplace.

The Kisatchie National Forest also has a Participating Agreement with the Louisiana Division of Archaeology (the Division) in executing Louisiana Archaeology Awareness Week. The Forest and the Division are dedicated to providing educational experiences to the public to establish awareness and understanding. Through such programs as this, the degradation of archeological and historical sites or values on Forest, state, private, and other federal lands in Louisiana, and the data they contain, will diminish.

The Forest Service and LSU completed a challenge cost share agreement to help one another accomplish mutually beneficial objectives related to the impacts of off road vehicles (ORV) to soil, water and other resources of the Kisatchie National Forest.

FY2005 Recommended Actions: Continue to accommodate interested partners who wish to form partnerships, cooperative agreements, memorandums of agreements consistent to Forest Plan goals and objectives. The Forest does not have a Programmatic Agreement with the SHPO and Tribes concerning Heritage Resource Management. The Forest should begin this process.

Continue to develop Challenge Cost Share agreements. Continue to seek interested partners who wish to participate in implementing the revised Forest Plan.

IV. Evaluation of Outcomes on the Land

This section of the Report evaluates the perceived outcome of the monitoring results for this reporting fiscal year (FY2004). The effectiveness of much of the Plan's direction will be more thoroughly evaluated during the *5-Year Review*, which was begun in FY2004. Based on monitoring results, the following observations were made:

- Decisions signed in FY2004 included a variety of prescribed treatments. General direction on the Forest has been to concentrate projects within RCW HMAs. As a result, most treatments were limited to mainly longleaf restoration and thinnings.
- Prescribed activities continue to move closer to Forest Plan average estimated outputs. Thinning was within 6% of average but regeneration harvests continue to be far below the anticipated Forest Plan outputs.
- Because no new regeneration harvest treatments were implemented, mixed hardwood-loblolly forest types continued to exceed long-term desired future conditions.
- Implementation of project decisions under this Plan are only beginning to be completed. Project decisions are more on track with the Plan's longleaf restoration expectations. 546 acres are planned for longleaf restoration clearcuts, however part of the 13,400 acres planned for RCW thinning will result in a change in forest type to predominately longleaf.
- Most projects are being concentrated within the RCW HMAs, which will limit shortleaf/hardwood and hardwood-loblolly restoration in the upcoming years.
- Compared to Forest Plan estimates in the FEIS, Kisatchie NF has a surplus of shortleaf pine/oak-hickory (mid-late stages) and a deficiency of mixed hardwood-loblolly pine (early stages). Other habitat types/successional stages are within planned estimates.
- It is likely that habitat objectives for selected MIS are being met mainly as a result of the effective forest prescribed burning program; however, current baseline data and survey methods have not proven effective for analyzing trends in plant indicator species. There is no statistical evidence showing that management objectives have been met.
- The Forest's prescribed burning program is the most effective practice used for restoration of pre-settlement habitats, which is proving to be very effective in protecting, improving and maintaining TESC species.
- The last surveys conducted for the pearlshell mussel were in 2002 (Grant Parish) and 2004 (Rapides Parish) in accordance to the USFWS Recovery Plan 1989. Considering both populations together, the latest counts indicate the species is stable if not actually increasing slightly.
- Water samples taken on KNF mussel streams indicated good water quality and were within state standards set by LDEQ.
- No significant changes in acres or site quality of habitat for sensitive and conservation plant species were found. Particular attention has been directed at protecting bogs, wetlands and streams on the Forest.
- Early successional (0-10 years) pine habitat has diminished significantly since 1999; older successional pine habitats have increased significantly since 1999. Mixed forest types: 0-10 year-old stand acreage remains approximately the same as the base year;

- 11-30 year-old stand acreage significantly increased; 31-80 year-old stand acreage decreased; and 81+ year-old stand acreage remains approximately the same as the base year. Hardwood acreage: 0-10 year-old stand acreage remains approximately the same as the base year; 11-30 year-old stand acreage significantly increased; 31-80 year-old stand acreage decreased; and 81+ year-old stand acreage decreased from the base year. All forest types, Forestwide: 0-10 year-old stand acreage significantly decreased from the base year; 11-30 year-old stand acreage significantly increased; 31-80 year-old stand acreage significantly decreased; and 81+ year-old stand acreage significantly increased from the base year.
- It is important to increase efforts to remove encroaching woody plants in the Winn district prairies and bogs throughout the Forest, as these habitats host many of our TESC species.
 - Wildland fire preparedness was still below the most efficient level. As a result, wildland fire losses were not being minimized due to the funding shortfall.
 - The Forest lost 342 acres to wildland fires in FY2004. The acceptable range in NFMAS was 2,108. The Forest was within the acceptable range.
 - A field review of fire lines constructed for prescribed burning activities showed that the use of natural barriers, roads, etc., as much as possible, minimized the length of fire lines on the burned areas. This minimizing of fire lines greatly reduced the amount of soil disturbance and consequent erosion. Bladed lines as opposed to plowed lines were constructed which reduced the potential for erosion.
 - Preliminary findings from the Long Term Soil Productivity Study being conducted by the Southern Research Station indicate that when sites located on several soil types with a severe compaction hazard rating were subjected to experimental compaction, bulk densities recovered to near original undisturbed levels within ten years and pine productivity was unaffected. However, the experimental compaction did not disturb the soils in a manner similar to harvesting, and wet-weather harvesting without remediation may reduce productivity. Preliminary results also indicate that soil productivity may be decreased by slash removal or increased by phosphorus fertilization on phosphorus-deficient sites. In general, less productive sites are more susceptible to detrimental harvesting impacts than highly productive sites.
 - All areas of the Kisatchie National Forest are in attainment of the National Ambient Air Quality Standards (NAAQS) including NAAQS for ozone.
 - Bi-weekly testing of fecal coliform levels at Stuart Lake, Kincaid Lake and Caney Lake swim beaches indicated that water quality standards for protection of public health and safety were met.
 - Predator/prey populations across the Forest are sufficient for a sustainable recreational fishery. Relative weights of largemouth bass indicated healthy populations and adequate forage bases and there was no evidence of primary or secondary infections and disease.
 - Forty-five miles of FS streams were surveyed to assess the fish assemblage, measure water quality and characterize habitat. Water quality was within acceptable norms (LDEQ), and population trends of MIS suggest that BMPs and SHPZs are adequately protecting the integrity and quality of watersheds within the Forest.
 - Populations of squirrels were stable. Deer populations are and have been considerably below the habitats' carrying capacity; herd densities are too low to provide adequate aesthetic enjoyment for non-consumptive users. Bobwhite populations are low region-wide.

- During FY2002 through FY2004, 0.22 miles of local roads were reconstructed. Of this total, 0.22 miles were reviewed. Of the roads reviewed, 100.0% of the road length was observed to be serviceable by the intended user and required no significant increase in the level or frequency of maintenance.
- Although still substantially low, the timber harvest level on the Forest increased. This was driven more by prices and markets and the changing macro-economic climate of the Southern marketplace.
- Management of Kisatchie Hills Wilderness was in compliance with Forest Plan standards and guidelines.
- Grazing resources are declining in acreage available due to the lack of management and lack of use. The two active allotments are meeting the current demand for allotment based forage resources. Serviceable fencing and handling facilities are declining annually.
- The level of special forest products continued at about the same level of interest as in FY2003. There was still insufficient supply of firewood.
- Four heritage sites were revisited to determine the extent of internal or externally caused damage. No evidence of damage due to Forest activities at these sites was noted, but external damage (unauthorized site looting) was recorded in a number of instances. There are still insufficient funds for Law Enforcement Officers and Heritage Specialists to physically monitor all sites at risk.
- Current strategies for heritage site and buffer zone delineation appear effective and should be continued. COR's and HRT's are doing an effective job of monitoring projects.
- Given FY2004 funding and staffing levels, we were not able to satisfy compliance with Section 110 of the NHPA, requiring assessments of NRHP eligibility for all known cultural properties.
- Public responses from public presentations indicate a general increase in awareness and sensitivity about the nonrenewable cultural resource base.
- User-created and designated trails within Kisatchie RD should be closed due to poor soil suitability for ORVs (49% have severe erosion potential; 11% severe rutting potential).
- Most local and collector roads appear to be serviceable by the intended user and require no significant increase in the level or frequency of maintenance.

V. Summary of M&E Recommendations Planned for FY2005

This section of the Report provides information on all monitoring items that need action during the current fiscal year (FY2005). In addition to the specific recommended actions listed below, the general recommendation for FY2005 is to continue 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.

Recommendations for those items that need attention follow:

- ✓ While acres planted to longleaf is below planned annual average of 1,400 acres longleaf restoration, project decisions with restoration cuts have increased. Project decisions under the Revised Plan are just beginning to be implemented. Thinning prescriptions within RCW HMAs should provide the needed longleaf stand composition. Post implementation field checks should be done on thinnings to ensure sufficient longleaf emphasis and evaluate species compositions changes.
- ✓ Because no new regeneration harvest treatments were implemented, mixed hardwood-loblolly forest types continue to exceed long-term desired future conditions by 89%. Prescribe regeneration cuts on off-site stands where there is a high priority for regeneration such as stands damaged by disease, insect or storm damage.
- ✓ The management indicator species list should be modified to include more commonly occurring native plants that occupy a wider range of forest habitat types. Additionally, the survey protocol needs to be reexamined and possibly revised.
- ✓ LDEQ monitoring of particulate matter in Alexandria (Rapides Parish) with a Federal Reference Method PM 2.5 indicates that the NAAQS for particulates is being met. Still, the Forest feels that there may be a need to model and monitor particulate matter concentrations in the air within the sensitive communities adjacent to and within the boundaries on the rest of the Forest. before, during, and after prescribed burning operations.
- ✓ Strive to maximize the implementation of growing season burns on longleaf pine plant community landscapes.
- ✓ Deactivate all permits not being used, and assess current acreage needed to meet public demand. Revise downward the target acreage mentioned above. Begin removing fence and handling facilities at unused allotments in accordance with the Revised Forest Plan.
- ✓ Implement backlog of NEPA covered timber stand improvement treatments, including pre-commercial thinning and first thinnings, at an increased rate.
- ✓ Insure that guidelines designed to prevent erosion and sedimentation of streams are followed. One problem has been the need for an additional dozer operator. Having another operator would allow more time for proper planning and construction of lines.
- ✓ The Forest needs to amend the Forest Plan to add new RCW direction provided in the USFWS' Red-cockaded Woodpecker (*Picoides borealis*) Recovery Plan.
- ✓ The effects of deer dog training and hunting on Kisatchie NF, while all other Louisiana public lands remain closed to these activities, should be assessed.
- ✓ The Forest does not have a Programmatic Agreement with the SHPO and Tribes concerning Heritage Resource Management. The Forest should begin this process.

VI. Status of FY2003 Monitoring & Evaluation Report Recommendations

► Every year continue to prepare documents addressing management practices, which will be implemented on approximately 10 percent of the Kisatchie National Forest ownership. Longleaf restoration cuts remain far below 10% of the RLRMP estimated acres, however the 4,436 acres of thinning were designed to move stands from offsite species to longleaf. Forest Silviculturist will

field check samples of implemented project decisions. Include thinnings to determine forest type changes.

Growing season and late dormant season burning has increased mortality in loblolly stands, especially poletimber size plantations. Consider these young loblolly stands for regeneration to longleaf, where possible and where growing season burns are planned, in order to capture mortality and provide for adequate and adequately financed site preparation and planting.

Status in FY2004: Planning and NEPA continued to increase. Implementation is still in early stages.

► Continue to monitor sites for additional treatment needs. Increase the number of acres burned during the growing season. Increase final harvest cut acres of off-site species on longleaf pine sites so an increase of planted longleaf can occur. Acres planted to longleaf is below target 1,400 acres longleaf restoration. Post implementation field checks will be done by Forest Silviculturist on thinnings to promote longleaf to determine species compositions changes. Continue to apply growing season burns on a three year rotation starting with the second growing season after planting.

Monitor shortleaf pine plantation in FY2004 for replanting needs. While 2003 planting of shortleaf was slightly below acceptable range of shortleaf/hardwood restoration, 2002 plantings exceeded the range. Continue restoration treatments on shortleaf/hardwood sites where there is high priority for regeneration.

While regeneration harvest treatments were not implemented, mixed hardwood-loblolly forest types exceed long-term desired future conditions by 89%. Prescribe regeneration cuts on off-site stands where there is a high priority for regeneration.

Continue to monitor management practices being implemented within 150 feet of streamside and riparian area protection zones for compliance with the Forest Plan, through timber sale contract administration and field checks.

Status in FY2004: Done.

► Modify collection methods to eliminate problems with data previously collected by multiple observers. Continue collecting baseline data on plant management indicators using the new methods. Review occurrences of plant management indicator species that have yet to be found in the existing system of plots, and begin development of a protocol to monitor these species. This will require either additional plots within known habitat for these species and/or modified methods of data collection at such sites.

Continue to adhere to Revised KNF Plan guidance.

Status in FY2004: Done.

► Continue to develop method for capturing MIS plant species that are not showing up in current survey methodology. Consult with University for possible CCS project to monitor the species. Plot location will also be reconsidered, in an effort to capture data on several species that were not found in sufficient numbers in the present plant MI plots.

Continue bird surveys on Kisatchie NF.

Status in FY2004: Done.

► Strive to implement harvesting levels consistent with Plan levels. Increase the number of prescribed burn acres to allow the completion of 125,000 to 150,000 acres per year. Growing

season burns are critical for successful gains in our restoration efforts. Continue to increase the number of growing season burns. Identify by calendar date when growing season burns begin in the spring and end in the summer. Publish these dates in the fire management handbook.

Continue increased emphasis on RCW management across the forest. Identify and prioritize thinning of foraging habitat, improvement and expansion of RCW clusters, and mid-story removal projects. Work with the USFWS to prioritize future projects and identify habitat needs. Identify all Pearlshell mussel beds on the Forest, and develop means of monitoring the number of mussels on a recurring basis.

Status in FY2004: Done.

► Strive to implement harvesting levels consistent with Plan levels. Increase the number of prescribed burn acres to allow the completion of 125,000 to 150,000 acres per year. Growing season burns are critical for successful gains in our restoration efforts. Continue to increase the number of growing season burns. Identify by calendar date when growing season burns begin in the spring and end in the summer. Publish these dates in the fire management handbook.

Continue to adhere to the land management practices described in the revised Land Management Plan for Kisatchie NF, which calls for relatively older timber stands.

Status in FY2004: Done.

► Closely monitor all populations for signs of stability. Prescribe burn the foraging habitat as much as feasible. Engage in RCW translocations to bolster populations, if feasible. Continue consultations with the USFWS.

Continue beaver control, enforcement of FS regulations prohibiting ORVs from riding in streams, and implementation of Best Management Practices (BMPs) and Streamside Habitat Protection Zones (SHPZs) that protect Louisiana pearlshell mussel habitat. Encourage collaboration from other agencies and partners to help protect the pearlshell.

Status in FY2004: Done. Through our partners, pearlshell restoration efforts were conducted on private lands and watersheds that border the Forest. Continued emphasis on pearlshell protection continues within the FS, and agencies are working together to maintain the viability of this species.

► Complete the inventories of designed old-growth patches and determine which forest ecosystem is represented within each patch. SO staff personal should complete field visits and review NEPA documents involving old-growth patches to determine compliance with the Forest Plan.

Status in FY2004: Ongoing.

► Begin field visits to old-growth patches and rank for quality.

Status in FY2004: Ongoing.

► Every year, conduct silvicultural surveys and prepare documents addressing management practices where needed, on approximately ten percent of the Kisatchie National Forest ownership. Document the streamside habitat protection zones and actions taken to manage in and near these areas. Monitor streamside habitat protection zones as outlined for this task.

Status in FY2004: Done

▶ The Forest should continue to monitor the weather and take advantage of every burning opportunity. Strive to maximize the implementation of growing season burns on longleaf pine plant community landscapes.

Status in FY2004: The Forest implemented more growing seasons burns than in the past year exceeding expectations.

▶ Increase acreage of growing season burns on longleaf and shortleaf pine/oak-hickory landscapes.

Status in FY2004: Done

▶ Review burn plans to evaluate how Louisiana Smoke Management Guidelines are being followed during reviews of soil, water and air standards and guidelines (Best Management Practices)(BMPs)) and report findings.

Status in FY2004: Done.

▶ Continue to coordinate with LDEQ Air Quality Dept. on monitoring.

Status in FY2004: Done.

▶ Continue to request wildland fire preparedness funding at the 100% efficiently level and staff accordingly.

Status in FY2004: Preparedness funds remained level from previous year.

▶ Manage for productive and healthy forest ecosystems by utilizing prescribed fire to prevent and minimize resource losses to wildland fires.

Status in FY2004: Prescribed fire targets were exceeded with emphasis on Wildland/Urban interface areas and on improving Habitat Management areas for the Red-cockaded Woodpecker.

▶ Identify restoration and forest health needs through the inventory process. Complete NEPA documentation that will allow the application of final harvest operations and thinning treatments through timber sales.

Continue to implement timber stand improvement treatments, including pre-commercial thinning, where appropriate. Early growing season burns within young longleaf pine plantations are especially beneficial.

Status in FY2004: Done

▶ Monitor for possible insect and/or disease infestations.

Status in FY2004: Done.

▶ Continue monitoring timber silvicultural management activities for implementation of Standards and Guidelines.

Status in FY2004: Done. Exploring protocol for effectiveness monitoring of S&Gs for keeping sediment out of streams.

▶ Continue to restore and re-vegetate disturbed areas.

Status in FY2004: Done. Funded erosion control projects on all Districts.

▶ Continue to coordinate with and assist the Southern Research Station with the Long Term Soil Productivity Study.

Status in FY2004: Done. Exploring ways to expand soil productivity study to KNF prescribed fire monitoring program.

▶ Continue to monitor silvicultural management activities for implementation of Best Management Practices.

Status in FY2004: Done.

▶ Continue to coordinate with LDEQ on monitoring the water quality of streams on the KNF. Continue monitoring on streams draining watersheds where management burning was conducted to determine any impacts on water quality. Continue required monitoring of water quality of KNF swim beaches.

Status in FY2004: Done.

▶ Stock threadfin shad in Fullerton and Valentine Lakes to improve the forage base. Continue to monitor and collect data.

Continue to monitor and assess (analyze and interpret data) the effectiveness of management strategies on the Forest concerning aquatic resources.

Continue to monitor and identify any future restoration projects.

Status in FY2004: Approximately 18,000 threadfin shad were stocked in Valentine and Fullerton lakes to improve the forage base. Bank stabilization projects are being monitored for their effectiveness. The aquatic database and monitoring program is ongoing.

▶ Stock catfish fingerlings when available. Continue to monitor.

Continue restoration and enhancement projects.

Status in FY2004: Channel catfish (7,500) and largemouth bass (3,500) fingerlings were stocked in FS lakes and ponds. Artificial reefs were constructed by university students and placed in FS lakes to improve the habitat with complex cover. Lime (103 tons) and fertilizer were applied to FS lakes to enhance water quality.

▶ Attempt to restrict hunting seasons to lengths comparable to those of Louisiana Department of Wildlife and Fisheries' Wildlife Management Areas with similar habitat in central and northern Louisiana. Attempt to restrict the training of free-ranging hunting dogs during spring and summer.

Status in FY2004: Coordination continues with LDWF to provide for consumptive, non-consumptive, and scientific users of the Forest.

► Accomplish comparisons of project designs with SIO guidance after Recreation Assistant is on board.

Status in FY2004: Done. The realignment process is assisting with this goal.

► Evaluate the feasibility of developing an automated GIS system that would periodically determine the ROS class eligibility of forest lands.

Status in FY2004: Evaluation was not made due to staffing limitations.

► Continue the update of the Meaningful Measures costing spreadsheet data converted to INFRA.

Status in FY2004: Done and will continue future updating.

► Continue use of appropriate design standards for road reconstruction and construction. Continue monitoring road condition and use.

Status in FY2004: Done.

► Continue outreach to new communities, emphasizing capacity building or comprehensive Action Planning project proposals.

Status in FY2004: Done.

► Continue emphasis on new communities and capacity-building projects that result in increased local job opportunities and local incomes.

Status in FY2004: Done.

► Dedicate additional resources to accomplishing Comparisons of project plans and Environmental Assessments with SIA Forest Plan direction in future years.

Status in FY2004: Done. Will continue to increase efforts. The realignment process is assisting the Recreation Staff in identifying projects that may be associated with SIAs. The public is learning more about these areas through education efforts. We are working with the LA Dept of Wildlife and Fisheries to protect the Saline Bayou National Scenic River. The legal description for the Saline Bayou National Scenic River was completed this year.

► Evaluate the compliance of Kisatchie Hills Wilderness management with Meaningful Measures Standards when they are completed.

Status in FY2004: Done.

► To reach the level outlined in the Forest Plan will require a time period of between 2-3 years. In FY2004, continue to monitor this situation for an anticipated improvement.

Status in FY2004: Done.

► Increase the amount of harvesting and prescribed burning on the Kisatchie National Forest to improve forest health and to achieve desired future conditions as presented in the Forest Plan.

Status in FY2004: Done.

▶ Given the continued non-use of the majority of KNF allotments, carefully scrutinize future expenditure as to their cost-effectiveness.

Status in FY2004: Done.

▶ Continue efforts to hire Lands/Minerals/Special Use Forester to maintain current level and monitor results.

Status in FY2004: Done.

▶ Continue the current course of pre-decisional inventories and consultations. Continue working with interested tribes to establish required government-to-government relations and partnerships.

Status in FY2004: Done.

▶ Continue current course of physical monitoring for heritage sites at risk. The Forest still needs to request and receive funding to increase monitoring efforts, with an eye towards using remote sensing-technology to supplement physical monitoring.

Status in FY2004: Done.

▶ Current strategies for site and buffer zone delineation appear effective and should be continued.

Status in FY2004: Done.

▶ Continue to request additional funds needed to conduct cultural site evaluations for all sites in backlogged status.

Status in FY2004: Done, but did not receive additional funds.

▶ Continue to offer PIT projects as possible given funding constraints, and remain as a primary partner with the LA SHPO in Louisiana Archaeology Week.

Status in FY2004: Done.

▶ Continue to provide funding for high-profile and effective interpretive programs such as Passport In Time, Audubon Zoo Earthfest, Audubon Nature Center Demonstration, Tensas Wildlife Refuge Fire Demonstration, Outdoor Education Classroom with Louisiana School for the deaf.

Status in FY2004: Done.

▶ Provide increased funding for environmental education projects, printed materials, and video productions. Increase presentations to civic groups, increase participation with non-profit organizations such as Boy Scouts and Girl Scouts; travel to destinations outside Forest boundary to reach various user groups and work with non-traditional audiences.

Status in FY2004: Funding levels and projects stayed essentially the same as previous years.

▶ Continue producing this report annually. Target audience continues to be the Regional Forester and any others who may request a copy of this report or wish to access it over the Internet.

Status in FY2004: The FY2003 Monitoring and Evaluation Report was completed and posted on the Forest and Regional websites in September of 2004.

▶ Amend the Forest Plan as new direction is needed or new allocations are required for changing land uses. Continue to collect monitoring data and compile it for the 5-Year Review to be done in FY2004.

Status in FY2004: Amendment #3 (*Sandstone Multiple Use Trail Management Plan* on the Kisatchie Ranger District) and Amendment #4 (*Providing Off Road Vehicle Management* on the Calcasieu Ranger District) were begun in FY2004. They were later signed in FY2005.

Preparation for needs on the 5-Year Review began. A compilation of the first 5 years of the Revised Plan monitoring is planned for a combined FY2005 M&E Report/5-Year Review.

▶ All the above studies are ongoing. Continue studies.

Continue with such cooperative relationships.

Status in FY2004: These CCS efforts continue.

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

The effects of deer dog training and hunting on Kisatchie NF, while all other Louisiana public lands remain closed to these activities, should be assessed.

Status in FY2004: Actively coordinating with SRS in ongoing soil productivity studies, and beginning new discussions about effectiveness monitoring of sediment control S&Gs.

Coordination continues with LDWF on the effects of deer dog training.

Appendix A

Comparison of FY2004 Budget with Revised Plan Annual Budget

<u>Budget Line Item</u>	<u>Plan EBLI</u>	<u>Plan Budget Estimate</u>	<u>FY2004 EBLI</u>	<u>FY2004 Budget</u>	<u>FY2004 Budget Difference</u>
Ecosystem Planning, Inventory, Monitoring					\$ (265,188)
Ecosystem management	NFEM	\$ 729,992	N/A	\$ -	
Inventory and monitoring	***	-	NFIM	392,834	
Land management planning	***	-	NFPN	43,893	
Recreation Use					104,600
Recreation management	NFRM	1,004,955	N/A	-	
Wilderness management	NFWM	55,966	N/A	-	
Heritage resources	NFHR	243,331	N/A	-	
Recreation, Heritage, Wilderness	***	-	NFRW	916,039	
Cooperative work - other	CWFS	36,500	CWFS	-	
Trails, Capital Improvements & Mtce.	***	-	CMTL	342,815	
Recreation fee collection	***	-	FEFR	-	
Fee Demo - collection	***	-	FDCL	17,400	

<u>Budget Line Item</u>	<u>Plan EBLI</u>	<u>Plan Budget Estimate</u>	<u>FY2004 EBLI</u>	<u>FY2004 Budget</u>	<u>FY2004 Budget Difference</u>
Fee Demo - projects	***	-	FDDS	117,530	
Rangeland Management					(397,036)
Range management	NFRG	72,999	NFRG	29,743	
Range vegetation management	NFRV	170,331	N/A	-	
Cooperative work - KV	CWKV	243,331	CWKV	41,164	
Wildlife and Fish Management					(1,947,150)
Wildlife habitat operations and improvement	NFWL	266,447	N/A	-	
Wildlife and fisheries management	***	-	NFWF	864,033	
Inland fish operations and improvement	NFIF	109,499	N/A	-	
T&E species operations and improvement	NFTE	643,609	N/A	-	
Cooperative work - KV	CWKV	2,161,992	CWKV	268,104	
Cooperative work - other	CWFS	30,416	CWFS	9,140	
Forestland Management					(4,420,874)
Timber management	NFTM	2,919,967	NFTM	1,427,788	

<u>Budget Line Item</u>	<u>Plan EBLI</u>	<u>Plan Budget Estimate</u>	<u>FY2004 EBLI</u>	<u>FY2004 Budget</u>	<u>FY2004 Budget Difference</u>
Forest vegetation management	NFFV	518,294	N/A	-	
Vegetation and watershed management	***	-	NFVW	422,707	
Reforestation trust fund	RTRT	133,832	RTRT	324,000	
Cooperative work - KV	CWKV	1,703,314	CWKV	254,832	
Timber roads - purchaser election	PEPE	64,483	PEPE	-	
Timber roads - purchaser construction	PUCR	1,459,983	N/A	-	
Timber salvage sales	SSSS	328,496	SSSS	-	
Forest health protection	***	-	SPS4	4,000	
Timber pipeline - Rec. backlog	***	-	TPCD	-	
Timber pipeline - Sale prep.	***	-	TPPS	-	
Soil, Water and Air Management					(394,265)
Soil, water, air operations	NFSO	79,082	N/A	-	
Soil and water improvement	NFSI	110,715	N/A	-	
Cooperative work - KV	CWKV	57,183	CWKV	-	
Cooperative work - other	CWFS	243,331	CWFS	77,188	

<u>Budget Line Item</u>	<u>Plan EBLI</u>	<u>Plan Budget Estimate</u>	<u>FY2004 EBLI</u>	<u>FY2004 Budget</u>	<u>FY2004 Budget Difference</u>
Hazardous waste management	***	-	HWHW	-	
Minerals and Geology Management					(97,976)
Minerals	NFMG	389,329	NFMG	276,379	
Land Ownership Management					154,850
Lands - real estate management	NFLA	225,081	N/A	-	
Landline location	NFLL	170,331	N/A	-	
Landownership management	***	-	NFLM	225,354	
Rural Development					264,000
Resource conservation and development	***	-	RCRC	-	
Economic recovery program	***	-	SPEA	5,000	
State fire assistance	***	-	SPFH	253,000	
Coop.lands forest health mgt.	***	-	SPCH	-	
Urban community forestry	***	-	SPUF	6,000	
Forest stewardship	***	-	SPST	-	

<u>Budget Line Item</u>	<u>Plan EBLI</u>	<u>Plan Budget Estimate</u>	<u>FY2004 EBLI</u>	<u>FY2004 Budget</u>	<u>FY2004 Budget Difference</u>
Construction					721,599
Recreation construction	CNRF	1,417,401	N/A	-	
Trail construction	CNTR	64,483	N/A	-	
Roads reconstruction and construction	CNRD	1,143,654	N/A	-	
Facilities capital improvs & mtce	***	-	CMFC	1,807,763	
Roads capital improvs & mtce	***	-	CMRD	1,438,391	
Facilities capital improvs and mtce (Title IV funds)	***	-	CMC2	-	
Land Acquisition					(37,006)
Land acquisition - L&W Cons. Fund	LALW	60,833	LALW	21,487	
Forest Service Fire Protection					1,920,035
Forest fire pre-suppression	WFPR	1,064,571	WFPR	869,504	
Forest fuel reduction	WFHF	608,326	WFHF	2,659,087	
Hazardous Fuel Reduction (Title IV funds)	***	-	WFW3	-	
Vegetation treatments to improve condition class	***	-	NFCC	-	

<u>Budget Line Item</u>	<u>Plan EBLI</u>	<u>Plan Budget Estimate</u>	<u>FY2004 EBLI</u>	<u>FY2004 Budget</u>	<u>FY2004 Budget Difference</u>
Infrastructure Management					(1,407,926)
Road maintenance and decommissioning	CNRM	986,706	CMII	-	
Maintenance of facilities	NFFA	248,197	N/A	-	
Backlog mtce of facilities (Title VIII funds)	***	-	DMDM	-	
Cooperative work - other	CWFS	425,829	CWFS	52,500	
Federal highway program	***	-	HTAE	6,500	
Federal Highway Public Roads	***	-	HTRP	-	
Operations & maintenance - FS quarters	***	-	QMQM	16,000	
Reforestation of forest lands	***	-	RIRI	1,652	
Roads and trails for states (10% Fund)	***	-	TRTR	112,279	
General Administration					2,232,550
General administration	NFGA	1,525,683	N/A	-	
Cooperative work - KV	CWKV	924,656	CWKV	433,840	
Cooperative work - other	CWFS	120,449	CWFS	147,182	
Timber - salvage sales	SSSS	58,399	SSSS	-	

<u>Budget Line Item</u>	<u>Plan EBLI</u>	<u>Plan Budget Estimate</u>	<u>FY2004 EBLI</u>	<u>FY2004 Budget</u>	<u>FY2004 Budget Difference</u>
Operations & maintenance - FS quarters	QMQM	24,333	QMQM	-	
Indirect cost pools	***	-	CACA	3,661,109	
Roads and trails for states (10% Fund)	***	-	TRTR	19,540	
Reforestation trust fund	***	-	RTRT	3,257	
Law enforcement	***	-	NFLE	-	
Senior citizens employment program	***	-	NFSD	489,084	
Visitor maps	***	-	MVIS	30,000	
External Agreements					474,040
External agents	***	-	NFEX	474,040	
Total (in FY2004 dollars)		\$ 22,846,308		18,562,158	\$ (3,405,446)

Appendix B

Avian Population Trends¹

Estimated trend in number of birds observed for Kisatchie National Forest Management Indicator Species at three spatial scales: physiographic stratum and state (BBS data 1991–2003), and Forest (BBS data 1991–2003, Forest data 1998–2003). A “+” indicates a statistically significant increasing trend; “-” a statistically significant decreasing trend; “= =” a statistically significant trend was not detected; “=” a statistically significant trend was not detected and the number of routes in the analysis was < 14 (stratum and state trends) or species was observed, on average, at < 5% of points (Kisatchie National Forest trends); “NA” indicates data insufficient to calculate trend estimate (statistical significance set at alpha < 0.10). Note: Red-cockaded woodpecker trends for Forest Data are trends in the total number of active clusters reported for all Kisatchie National Forest Ranger Districts (1990–2003).

Common Name	Kisatchie National Forest			
	Upper Coastal Plain	State - Louisiana	BBS Data	Forest Data
Acadian Flycatcher	= =	= =	= =	= =
Bachman’s Sparrow	= =	-	-	= =
Cooper’s Hawk	= =	=	NA	=
Eastern Wood-pewee	-	= =	= =	-
Hooded Warbler	= =	= =	= =	= =
Kentucky Warbler	= =	-	= =	+

¹ NOTE: This appendix contains only a small excerpt from the full 2004 MIS Report for the KNF.

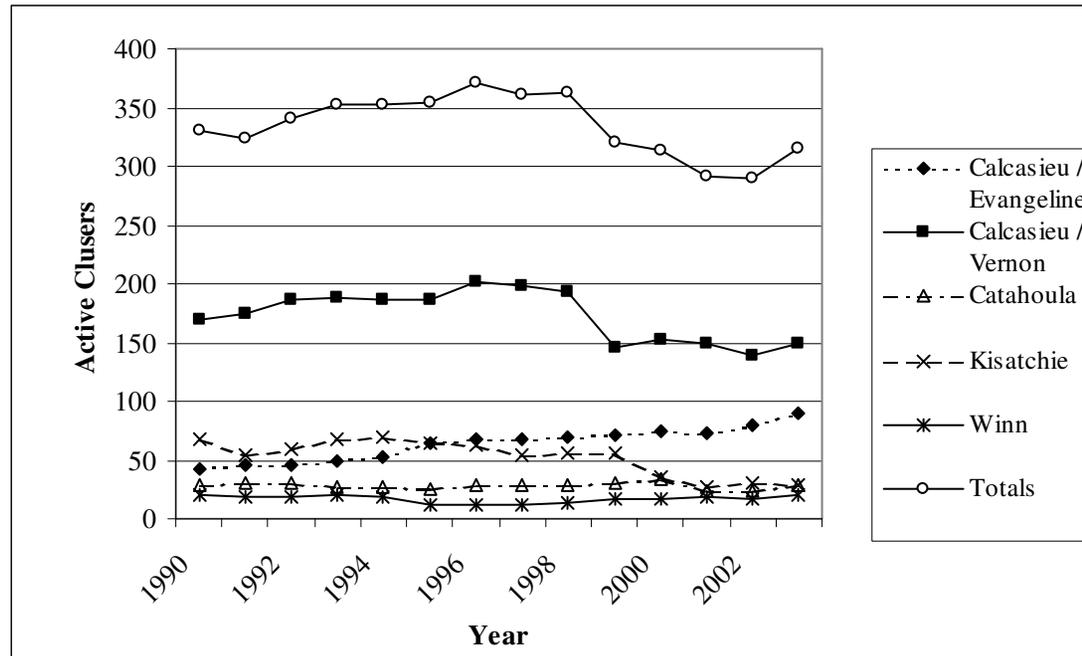
Louisiana Waterthrush	==	=	=	=
Northern Bobwhite	-	-	-	==
Northern Parula	==	==	=	==
Pileated Woodpecker	==	==	==	+
Prairie Warbler	==	-	=	-
Red-cockaded Woodpecker	+	=	=	-
Red-headed Woodpecker	==	==	=	==
Summer Tanager	==	==	==	==
Warbling Vireo	+	NA	NA	=
White-breasted Nuthatch	==	NA	NA	=
White-eyed Vireo	==	-	==	==
Wood Thrush	-	==	-	==
Worm-eating Warbler	+	-	=	==
Yellow-billed Cuckoo	-	==	+	==

Number of active Red-cockaded Woodpecker clusters in the Kisatchie National Forest, 1990–2003:

Ranger District / Population	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Calcasieu / Evangeline	43	46	46	50	52	64	67	68	70	72	75	73	79	89
Calcasieu / Vernon	169	174	186	188	186	187	201	198	194	146	152	149	139	149
Caney¹	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Catahoula	29	31	31	27	27	26	28	29	29	30	34	24	24	28
Kisatchie	68	54	59	67	69	65	63	54	56	56	35	27	30	29
Winn	21	18	18	21	18	12	12	12	14	17	17	18	17	20
Totals	330	323	340	353	352	354	371	361	363	321	313	291	289	315

¹ The Caney population is believed to be extinct with extirpation occurring sometime in the late 1980's.

Trend in the number of active Red-cockaded Woodpecker clusters in the Kisatchie National Forest 1994–2003:



Combined, the RCW populations on the Forest have declined slightly at an annual rate of -0.20% over the period 1990 through 2003, resulting in the loss of 15 active clusters (or 4.5% of the combined 1990 populations).

Appendix C

Aquatic MIS¹

MONITORING TRENDS IN MIS

In summary, forest management activities by Kisatchie National Forest do not seem to be negatively impacting lotic systems within the forest. None of the aquatic management indicator species showed an appreciable decline in relative abundance and all showed the presence of juveniles. If management activities had altered the habitat conditions and disrupted the natural hydrology, an effect should have been evident in at least one of the indicator species. This was not the case.

Graphs of relative abundance over time for the indicator species did show significant variability. A number of factors may have contributed to this variability. The most likely explanation is variability in methodologies or the timing of collections. Because streams in the southeastern United States fluctuate hydrologically, species composition in the spring will differ from the summer when many of the smaller streams become intermittent (Byrd 1994, Williams 2000, Taylor and Warren 2001). Also, different collecting methods vary in their ability to sample aquatic species (Hauer and Lamberti 1996). Additionally, all fish indicator species have a relatively short life span (four years or less); thus, they will have high turnover in age-classes over time, which could also partially account for the high variability. Nonetheless, fish populations appear to be viable and sustainable in the protected habitats and refuges of KNF.

Although numbers of largemouth bass and sunfish in KNF are not indicative of eutrophic systems, viable populations do exist for a sustainable sport fishery. The nutrient cycle in oligotrophic systems occasionally produces an influx of nutrients over the short term, but cannot maintain a high level of production every year. Therefore, forest-wide trends of largemouth bass and sunfish may fluctuate, but this is due to natural variability. Thus, where economically feasible, the Forest Service initiates restoration and enhancement projects.

¹ NOTE: This appendix contains only a small excerpt from the full 2004 MIS Report for the KNF.

Appendix D

List of Preparers

<u>Name</u>	<u>Title</u>
Cynthia Dancak	<i>Team Leader - Planning, GIS</i>
[Vacant]	<i>Team Leader – Public Uses and Services</i>
Ed Bratcher	<i>Team Leader – Fire, Lands, Minerals, Safety</i>
Calvin Baker	<i>Team Leader – Ecosystem Conservation Management</i>
Jim Caldwell	<i>Public Affairs</i>
Carl Brevelle	<i>Forester/Resource Planner</i>
Deberoah Collins	<i>Financial Manager</i>
Velicia Bergstrom	<i>Forest Archeologist</i>
Shanna Ellis	<i>Forest Recreation Program Manager</i>
Mike Dawson	<i>Forester/Timber Sales Specialist</i>
John Nobles	<i>Forester/Fire Management Officer</i>
Ken Dancak	<i>Forest Wildlife Biologist</i>
John Novosad	<i>Forest Soil Scientist & Hydrologist</i>
Bruce Prud'homme	<i>Forest Hydrologist</i>
Jo Ann Smith	<i>Forest Silviculturist</i>
Peter Nilles	<i>Forest Botanist</i>
David Byrd	<i>Forest Fisheries Biologist</i>
Charlie Crothers	<i>Lands Program Manager</i>