

FY2005



Kisatchie National Forest

Monitoring and Evaluation Action Plan & Report

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

September 2006

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I. Introduction to Monitoring and Evaluation Report

The Kisatchie National Forest (KNF) annually monitors and evaluates programs and projects to determine whether they 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&G's) 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 2005, 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 2006, 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

September 28, 2006

Date

II. Summary of M&E Results and Report Findings

A. *Ecosystem Condition, Health, and Sustainability*

- Five landscape level environmental documents were completed during FY2005, with the focus on longleaf and shortleaf/oak-hickory community restoration and RCW management objectives. All projects were designed to restore, maintain or improve the native ecosystem and plant communities of the Forest. There were 232 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 7,689 acres. Prescribed burning was also included in several project level decisions that plan for the majority of longleaf LTAs to be rotationally burned. Very few timber harvesting projects that fall under current Plan direction have been completely implemented. Project decisions for harvest treatment of longleaf and shortleaf/oak-hickory communities continue to backlog, however limitations in budgets and targets limit implementation.
- 432 acres were planted with longleaf pine seedlings in FY2005. There were no areas planted with shortleaf pine seedlings in FY2005. Eleven acres were interplanted with loblolly seedlings to regenerate the area to a mixed hardwood-loblolly pine. Currently direction is to concentrate projects within the RCW HMAs, which will limit non-longleaf restoration in the upcoming years.
- Current baseline data and survey methods have not proven effective for analyzing trends in plant indicator species.
- 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 Forest Plan standards.
- The Forest's prescribed burning program is the most important 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. Additionally, treatment of non-native invasive species is improving habitat for TESC species.
- Early successional (0-10 years) pine habitat has diminished since the base year 1999 (the year the KNF Revised Forest Plan was published); mid-successional pine habitat has stayed approximately the same since 1999; and older successional pine habitats have increased since the base year. Mixed forest types and hardwood forest types: early successional habitat remains approximately the same as the base year; mid-successional habitat remains approximately the same as the base year; and older successional habitats have increased since the base year. All forest types, forestwide: early successional habitat has decreased since the base year; mid-successional habitat remains approximately the same; and late successional habitat has increased since the base year.
- The Kisatchie's RCW total indicates an increasing population trend.
- Although Pearlshell mussel surveys were anticipated in Grant parish, they were not completed in FY2005. A commitment was made to complete the National Forest portion of the surveys in FY2006. The mussel populations appeared to be stable overall from recent surveys, with both increases and decreases in individual stream numbers. Activities from ORVs and urban sprawl continue to threaten the pearlshell's habitat. The Forest Service is working with the US Fish and Wildlife Service (USFWS) and several partners to establish an active task force with a panel of experts and interested parties for the betterment of the pearlshell.

- Through the USDA APHIS program, beavers were removed and beaver dams were destroyed to protect this threatened species from inundation.
- There were very limited activities planned in old-growth patches. There were small acreages of thinning in existing plantations that fall within a patch planned in FY2005.
- The Forest accomplished 122,202 acres; of which 79,256 acres were dormant season and 42,946 acres were growing season burns.
- All areas of the Kisatchie National Forest are in attainment of the National Ambient Air Quality Standards (NAAQS) including those for ozone.
- Wildland fire preparedness funding 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.
- 1972 acres of 1st thinnings specific to high hazard SPB stands were planned in Decision Notices signed in FY2005. The Kisatchie National Forest did not have any reported SPB spots during FY2005.
- Insect and disease population trends on the Kisatchie National Forest were stable and low in FY2005 and are predicted to be low through 2006.
- Field reviews of prescribed burning activities were conducted on the Kisatchie Ranger District and the Catahoula Ranger District on July 6 and August 9, respectively, in 2005. Appropriate S&G's were implemented in all compartments reviewed, and all were rated as either "Full Compliance" or "Exceeds" with two exceptions. Bladed lines as opposed to plowed lines were constructed which reduced the potential for erosion.
- Watershed improvement work is ongoing. Projects on all districts but the Caney included erosion/sediment control for ORV-related damage.
- 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.
- Lake predator/prey populations across the Forest are sufficient for a sustainable recreational fishery. To maintain and enhance the resource, supplemental stocking of 2,275 largemouth bass fingerlings (provided by the USFWS) were stocked in Government, Little Cypress and Fullerton Lakes on the FS; and Engineer, Alligator, North Bonner, South Bonner and Peason Lakes at Ft. Polk.
- Ten 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 2005 MIS Report) suggest that BMPs and SHPZs are adequately protecting the integrity and quality of watersheds within the Forest.
- Presence of forage fish and omnivores were evaluated in Forest lakes. Infestations of *hydrilla verticillata* still threaten spawning habitat and fish population balance in Caney Lakes. A contract has been awarded to repair the control structures and an aquatic environmental evaluation was conducted to deal with this intrusive species.

B. Sustainable Multiple Forest and Range Benefits

- 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. Catahoula and Evangeline deer numbers are based on the LSU deer abundance survey during late fall 2005. Bobwhite population densities are low region-wide.

- In 2005, KNF provided 49,336 acres (559 stands) of riparian/bottomland habitat for waterfowl and wetland wildlife.
- During FY2003 through FY2005, 1.22 miles of local roads were reconstructed or constructed. Of this total, 0.51 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.
- 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 2005. No private land was acquired in 2005. A total of 425 special-use permits are authorized on the Forest.
- Harvest levels in FY2005 were 45,225 CCF (4,522 MCF or 22.6 MMBF). This compares favorably to FY2004 (52,200 CCF OR 26 MMBF). This volume decline is less than 10% and may be considered a slight variability. Prices and markets continue to drive the demand for wood products.
- National Meaningful Measures standards for wilderness management have been completed. The Forest developed a 10 Year Strategy Plan to bring Kisatchie Hills Wilderness into compliance.
- No uneven-aged management projects were proposed in FY2005.
- Commercial thinning (9,661 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 FY2005 continue to move closer to Forest Plan average estimated outputs. Regeneration harvests continue to be far below the anticipated Forest Plan outputs.
- 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".
- No new Applications for Permit to Drill were received in 2005. Existing operations of private minerals were reviewed for compliance with existing state and federal laws.
- The interest in special wood products from the Forest continues to increase slightly. Many items, such as firewood, demand exceeds supply. The number of permits issued year to year is about the same, with slight variation. A few more permits were issued on those districts which had suffered storm damage and were in need of the removal of downed material.
- All compliance reviews and consultations pursuant to Section 106 of the National Historic Preservation Act (NHPA) were completed prior to agency decisions. FY2005 saw an increase in request for surveys.
- In FY2005, 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.
- The Forest continued to evaluate one potentially significant heritage site for eligibility to the National Register of Historic Places, and the number of backlogged sites dropped has increased to 452. Given FY2005 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.
- In October of 2005, *Amendment #5* (Recovery Plan Amendment to Kisatchie National Forest Plan) was signed. It added new direction and modified some of the current direction for managing RCW on the Forest.
- A Challenge Cost Share Agreement between Kisatchie NF and Louisiana State University (LSU), begun in 2001, to ascertain quail abundance and distribution on the Winn and Caney Districts, concluded this year.
- Kisatchie NF conducted a Challenge Cost Share Agreement with Louisiana State University to estimate deer abundance on the Catahoula and Calcasieu Ranger Districts.
- Kisatchie NF contracts with local birding experts to conduct bird surveys.
- Kisatchie NF maintains a strong rapport with the Louisiana Department of Wildlife and Fisheries, National Wild Turkey Federation, and the Louisiana Wildlife Federation.
- 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.
- Soil and water staff cooperated with LSU staff to initiate a study of the water quality of three Louisiana pearlshell mussel streams.

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)

FY2005 Findings: Five landscape level environmental documents were completed during FY2005, with the focus on longleaf and shortleaf/oak-hickory community restoration and RCW management objectives. All projects were designed to restore, maintain or improve the native ecosystem and plant communities of the Forest. There were 232 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 7,689 acres. Prescribed burning was also included in several project level decisions that plan for the majority of longleaf LTAs to be rotationally burned. Very few timber harvesting projects that fall under current Plan direction have been completely implemented. Project decisions for harvest treatment of longleaf and shortleaf/oak-hickory communities continue to backlog, however limitations in budgets and targets limit implementation.

FY2006 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)

FY2005 Findings: 432 acres were planted with longleaf pine seedlings in FY2005. Implementations of project decisions under the Revised Plan are only beginning to be completed. Project decisions are more on track with the Plan's longleaf restoration expectations. 232 acres were planned for longleaf restoration clearcuts, however part of the 7,689 acres planned for RCW thinning will result in a change in forest type to predominately longleaf.

There were no areas planted with shortleaf pine seedlings in FY2005. Currently, direction is to concentrate projects within the RCW HMAs, which will limit shortleaf/hardwood restoration in the upcoming years.

Eleven acres were interplanted with loblolly seedlings to regenerate the area to a mixed hardwood-loblolly pine. Species conversion may occur from natural hardwood regeneration. No harvest cuts were planned in this landscape ecosystem in FY2005. Currently direction is to

concentrate projects within the RCW HMAs, which will limit hardwood-loblolly restoration in the upcoming years.

Review of 2005 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.

FY2006 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 composition changes.

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

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)

FY2005 Findings: A botany MIS survey was initiated in 2002, and surveys were conducted at sites associated with RCW habitat. In 2004 data collection ceased with the vacancy of the forest botanist position. 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 some specific plant indicator species.

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

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Landscape Community	Forest Plan goal (acres)	FY2001 acres	FY2002 acres	FY2003 acres	FY2004 acres	FY2005 acres
Longleaf pine, all stages	121,000	127,415	120,483	122,503	119,245	125,661
Shortleaf pine / oak-hickory, early stages	0	1,633	2,897	626	1,149	1,182
Shortleaf pine / oak-hickory, mid-late stages	16,000	48,050	34,912	45,610	36,396	45,450
Mixed hardwood-loblolly pine, early stages	42,000	14,351	15,519	6,811	9,720	3,053
Mixed hardwood-loblolly pine, mid-late stages	252,000	261,024	247,710	259,284	253,922	267,186
Riparian, small streams	85,000 (no annual change)	85,000	85,000	85,000	85,000	85,000
Riparian, large streams	92,000 (no annual change)	92,000	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	FY2005 acres
Early (0-10 yrs)	>= 20,000	26,882	24,921	13,189	14,339	14,859
Middle (31-50 yrs)	>= 50,000	86,898	55,265	82,780	66,452	78,445
Late (71+ yrs)	>= 75,000	163,120	151,111	179,201	175,024	189,636

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 Forest Plan standards.

FY2006 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 re-examined 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. After consultation with forest planners and the ecosystem conservation team leader, it was decided to delay any MIS survey until the planning changes in the new EMS system are made on Forest, beginning in 2007.

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)

FY2005 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 some specific plant indicator species.

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

Management Indicator (terrestrial)	KNF 2005 Number ¹	KNF 1998-1999 Average ¹	KNF 2002-2004 Average ²	KNF 2003-2005 Average ²	Found in Habitat Types ³
Bachman's Sparrow	0.13	0.12	0.11	0.12	A
Northern Bobwhite	0.05	0.15	0.08	0.10 ^a	A
Prairie Warbler	0.15	0.30	0.17 ^a	0.14 ^a	A,B
Red-Cockaded Woodpecker	0.00	0.10	0.03 ^a	0.02 ^c	A,C,E
Red-Headed Woodpecker	0.08	0.11	0.10	0.07	A
Cooper's Hawk	0.00	0.00	0.00	0.00	C
Eastern Wood-Pewee	0.03	0.37	0.09 ^a	0.08 ^a	C
Pileated Woodpecker	0.32	0.25	0.37 ^b	0.35 ^b	C,E,G
Summer Tanager	0.30	0.67	0.56 ^a	0.52 ^a	C
Hooded Warbler	0.56	0.91	0.77 ^a	0.76 ^a	E
Wood Thrush	0.02	0.06	0.09	0.07	E
White-Eyed Vireo	0.40	0.42	0.50	0.47	D,F

¹ (Cumulative number of individuals observed per District / number of points surveyed per year per District) / 5 Districts.

² (Cumulative number of individuals observed per District / number of points surveyed per year per District) / 5 Districts) / the number of years in the range; ^a possible decreases from baseline years; ^b possible increases from baseline years; ^c this diminution is refuted by actual population counts which indicate an increasing population.

³ 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 2005 Number ¹	KNF 1998-1999 Average ¹	KNF 2002-2004 Average ²	KNF 2003-2005 Average ²	Found in Habitat Types ³
Yellow-Billed Cuckoo	0.54	0.54	0.55	0.49	E,F
Acadian Flycatcher	0.21	0.51	0.49	0.39 ^a	F
Louisiana Waterthrush	0.01	0.03	0.04	0.03	F
Kentucky Warbler	0.20	0.20	0.41 ^b	0.32 ^b	G
Northern Parula	0.05	0.12	0.11	0.07	G
Warbling Vireo	0.00	0.00	0.00	0.00	G
White-Breasted Nuthatch	0.00	0.05	0.06	0.04	G
Worm-Eating Warbler	0.01	0.19	0.09 ^a	0.06 ^a	G

FY2006 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 re-examined 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. After consultation with forest planners and the ecosystem conservation team leader, it was decided to delay any MIS survey until the planning changes in the new EMS system are made on Forest, beginning in 2007.

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)

FY2005 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 important 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. Additionally, treatment of non-native invasive species is improving habitat for TESC species.

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.

FY2006 Recommended Actions: Continue the current prescribed burn program of 100,000 to 130,000 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 Louisiana 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)

FY2005 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, recent compared to 1999:

Pine Forest Types	Successional Classes							
	0-10 years		11-30 years		31-80 years		81+ years	
Year:	2005	1999	2005	1999	2005	1999	2005	1999
Longleaf	5,587	13,614	14,909	10,179	85,470	95,690	19,383	4,162
Slash	44	618	3,995	7,392	33,233	31,273	37	11
Loblolly	2,694	38,880	90,871	81,214	155,189	147,014	26,041	15,382
Shortleaf	968	938	745	927	6,737	8,000	6,250	4,799
Sub-Total	9,293	54,050	110,520	99,712	280,629	281,977	51,711	24,354
Sub-Total %	2.1	11.7	24.4	21.7	62.1	61.3	11.4	5.3
Forestwide %	1.6	9.0	18.5	16.6	47.0	47.0	8.7	4.1

Mixed Forest Types	Successional Classes							
	0-10 years		11-30 years		31-80 years		81+ years	
Year:	2005	1999	2005	1999	2005	1999	2005	1999
Pine-Hwd	482	1,200	4,638	4,593	11,735	15,024	8,849	4,438
Hwd-Pine	42	371	1,470	2,958	18,027	25,071	15,476	8,229
Sub-Total	524	1,571	6,108	7,551	29,762	40,095	24,325	12,667
Sub-Total %	0.9	4.9	10.1	23.7	49.0	125.8	40.1	39.7
Forestwide %	0.1	0.3	1.0	1.3	5.0	6.7	4.1	2.1

Hardwood Forest Types	Successional Classes							
	0-10 years		11-30 years		31-80 years		81+ years	
Year:	2005	1999	2005	1999	2005	1999	2005	1999
Upland	5	522	2,886	2,752	19,204	24,809	12,161	5,480
Bottomland	0	311	1,806	2,664	22,472	29,917	25,059	12,045
Sub-Total	5	833	4,692	5,416	41,676	54,726	37,220	17,525
Sub-Total %	0.0	1.1	5.6	6.9	49.9	69.7	44.5	22.3
Forestwide %	0.0	0.1	0.8	0.9	7.0	9.1	6.2	2.9

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Forestwide	Successional Classes							
	0-10 years		11-30 years		31-80 years		81+ years	
Year:	2005	1999	2005	1999	2005	1999	2005	1999
Total Acres	9,822	56,454	121,320	112,679	352,067	376,798	113,256	54,546
Forestwide %	1.6	9.4	20.3	18.8	59.0	62.7	19.0	9.1

Early successional (0-10 years) pine habitat has diminished since the base year 1999 (the year the KNF Revised Forest Plan was published); mid-successional pine habitat has stayed approximately the same since 1999; and older successional pine habitats have increased since the base year. Mixed forest types and hardwood forest types: early successional habitat remains approximately the same as the base year; mid-successional habitat remains approximately the same as the base year; and older successional habitats have increased since the base year. All forest types, forestwide: early successional habitat has decreased since the base year; mid-successional habitat remains approximately the same; and late successional habitat has increased since the base year.

FY2006 Recommended Actions: Continue the current prescribed burning program of 100,000 to 130,000 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? (M)

FY2005 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 changes in the Catahoula and Winn Ranger Districts' RCW totals are attributable to a change in population accounting from an administrative boundary basis to a geographical boundary basis. The Forest RCW total indicates an increasing population trend.

Although Pearlshell mussel surveys were anticipated in Grant parish, they were not completed in FY2005. A commitment was made to complete the National Forest portion of the surveys in FY2006. The mussel populations appeared to be generally stable overall from recent surveys, with both increases and decreases in individual stream numbers. Activities from ORVs and urban sprawl continue to threaten the pearlshell's habitat. The Forest Service is working with the US Fish and Wildlife Service (USFWS) and several partners to establish an active task force with a panel of experts and interested parties for the betterment of the pearlshell.

The FS and the FWS have collaborated in a joint project to potentially identify the pearlshell host fishes. The pearlshell mussel goes through a parasitic stage in the early part of its life cycle where it lives on the gills of fish. Mussels may be specific as to which species of host fish they select. Currently, other than the brown madtom, other host fishes for the Louisiana pearlshell mussel are unknown.

Through the USDA APHIS program, beavers were removed and beaver dams were destroyed to protect this threatened species from inundation.

Water samples taken on mussel streams indicated good water quality and were within state standards set by LDEQ.

FY2006 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. Close areas to ORVs where violations continually occur. Encourage collaboration from other agencies, partners and private landowners to help protect the pearlshell. Survey and monitor mussel beds on the Catahoula Ranger District to assess the population and identify any potential threats to the pearlshell. Transport resident fishes of pearlshell mussel streams to the FWS Natchitoches fish hatchery for possible host fish identification.

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)

FY2005 Findings: Currently there were very limited activities planned in old-growth patches. There were small acreages of thinning in existing plantations that fall within a patch planned in FY2005. Actions meet Plan standards and guidelines for old-growth patches.

FY2006 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)**

FY2005 Findings: No activities have been completed at this time.

FY2006 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)**

FY2005 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.

FY2006 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)**

FY2005 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. Completed projects did meet at least 90% compliance with Forest Plan direction, project design, and NEPA decision direction.

FY2006 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)

FY2005 Findings: The Forest accomplished 122,202 acres; of which 79,256 acres were dormant season and 42,946 acres were growing season burns. This was the second year in a row that the Growing Season acres exceeded 40,000 acres, which was a first for the Forest. Prescribed burning occurred in the following landtype associations (LTAs):

<u>LTA</u>	<u>Dormant Season Acres</u>	<u>Growing Season Acres</u>
1	42,728	26,547
2	10,688	5,478
3	8,616	3,500
4	4,792	633
5	5,869	3,028
6	6,023	1,575
7	288	0
9	1,085	0

FY2006 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 will have 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)

FY2005 Findings: Research has been ongoing to identify prescribed burn treatments on the longleaf ecosystem (see Objective 8-1).

FY2006 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)

FY2005 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.

FY2006 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. Coordinate with the Zone Air Specialist in Arkansas until a protocol is developed, modeling is accomplished, samplers are acquired, and monitoring is implemented.

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

FY2005 Findings: All areas of the Kisatchie National Forest are in attainment of the National Ambient Air Quality Standards (NAAQS) including those for ozone. Monitoring data for ozone was continuously collected at the LDEQ air monitoring station located on the Catahoula Ranger District at the Bentley site in Grant Parish until the station was destroyed by fire in August 2005. Indications from LDEQ are that the Bentley station will not be re-established in the foreseeable future.

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.

FY2006 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)

FY2005 Findings: Wildland fire preparedness funding 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.

FY2006 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)

FY2005 Findings: Resources identified in NFMAS are being made available in accordance with budget funding level. The Forest lost 3,360 acres to wildland fires in FY2005. The acceptable range in NFMAS was 2,108. However, it was an unusually dry year with severity being utilized. The Forest was within the acceptable range. The Forest had 83 statistical fires for 3,360 acres of FS land and 1,905 acres of private land and no non-statistical fires.

FY2006 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)**

FY2005 Findings: There were an additional 7,689 planned for RCW thinnings that manage for healthy forest ecosystems and reduce disease and insect losses.

1972 acres of 1st thinnings specific to high hazard SPB stands were planned in Decision Notices signed in FY2005. The Kisatchie National Forest did not have any reported SPB spots during FY2005.

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.

There was decline noted in some shortleaf pine on the Winn R.D. in FY05. Forest Health specialists attributed this to a root fungus (i.e. loblolly decline, littleleaf disease.). Forest management practices of on-site species regeneration and thinning will help reduce mortality.

FY2006 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.

Continue to monitor areas for shortleaf decline and bug spots through aerial surveillance flights.

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

FY2005 Findings: Insect and disease population trends on the Kisatchie National Forest were stable and low in FY2005 and are predicted to be low through 2006.

FY2006 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 revegetating disturbed areas, and by restoring degraded areas to a natural condition.

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

FY2005 Findings: Field reviews of prescribed burning activities were conducted on the Kisatchie Ranger District and the Catahoula Ranger District on July 6 and August 9, respectively, in 2005. Appropriate S&G’s were implemented in all compartments reviewed, and all were rated as either “Full Compliance” or “Exceeds” with two exceptions. One compartment each on the two Districts had minor departures for the same two S&G’s. They were fireline diversion berms less than 50 feet from the stream channel, and firelines not well re-vegetated or diversions less frequent than desired. Re-vegetation had failed due to dry weather after burning was completed. In the case of the Calcasieu District, unauthorized ORV use exacerbated the minor departure by breaking down constructed diversions, and destroying vegetation planted in firelines. Both Districts had already planned additional re-vegetation after adequate soil moisture occurred. No sediment was observed to have been delivered to any streams in spite of the minor departures. 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 the reviews. The erosion control guidelines were discussed.

FY2006 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)

FY2005 Findings: Watershed improvement work is ongoing. All targets for watershed improvement work were accomplished in FY2005 with watershed improvement funding. Maintenance on FY2004 projects was done, as needed, to shorten recovery. Projects were located on all districts and all included erosion and sediment control measures. Projects on all districts but the Caney included erosion/sediment control for ORV-related damage.

FY2006 Recommended Actions: Continue to restore and revegetate disturbed areas.

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

FY2005 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.

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.

FY2006 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)

FY2005 Findings: Field reviews were conducted of prescribed burning activities on the Kisatchie and Catahoula Ranger Districts as discussed earlier under Watershed Conditions. Monitoring for implementation of Timber Removal S&G's was conducted on the Catahoula and Calcasieu Ranger Districts on June 28 and July 27, 2005, respectively. All S&G's were implemented in full compliance with the exception of two minor departures on the Calcasieu District. In one case the sale layout boundaries encroached slightly into the Riparian Area Protection Zone, and in the other case diversions at a crossing were not installed. Gradients were very flat in both cases, and the approaches were very short at the stream crossing, so no sediment was observed to have been delivered in either case. The sale was still open during the review on the Catahoula District, so all erosion control measures hadn't been fully implemented, yet. However, the measures were installed after the sale was closed as reported by the district TMA. Good discussions concerning S&G implementation were had with personnel of both districts.

FY2006 Recommended Actions: Continue to monitor prescribed burning and timber management activities for implementation of Standards and Guidelines.

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

FY2005 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 Forest'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 nephelometric turbidity units (NTU), which is the criterion for natural and scenic streams. Additional parameters being monitored are metals (arsenic, chromium, cadmium, copper, lead, mercury, and nickel), nutrients (carbon, phosphates, potassium, nitrogen, nitrites, and nitrates) and sulfates. The monitoring data indicate minimal or trace levels of some of these substances but no contamination that would affect fish or wildlife.

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.

FY2006 Recommended Actions: Continue to coordinate with LDEQ on monitoring the water quality of streams on the KNF. 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?

(I)

FY2005 Findings: Predator/prey populations across the Forest are sufficient for a sustainable recreational fishery. To maintain and enhance the resource, supplemental stocking of 2,275 largemouth bass fingerlings (provided by the USFWS) were stocked in Government, Little Cypress and Fullerton Lakes on the Vernon Unit of the Calcasieu Ranger District; and Engineer, Alligator, North Bonner, South Bonner and Peason Lakes at Ft. Polk.

Ten 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 2005 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.

FY2006 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 non-natives and / or generalist-omnivore natives affecting lake biomass and balance? Is lake habitat sufficient? **(E)**

FY2005 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. Infestations of *hydrilla verticillata* still threaten spawning habitat and fish population balance in Caney Lakes. A contract has been awarded to repair the control structures and an aquatic environmental evaluation was conducted to deal with this intrusive species.

Channel catfish fingerlings (16,919) were stocked in Corney Lake (FS) and Twin Lakes (Camp Beauregard National Guard) to improve the sport fishery and fill a habitat niche that would otherwise be filled by undesirable species (ex. bullheads).

To decrease the need for continual stocking in a put-and-take fishery, 183 catfish spawning cavities were designed, constructed and placed in FS lakes and ponds.

Water quality on FS 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 (eleven ponds and lakes totaling 92 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.

FY2006 Recommended Actions: Stock catfish fingerlings when available and necessary. Monitor the success and utilization of the spawning cavities placed in FS lakes. Continue restoration and enhancement projects.

B. Sustainable Multiple Forest and Range Benefits

4. 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)

FY2005 Findings: Planned and actual acreage by successional habitat are shown below. The Forest has a shortage of early successional habitat; is within the Plan guidelines for mid- and late successional habitats.

Successional Habitat (all Forest Types) ⁴	Forest Plan goal (acres)	FY2001 acres	FY2002 acres	FY2003 acres	FY2004 acres	FY2005 acres
Early (0-10 yrs)	>= 20,000	26,882	24,921	13,189	14,339	14,859
Middle (31-50 yrs)	>= 50,000	86,898	55,265	82,780	66,452	78,455
Late (71+ yrs)	>= 75,000	163,120	151,111	179,201	175,024	189,636

FY2006 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? **(M)**

FY2005 Findings:

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

White-Tailed Deer (acres/animal)	2000	2001	2002	2003	2004	2005
Catahoula District	60	90	90	110	100	140
Evangeline District	75	90	90	120	100	200
Kisatchie District	75	90	90	110	100	110

⁴ The monitoring items are the same as for T#28; however, the evaluation here applies to "... quality habitats for game and fish species." In T#28, the evaluation applies to "...quality habitats for management indicators."

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	Winn District	55	75	75	90	85	100
	Vernon District	75	75	75	75	75	75
	Caney District	40	50	50	50	50	50
Wild Turkey (acres/animal)		2000	2001	2002	2003	2004	2005
	Catahoula District	100	200	200	200	200	200
	Evangeline District	200	300	300	300	300	300
	Kisatchie District	75	100	100	100	100	100
	Winn District	75	150	150	150	150	150
	Vernon District	75	250	250	250	250	250
	Caney District	200	300	300	300	300	300
Fox Squirrel (acres/animal in upland hardwoods)		2000	2001	2002	2003	2004	2005
	Catahoula District	5	5	5	5	5	5
	Evangeline District	5	5	5	5	5	5
	Kisatchie District	5	5	5	5	5	5
	Winn District	5	5	5	5	5	5
	Vernon District	5	5	5	5	5	5
	Caney District	5	5	5	5	5	5
Gray Squirrel (acres/animal in bottomland hardwood)		2000	2001	2002	2003	2004	2005
	Catahoula District	3	3	3	3	3	3
	Evangeline District	3	3	3	3	3	3
	Kisatchie District	3	3	3	3	3	3
	Winn District	3	3	3	3	3	3
	Vernon District	3	3	3	3	3	3
	Caney District	3	3	3	3	3	3
Northern Bobwhite (acres/covey)		2000	2001	2002	2003	2004	2005
	Catahoula District	1,300	1,800	1,800	1,800	1,800	1,800
	Evangeline District	1,300	1,800	1,800	1,800	1,800	1,800
	Kisatchie District	1,300	1,800	1,800	1,800	1,800	1,800
	Winn District	1,300	1,800	1,800	1,800	1,800	1,800

Vernon District	1,200	1,200	1,800	1,800	1,200	1,800
Caney District	1,300	1,800	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. Catahoula and Evangeline deer numbers are based on the LSU deer abundance survey during late fall 2005. Bobwhite population densities are low region-wide.

FY2006 Recommended Actions: Attempt to implement hunting seasons comparable to those of Louisiana Department of Wildlife and Fisheries' Wildlife Management Areas with similar habitat in central and northern Louisiana. Attempt to implement management guidelines concerning the use of free-ranging hunting dogs that are comparable to those of other Louisiana public hunting lands.

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)

FY2005 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.

FY2006 Recommended Actions: To be determined by KNF Management Team, if any.

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

FY2005 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. In 2005, KNF provided 49,336 acres (559 stands) of riparian/bottomland habitat for waterfowl and wetland wildlife.

FY2006 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)

FY2005 Findings: Consultations with district staff reveal recent management actions are in compliance the sios.

FY2006 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.
- Semi-primitive non-motorized: 57,269 acres.
- Semi-primitive 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)

FY2005 Findings: Comparisons were not made due to continued 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. Some changes may occur in the next year due to new travel management designation direction.

FY2006 Recommended Actions: Continue to attempt to evaluate the feasibility of developing an automated GIS system that would periodically determine the ROS class eligibility of forest lands as funding and personnel constraints permit.

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)

FY2005 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 was selected to beta test a Regional comment card. The test period began October 1, 2003. The Beta Test was concluded. It is not known if the Region will go forward with this program at this time. The Forest completed the National Visitor Use Monitoring Survey project. Customer service response has continued to improve 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.

FY2006 Recommended Actions: Continue the annual update of INFRA data. Continue management of the recreation program using the Meaningful Measures system and the Recreation Realignment Process. Continue to improve customer service through the Customer Service Representative.

5. 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)

FY2005 Findings: During FY2003 through FY2005, 1.22 miles of local roads were reconstructed or constructed. Of this total, 0.51 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	FY2002		FY2003		FY2004		FY2005		Totals
	Local	Collector	Local	Collector	Local	Collector	Local	Collector	
Road Reconstruction/Construction (miles)	0.0	0.0	0.0	0.0	0.22	0.0	1.00	0.00	1.22
Roads Monitored (miles)	0.0	0.0	0.0	0.0	0.22	0.0	0.29	0.00	0.51
Roads requiring increased level/frequency of maintenance or not serviceable by use (miles)	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00

FY2006 Recommended Actions: Continue use of appropriate design standards for road reconstruction and construction. Continue monitoring road condition and use.

6. 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)

FY2005 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 2005. No private land was acquired in 2005.

We evaluated over 30 applications for a variety of special uses including roads, utilities, recreation events and group use. 25 authorizations were granted or renewed in 2005 after private occupancy alternatives were examined. 10 permits were closed either because the uses were no longer needed or the term of use expired. A total of 425 permits are authorized on the Forest.

FY2006 Recommended Actions: The Forest is participating in a significant effort with the region to digitize our title records. 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)

FY2005 Findings: 310 miles of landline was maintained to standard. [Note: A significant budget reduction in NFLM is anticipated for FY2006. This would result in only 180 miles of landline being planned for maintenance in 2006.]

FY2006 Recommended Actions: Increase NFLM funding levels to accommodate true landline maintenance needs.

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)

FY2005 Findings: Harvest levels in FY2005 were 45,225 CCF (4,522 MCF or 22.6 MMBF). This compares favorably to FY2004 (52,200 CCF OR 26 MMBF). This volume decline is less than 10% and may be considered a slight variability. Prices and markets continue to drive the demand for wood products. The future demand is uncertain, as global demand and supply play themselves out.

In FY2005, over 70,000 CCF (7,000 MCF OR 35 MMBF) was actually sold. This is an increase over 2004, and is expected to continue to climb steadily until we begin to achieve the offer/sold levels outlined in the Forest Plan. This will likely result in a positive although slight impact to the parish and local jobs/income.

FY2006 Recommended Actions: Continue to monitor the situation.

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)

FY2005 Findings: The Forest received no Economic Recovery (ER) grant proposals as funding has been cut.

FY2006 Recommended Actions: None.

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

FY2005 Findings: No, the program dollars have been cut.

FY2006 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. Pursue future program dollars.

7. 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)

FY2005 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 Scenic River. The triploid carp were monitored by the monitoring device and the Fisheries biologist. Fifteen miles of the Saline Bayou was maintained by sign placement and paint. The realignment process continues to assist in this area.

Also, in cooperation with the Louisiana Natural Heritage Program, the Forest added Fleming Glade Natural Area (129 acres) and the Brushy Creek/Magnolia Ridge Natural Area (432 acres) to the Louisiana Natural Areas Registry.

FY2006 Recommended Actions: The Kisatchie National Forest should continue to assist the Southern Research Station in ongoing studies. The Forest should help initiate additional studies when requested and as funding allows.

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)

FY2005 Findings: National Meaningful Measures standards for wilderness management have been completed. The Forest developed a 10 Year Strategy Plan to bring Kisatchie Hills Wilderness into compliance.

FY2006 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. Work towards bringing the Kisatchie Hills Wilderness Area into compliance with standards by implementing the strategy that was developed for the Forest.

8. 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)

FY2005 Findings: In FY2005, over 70,000 CCF (7,000 MCF OR 35 MMBF) was actually sold. This is an increase over 2004, and is expected to continue to climb steadily until we begin to achieve the offer/sold levels outlined in the Forest Plan. The Forest has project plans and EA's well in excess of what we can reasonably be expected to offer in the way of sold timber sales.

FY2006 Recommended Actions: Continue to systematically increase the sale quantity each year so that the timber sale volume for the first decade of the Plan more closely follows expected outputs.

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)

FY2005 Findings: Decisions signed in FY2005 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 uneven-aged management projects were proposed in FY2005.
- Even-age management using clearcut with reserves to restore longleaf on 232 Acres
- Site preparation treatments using a range of methods, including fire, mechanical and herbicide
- Commercial thinning (9,661 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 FY2005 continue to move closer to Forest Plan average estimated outputs. Regeneration harvests continue to be far below the anticipated Forest Plan outputs.

FY2006 Recommended Actions: Continue to complete field exams and prescriptions to meet Forest Plan goals.

9. 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)

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

FY2005 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 FY2005. The two active allotments are meeting the current demand for allotment based forage resources.

FY2006 Recommended Actions: Given the continued non-use of the majority of KNF allotments, carefully scrutinize future expenditure as to their cost-effectiveness.

10. 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)

FY2005 Findings: Parcels were made available for lease according to the latest U.S. ownership (based on court judgments) and management restrictions. The Forest Service has offered land for lease through the BLM Federal Oil and Gas Leasing Program the last two years after a long hiatus.

No new Applications for Permit to Drill were received in 2005. Existing 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.

FY2006 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)

FY2005 Findings: The interest in special wood products from the Forest continues to increase slightly. It should be noted that many items, such as firewood, demand exceeds supply. The number of permits issued year to year is about the same, with slight variation. A few more permits were issued on those districts which had suffered storm damage and were in need of the removal of downed material.

FY2006 Recommended Actions: None.

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

FY2005 Findings: Low demand for special forest products continued. The majority of permit requests are for personal plant collection which is handled with a FS-2400-8 Forest Products Free Use Permit. There were no known negative impacts on forest health or resources noted.

FY2006 Recommended Actions: None.

11. 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)

FY2005 Findings: All compliance reviews and consultations pursuant to Section 106 of the National Historic Preservation Act (NHPA) were completed prior to agency decisions. FY2005 saw an increase in request for surveys. In FY2005, a total of 26,420.7 acres were inventoried. All these acres were in support of timber, recreation or special use. One hundred and ninety-nine new sites were added to the KNF heritage database. In FY2005, 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.

FY2006 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. Complete 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)

FY2005 Findings: Twenty-six 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. There are still insufficient funds for Law Enforcement Officers and Heritage Specialists to physically monitor all sites at risk.

FY2006 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)

FY2005 Findings: In FY2005 no unacceptable damage occurred due to agency projects. COR's and HRT's are doing an effective job of monitoring projects.

FY2006 Recommended Actions: Current strategies for site and buffer zone delineation appear effective and should be continued.

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)

FY2005 Findings: The Forest continued to evaluate one potentially significant heritage site for eligibility to the National Register of Historic Places, and the number of backlogged sites dropped has increased to 452. Given FY2005 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.

FY2006 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)

FY2005 Findings: The Forest Service was a contributor to Louisiana Archaeology Week for the 16th 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. Through a grant from the Rapides Foundation, a walking trail was constructed at the Old LSU site. This site is listed on the National Register of Historic Places.

FY2006 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. Work with partners to interpret the Old LSU site. Continue to strengthen the relationship between Recreation and Heritage Resources to provide interpretive opportunities between the two resources, such as the continued efforts on the Old LSU Site trail and interpretive area.

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

FY2005 Findings: Public responses from public presentations indicate a general increase in awareness and sensitivity about the nonrenewable cultural resource base. The walking trail has numerous visitors each day.

FY2006 Recommended Actions: Continue to offer PIT projects, classroom and civic organization presentations, and partner with the LA SHPO in Louisiana Archeology Week. Interpretation of the Old LSU site will enhance public awareness.

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)

FY2005 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. However, the Forest has no priority funding for informational materials. Presentations to Rotary, Lions, and other civic organizations were done.

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

FY2006 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, Louisiana Black Bear Festival, and the Louisiana State Fair. Provide a printing budget for educational and informational materials. Increase budget for videos, DVD's, and other educational materials.

Continue to expand types of audiences reached with educational presentations, 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)

FY2005 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. Unfortunately, funding for this work was cut this year. For the first time in 15 years the Forest did not participate in the New Orleans Earthfest. Some individuals recommended that the Forest end participation in the State Fair. PAO believes that this is a huge mistake and is not with keeping with national forest policy.

FY2006 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. Commitments to the New Orleans Earthfest and the Shreveport State Fair should be renewed.

C. Organizational Effectiveness

12. ECONOMICS

FY2005 Findings: (See Appendix A)

FY2006 Recommended Actions: Continue providing funds as needed to meet Plan objectives.

13. 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)

FY2005 Findings: Yes, this report documents monitoring results for FY2005 activities and shows recommendations for FY2006. This report will also be used along with past reports to compile the 5-Year Review or Comprehensive Evaluation Report (CER) for 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>).

FY2006 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)

FY2005 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.

In October of 2005, *Amendment #5 (Recovery Plan Amendment to Kisatchie National Forest Plan)* was signed. It added new direction and modified some of the current direction for managing RCW on the Forest.

FY2006 Recommended Actions: Amend the Plan for any new allocations needed for the proposed Breezy Hill Trail Project planned for the Catahoula Ranger District. 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 or Comprehensive Evaluation Report (CER). Begin transitioning from the 1982 Planning Rule and review changes needed for compliance with the 2005 Planning Rule as new FSH direction becomes available.

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)

FY2005 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.

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, concluded this year. Kisatchie NF conducted a Challenge Cost Share Agreement with Louisiana State University to estimate deer abundance on the Catahoula and Calcasieu Ranger Districts. Kisatchie NF maintained a Challenge Cost Share Agreement with the National Wild Turkey Federation to enhance wildlife habitat. Kisatchie NF contracts with local birding experts to

conduct bird surveys. Kisatchie NF participated in the Louisiana Wildlife & Fisheries Commission's Deer Dog Task Force, Louisiana Quail and Grassland Birds Task Force, and the Southeastern Association of Fish and Wildlife Agencies' Deer Management Symposium. Kisatchie NF maintains a strong rapport with the Louisiana Department of Wildlife and Fisheries, National Wild Turkey Federation, and the Louisiana Wildlife Federation.

FY2006 Recommended Actions: All the above studies are ongoing. 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)

FY2005 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
- Reducing soil loss due to burning on erosive soils particularly the Kisatchie severely eroded soil type
- Effectiveness and suitability of poultry litter amendments in restoring disturbed and degraded sites.

FY2006 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.

Continue to participate in research endeavors targeting quail and deer.

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)

FY2005 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.

FY2006 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? (U)

FY2005 Findings: The Kisatchie NF and the Louisiana Department of Wildlife and Fisheries cooperate to better manage demand species such as deer. The Kisatchie NF, Louisiana Department of Wildlife and Fisheries, and the USDI Fish and Wildlife Service coordinate Red-Cockaded Woodpecker, Louisiana Pinesnake, and the Louisiana Pearlshell Mussel management activities. 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 Catahoula and Calcasieu Ranger 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.

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.

FY2006 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 currently has a Draft Programmatic Agreement with the SHPO and Tribes concerning Heritage Resource Management. The Forest should complete this PA in FY2006.

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

The Memorandum of Understanding between the Kisatchie NF and the Louisiana Department of Wildlife and Fisheries is over 20 years old; therefore, it needs updating. Continue accommodating 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 (FY2005). The effectiveness of much of the Plan's direction will be more thoroughly evaluated during the *Comprehensive Evaluation Report (CER)*, which will begin in FY2006. Based on monitoring results, the following observations were made:

Biodiversity

- Implementations of project decisions under the Revised Plan are only beginning to be completed. Project decisions are more on track with the Plan's longleaf restoration expectations. 232 acres were planned for longleaf restoration clearcuts, however part of the 7,689 acres planned for RCW thinning will result in a change in forest type to predominately longleaf.
- Current decisions are concentrating projects within the RCW HMAs, which will limit shortleaf/hardwood and hardwood-loblolly restoration in the upcoming years. Some species conversion may occur from natural hardwood regeneration.
- 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.
- Thinning prescriptions within RCW HMAs should provide the needed longleaf stand composition.
- Kisatchie NF has a surplus of shortleaf pine/oak-hickory (mid-late stages) and a deficiency of mixed hardwood-loblolly pine (early stages).
- Habitat 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.
- Early successional (0-10 years) pine habitat has diminished since the base year 1999; mid-successional pine habitat has stayed approximately the same since 1999; and older successional pine habitats have increased since the base year. For mixed forest types and hardwood forest types, early successional habitat remains approximately the same as the base year; mid-successional habitat remains approximately the same as the base year; and older successional habitats have increased since the base year. Considering all forest types across the Forest, early successional habitat has decreased since the base year; mid-successional habitat remains approximately the same; and late successional habitat has increased since the base year.
- The Forest RCW total indicates an increasing population trend.
- Although Pearlshell mussel surveys were anticipated in Grant parish, they were not completed in FY2005. A commitment was made to complete the National Forest portion of the surveys in FY2006. The mussel populations appeared to be generally stable overall from recent surveys, with both increases and decreases in individual stream numbers. Activities from ORVs and urban sprawl continue to threaten the pearlshell's habitat.
- There have been very limited activities planned in old-growth patches.
- No significant changes in acres or site quality of habitat for sensitive and conservation plant species have been found.

Forest Health

- All areas of the Kisatchie National Forest are in attainment of the National Ambient Air Quality Standards (NAAQS) including those for ozone. Monitoring data for ozone was continuously collected at the LDEQ air monitoring station located on the Catahoula Ranger District at the Bentley site in Grant Parish until the station was destroyed by fire in August 2005.
- The LDEQ has been monitoring particulate matter with a Federal Reference Method PM 2.5 monitor located in Alexandria (Rapides Parish) since 1999. The monitoring data indicates that the NAAQS for particulates is being met.
- Wildland fire preparedness funding was still below the most efficient level. As a result, wildland fire losses were not being minimized due to the funding shortfall.

Watershed Conditions

- 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. Also, results 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.
- 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 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 nephelometric turbidity units (NTU), which is the criterion for natural and scenic streams. Additional parameters being monitored are metals (arsenic, chromium, cadmium, copper, lead, mercury, and nickel), nutrients (carbon, phosphates, potassium, nitrogen, nitrites, and nitrates) and sulfates. The monitoring data indicate minimal or trace levels of some of these substances but no contamination that would affect fish or wildlife.
- 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.
- Ten 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 2005 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.

Outdoor Recreation Opportunities

- 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. Catahoula and Evangeline deer numbers are based on the LSU deer abundance survey during late fall 2005. Bobwhite population densities are low region-wide.

- Consultations with district staff reveal recent management actions are in compliance the SIOS.
- Customer service response has continued to improve 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.

Infrastructure

- All roads were found to be serviceable by the intended user and required no significant increase in the level or frequency of maintenance.

Human Influences

- In FY2005, over 70,000 CCF (7,000 MCF OR 35 MMBF) of timber was sold. This is an increase over 2004, and is expected to continue to climb steadily until we begin to achieve the offer/sold levels outlined in the Forest Plan. This will likely result in a minor positive impact to the parish and local jobs/income.

Roadless Area/Wilderness/Wild & Scenic Rivers

- Work is needed to bring the Kisatchie Hills Wilderness Area into compliance with standards by implementing the strategy that was developed for the Forest.

Timber

- Prescribed activities in FY2005 continue to move closer to Forest Plan average estimated outputs. Regeneration harvests continue to be far below the anticipated Forest Plan outputs.

Forage

- Forestwide grazing resources are declining in acreage available due to the lack of management and lack of use. Two active allotments are meeting the current demand for forage resources. Given the continued non-use of the majority of KNF allotments, carefully scrutinize future expenditure as to their cost-effectiveness.

Heritage Resources

- Twenty-six 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 site and buffer zone delineation appear effective in protecting heritage resources and should be continued.

V. Summary of M&E Recommendations Planned for FY2006

This section of the Report provides information on all monitoring items that need action during the current fiscal year (FY2006). In addition to the specific recommended actions listed below, the general recommendation for FY2006 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:

Biodiversity

- ✓ Perform post-implementation field checks on thinnings to ensure sufficient longleaf emphasis and evaluate species composition changes.
- ✓ 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.
- ✓ Modify the management indicator species list to include more commonly occurring native plants that occupy a wider range of forest habitat types. Additionally, re-examine the survey protocol and revise it as needed.
- ✓ 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.
- ✓ Identify all Louisiana pearlshell mussel beds on the Forest, and develop means of monitoring the number of mussels on a recurring basis.
- ✓ Maintain the current prescribed burning program of 125,000 to 150,000 acres per year.
- ✓ Prescribe burn the RCW foraging habitat as much as feasible. Engage in RCW translocations to bolster populations, if feasible.
- ✓ 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. Close areas to ORVs where violations continually occur.
- ✓ Survey and monitor mussel beds on the Catahoula Ranger District to assess the population and identify any potential threats to the pearlshell. Transport resident fishes of pearlshell mussel streams to the FWS Natchitoches fish hatchery for possible host fish identification.
- ✓ Maximize the implementation of growing season burns on longleaf pine plant community landscapes.

Forest Health

- ✓ 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. Coordinate with the Zone Air Specialist in Arkansas until a protocol is developed, modeling is accomplished, samplers are acquired, and monitoring is implemented.

- ✓ Monitor areas for shortleaf decline. 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.

Watershed Conditions

- ✓ Coordinate with and assist the Southern Research Station with the Long Term Soil Productivity Study.
- ✓ Coordinate with LDEQ on monitoring the water quality of streams on the KNF. Continue required monitoring of water quality of KNF swim beaches.
- ✓ Establish fishery size and creel limits on the Forest to ensure recruitment and sustainability of the resource.
- ✓ Stock catfish fingerlings when available and necessary.

Outdoor Recreation Opportunities

- ✓ Implement hunting seasons comparable to those of Louisiana Department of Wildlife and Fisheries' Wildlife Management Areas with similar habitat in central and northern Louisiana. Implement management guidelines concerning the use of free-ranging hunting dogs that are comparable to those of other Louisiana public hunting lands.
- ✓ Evaluate the feasibility of developing an automated GIS system that would periodically determine the ROS class eligibility of forest lands as funding and personnel constraints permit.

Human Influences

- ✓ Increase NFLM funding levels to accommodate true landline maintenance needs.

Roadless Area/Wilderness/Wild & Scenic River

- ✓ Assist the Southern Research Station in ongoing studies. The Forest should help initiate additional studies when requested and as funding allows.
- ✓ Work towards bringing the Kisatchie Hills Wilderness Area into compliance with standards by implementing the strategy that was developed for the Forest.

Heritage Resources

- ✓ Work with interested tribes to establish required government-to-government relations and partnerships. Complete Programmatic Agreement with the SHPO and Tribes.
- ✓ Request additional funds needed to conduct cultural site evaluations for all sites in backlogged status.
- ✓ Work with partners to interpret the Old LSU site. Strengthen the relationship between Recreation and Heritage Resources to provide interpretive opportunities between the two resources, such as the continued efforts on the Old LSU Site trail and interpretive area.
- ✓ Expand types of audiences reached with educational presentations, such as schools from the larger cities and the Louisiana School for the Deaf.

Evaluation of New Information

- ✓ Amend the Plan for any new allocations needed for the proposed Breezy Hill Trail Project planned for the Catahoula Ranger District.
- ✓ Collect monitoring data from the first half of the planning period and compile it for the 5-Year Review or Comprehensive Evaluation Report (CER). Begin transitioning from the 1982 Planning Rule and review changes needed for compliance with the 2005 Planning Rule as new FSH direction becomes available.

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- ✓ Complete the Draft Programmatic Agreement with the SHPO and Tribes concerning Heritage Resource Management by FY2006.
- ✓ Evaluate the need to update the Memorandum of Understanding between the Kisatchie NF and the Louisiana Department of Wildlife and Fisheries. It is over 20 years old.

VI. Status of FY2004 Monitoring & Evaluation Report Recommendations

FY2004 M&E Recommendation: 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.

Status in FY2005: *Done.*

FY2004 M&E Recommendation: 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.

Status in FY2005: *Done.*

FY2004 M&E Recommendation: 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.

Status in FY2005: *The recommendations stated above are still valid concerns, and the actions to correct the problems have not been instituted as of 2006. After a meeting with the Eco Team Leader, and the Forest Planner – along with advice solicited from region (Tim Mersmann) – it was decided to wait until the implementation of the new EMS, which should be in place on the KNF in 2007. EMS will replace the old MIS system with a new method of monitoring forest health, and is the logical time to revamp the system.*

FY2004 M&E Recommendation: 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.

Status in FY2005: *The recommendations stated above are still valid concerns, and the actions to correct the problems have not been instituted as of 2006. After a meeting with the Eco Team Leader, and the Forest Planner – along with advice solicited from region (Tim Mersmann) – it was decided to wait until the implementation of the new EMS, which should be in place on the KNF in 2007. EMS will replace the old MIS system with a new method of monitoring forest health, and is the logical time to revamp the system.*

FY2004 M&E Recommendation: 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.

Status in FY2005: *In FY2005, a total of 122,202 acres of National Forest was prescribed burned. Of this total 42,946 acres were burned in the growing season. This continued the pattern that began in 2000 of increasing amounts of growing season burning on the Forest.*

RCW management continued to be emphasized on the Forest in FY2005. Some changes in RCW management were prompted by the Second Revision of the Recovery plan for the Red-Cockaded Woodpecker, and a major Forest effort was directed at identifying changes and amending the Forest Plan (Amendment #5) to incorporate the revised direction (completed in October, 2005).

Although Pearlshell mussel surveys were anticipated in Grant parish, they were not completed in FY2005. A commitment was made to complete the National Forest portion of the surveys in FY2006. There was substantial discussion on the intensity of future surveys and the desire for consistent enumeration of mussels, which carried into early FY2006.

FY2004 M&E Recommendation: 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.

Status in FY2005: *Done.*

FY2004 M&E Recommendation: 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.

Status in FY2005: *Eleven beaver dams were removed and fifteen beavers were trapped in FY2005. Due to hurricanes and tropical storms Katrina and Rita, no population surveys were conducted in FY2005 on the Catahoula RD, but surveys are planned for FY2006.*

FY2004 M&E Recommendation: Continue to review all project decisions with management practices within old growth patches. Conduct sample field reviews after implementation.

Status in FY2005: *None.*

FY2004 M&E Recommendation: During field examination process, review existing designated old growth patches and use old growth attribute scorecard to rank quality.

Status in FY2005: *None.*

FY2004 M&E Recommendation: 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.

Status in FY2005: *Done, on less than 10%.*

FY2004 M&E Recommendation: 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.

Status in FY2005: *All was accomplished.*

FY2004 M&E Recommendation: 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.

Status in FY2005: *Burn plans were reviewed for consideration of smoke management and sensitive areas during reviews of S/W/A prescribed burn S&G monitoring. There was no budget for portable samplers for smoke monitoring, so no real time smoke monitoring occurred.*

FY2004 M&E Recommendation: Continue to coordinate with LDEQ Air Quality Dept. on monitoring.

Status in FY2005: *Done.*

FY2004 M&E Recommendation: Continue to request wildland fire preparedness funding at the 100% efficiently level and staff accordingly.

Status in FY2005: *Although request was made, we still were not funded at 100% MEL; however, we were fully staffed at the funded level.*

FY2004 M&E Recommendation: 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.

Status in FY2005: *Done.*

FY2004 M&E Recommendation: Continue to monitor for possible SPB attacks through aerial observations. Implement field checks for increased mortality from Annosus root.

Status in FY2005: *Done.*

FY2004 M&E Recommendation: Continue to restore and revegetate disturbed areas.

Status in FY2005: *Done in cooperation with Districts' watershed restoration projects.*

FY2004 M&E Recommendation: Continue to coordinate with and assist the Southern Research Station with the Long Term Soil Productivity Study.

Status in FY2005: *Done.*

FY2004 M&E Recommendation: Continue to monitor silvicultural management activities for implementation of Best Management Practices.

Status in FY2005: *Done.*

FY2004 M&E Recommendation: 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 FY2005: *Done. Monitoring of the streams draining watersheds where prescribed burning was conducted is completed. Analysis of data and determining results is being coordinated by Forest Fisheries Biologist.*

FY2004 M&E Recommendation: 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.

Status in FY2005: *Electrofishing surveys were conducted to determine population dynamic trends that will aid in establishing size and creel limits.*

FY2004 M&E Recommendation: 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.

Status in FY2005: *Channel catfish fingerlings (13,597) were stocked in Corney Lake. Catfish spawning cavities (133) were placed in Valentine, Blue Hole, Fullerton, Anderson, Bombing Range and Powerline FS lakes and ponds.*

FY2004 M&E Recommendation: 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 FY2005: *KNF continued to work closely with LDWF in the management of KNF hunting seasons. The KNF met with the Department of Wildlife and Fisheries and made presentations to the Wildlife and Fisheries Commission regarding: (1) possible areas to restrict dog-deer hunting on the Forest, and (2) possible future restrictions on dog training on the Forest. The Forest also issued press releases outlining these possible options; however no action was taken in FY2005. The Forest did work with eh LDWF to restrict dog-deer hunting on a small portion of the Evangeline Unit of the Calcasieu Ranger District. The Forest also began participation in a statewide dog-deer task force organized by the Louisiana Wildlife and Fisheries Commission.*

FY2004 M&E Recommendation: Continue to review proposed projects for SIO compliance.

Status in FY2005: *Done on projects submitted to SO for review.*

FY2004 M&E Recommendation: Evaluate the feasibility of developing an automated GIS system that would periodically determine the ROS class eligibility of forest lands.

Status in FY2005: *Suspended action on this item until the funding and personnel are available.*

FY2004 M&E Recommendation: 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.

Status in FY2005: *Completed some of the updates, others will be entered in FY2006 due to delays from Hurricanes Katrina and Rita.*

FY2004 M&E Recommendation: 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.

Status in FY2005: *Only the Collins Camp exchange remains viable. Work is progressing on it.*

FY2004 M&E Recommendation: 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.

Status in FY2005: *Congress has in effect cut this program and there are no funds available, sadly. Yes we should continue to emphasize new communities and capacity building projects that result in increased local job opportunities and local income. And we should stress environmental concerns for the future; however this will now have to be accomplished with out the aide of Rural Development grants.*

FY2004 M&E Recommendation: 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.

Status in FY2005: *The Forest continued to coordinate with the LDWF regarding carp movement in Saline Lake. So far, car continued to stay in the Lake. Sign placement was completed.*

FY2004 M&E Recommendation: Strive to manage Kisatchie Hills Wilderness in compliance with the new national Wilderness Meaningful Measures Standards. Continue to promote the area and educate users.

Status in FY2005: *Completed FY2005 INFRA WILD database entry. We will continue to strive for compliance.*

FY2004 M&E Recommendation: Given the continued non-use of the majority of KNF allotments, carefully scrutinize future expenditure as to their cost-effectiveness.

Status in FY2005: *The Forest continued to look at the cost effectiveness of the range allotments on the Forest. In addition, the allocation of dollars for range management continued to decline. Only two allotments were active in FY2005, however, range evaluation and reporting requirements (and data entries) continued to be needed on all allotments, hence the need to continue to look at the future of grazing on the Forest.*

FY2004 M&E Recommendation: 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.

Status in FY2005: *Done.*

FY2004 M&E Recommendation: 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.

Status in FY2005: *The KNF has begun to draft a Programmatic Agreement in consultation with interested tribes.*

FY2004 M&E Recommendation: 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.

Status in FY2005: *Funding restraints still deter our monitoring efforts. Some monitoring has occurred, but we have yet to meet the required minimal amount of monitoring.*

FY2004 M&E Recommendation: Current strategies for site and buffer zone delineation appear effective and should be continued.

Status in FY2005: *Funding restraints still deter our monitoring efforts. Some monitoring has occurred, but we have yet to meet the required minimal amount of monitoring.*

FY2004 M&E Recommendation: Continue to request additional funds needed to conduct cultural site evaluations for all sites in backlogged status.

Status in FY2005: *In 2005 we began evaluation on one site.*

FY2004 M&E Recommendation: 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.

Status in FY2005: *Done.*

FY2004 M&E Recommendation: Continue to offer PIT projects, classroom and civic organization presentations, and partner with the LA SHPO in Louisiana Archeology Week.

Status in FY2005: *We offered two PIT projects, gave numerous presentations and partnered with the LA SHPO in Louisiana Archaeology Week.*

FY2004 M&E Recommendation: 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. Include groups such as schools from the larger cities and the Louisiana School for the Deaf.

Status in FY2005: *Done.*

FY2004 M&E Recommendation: 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.

Status in FY2005: *Ongoing.*

FY2004 M&E Recommendation: 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.

Status in FY2005: *The RCW Recovery Plan Amendment to the Kisatchie NF Plan was completed in October 2005 (Plan Amendment #5).*

The Final 2004 Planning Rule went into effect in January of 2005. The new Rule requires that a comprehensive evaluation be done at least once every five years (36 CFR 219.6(a) (1)). This comprehensive evaluation report (CER) will take the place of the 5-Year Review required under the 1982 Planning regulations. The Forest will begin its CER in F2006, with estimated completion in FY2007.

FY2004 M&E Recommendation: 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 FY2005: *Louisiana State University concluded a study on deer abundance in KNF; deer abundance is relatively low. The Forest Soil/Water/Air Program Manager met frequently with SRS research scientists on current research projects and to discuss possible future cooperative research projects.*

FY2004 M&E Recommendation: 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.

Status in FY2005: *The Districts are working with Volunteer Groups on trail systems. In 2005 Soil/Water/Air did not seek out Challenge Cost Share Partners.*

Appendix A

Comparison of FY2005 Budget with Revised Plan Annual Budget

<u>Budget Line Item</u>	<u>Plan EBLI</u>	<u>Plan Budget Estimate</u>	<u>FY2005 EBLI</u>	<u>FY2005 Budget</u>	<u>FY2005 Budget Difference</u>
Ecosystem Planning, Inventory, Monitoring					\$ (114,294)
Ecosystem management	NFEM	\$ 759,191	N/A	\$ -	
Inventory and monitoring	***	-	NFIM	521,082	
Land management planning	***	-	NFPN	123,815	
Recreation Use					(84,677)
Recreation management	NFRM	1,045,154	N/A	-	
Wilderness management	NFWM	58,205	N/A	-	
Heritage resources	NFHR	253,064	N/A	-	
Recreation, Heritage, Wilderness	***	-	NFRW	821,700	
Cooperative work - other	CWFS	37,960	CWFS	10,000	
Trails, Capital Improvements & Mtce.	***	-	CMTL	404,005	
Recreation fee collection	***	-	FEFR	-	
Fee Demo - collection	***	-	FDCL	10,000	

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<u>Budget Line Item</u>	<u>Plan EBLI</u>	<u>Plan Budget Estimate</u>	<u>FY2005 EBLI</u>	<u>FY2005 Budget</u>	<u>FY2005 Budget Difference</u>
Fee Demo - projects	***	-	FDDS	64,000	
Rangeland Management					(486,356)
Range management	NFRG	75,919	NFRG	19,772	
Range vegetation management	NFRV	177,145	N/A	-	
Cooperative work - KV	CWKV	253,064	CWKV	-	
Wildlife and Fish Management					(2,080,912)
Wildlife habitat operations and improvement	NFWL	277,105	N/A	-	
Wildlife and fisheries management	***	-	NFWF	803,349	
Inland fish operations and improvement	NFIF	113,879	N/A	-	
T&E species operations and improvement	NFTE	669,354	N/A	-	
Manage/protect bats (Centennial of Service)	***	-	NFEE	10,430	
Cooperative work - KV	CWKV	2,248,472	CWKV	437,051	
Cooperative work - other	CWFS	31,633	CWFS	8,700	
Forestland Management					(4,110,795)
Timber management	NFTM	3,036,766	NFTM	1,431,417	
Forest vegetation management	NFFV	539,026	N/A	-	

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<u>Budget Line Item</u>	<u>Plan EBLI</u>	<u>Plan Budget Estimate</u>	<u>FY2005 EBLI</u>	<u>FY2005 Budget</u>	<u>FY2005 Budget Difference</u>
Vegetation and watershed management	***	-	NFVW	424,615	
Reforestation trust fund	RTRT	139,185	RTRT	311,090	
Cooperative work - KV	CWKV	1,771,447	CWKV	580,587	
Timber roads - purchaser election	PEPE	67,062	PEPE	-	
Timber roads - purchaser construction	PUCR	1,518,383	N/A	-	
Timber salvage sales	SSSS	341,636	SSSS	236,000	
Forest health protection	***	-	SPS4	-	
Rehab of burned areas	***	-	NFN3	34,000	
Timber pipeline - Rec. backlog	***	-	TPCD	-	
Timber pipeline - Sale prep.	***	-	TPPS	285,000	
Soil, Water and Air Management					(446,089)
Soil, water, air operations	NFSO	82,246	N/A	-	
Soil and water improvement	NFSI	115,144	N/A	-	
Cooperative work - KV	CWKV	59,470	CWKV	1,647	
Cooperative work - other	CWFS	253,064	CWFS	62,188	
Hazardous waste management	***	-	HWHW	-	

<u>Budget Line Item</u>	<u>Plan EBLI</u>	<u>Plan Budget Estimate</u>	<u>FY2005 EBLI</u>	<u>FY2005 Budget</u>	<u>FY2005 Budget Difference</u>
Minerals and Geology Management					(180,496)
Minerals	NFMG	404,902	NFMG	219,906	
Minerals	NFMG	404,902	CWFS	4,500	
Land Ownership Management					(51,371)
Lands - real estate management	NFLA	234,084	N/A	-	
Landline location	NFLL	177,145	N/A	-	
Landownership management	***	-	NFLM	359,858	
Rural Development					435,000
Resource conservation and development	***	-	RCRC	-	
Economic recovery program	***	-	SPEA	5,000	
State fire assistance	***	-	SPFH	430,000	
Coop.lands forest health mgt.	***	-	SPCH	-	
Urban community forestry	***	-	SPUF	-	
Forest stewardship	***	-	SPST	-	
Construction					(2,097,001)
Recreation construction	CNRF	1,474,097	N/A	-	

<u>Budget Line Item</u>	<u>Plan EBLI</u>	<u>Plan Budget Estimate</u>	<u>FY2005 EBLI</u>	<u>FY2005 Budget</u>	<u>FY2005 Budget Difference</u>
Trail construction	CNTR	67,062	N/A	-	
Roads reconstruction and construction	CNRD	1,189,400	N/A	-	
Facilities capital improves & mtce	***	-	CMFC	633,557	
Roads capital improves & mtce	***	-	CMRD	-	
Facilities capital improves and mtce (Title IV funds)	***	-	CMC2	-	
Land Acquisition					(47,453)
Land acquisition - L&W Cons. Fund	LALW	63,266	LALW	15,813	
Forest Service Fire Protection					1,611,197
Forest fire pre-suppression	WFPR	1,107,154	WFPR	969,443	
Forest fuel reduction	WFHF	632,660	WFHF	2,381,568	
Hazardous Fuel Reduction (Title IV funds)	***	-	WFW3	-	
Vegetation treatments to improve condition class	***	-	NFCC	-	
Infrastructure Management					537,613
Road maintenance and decommissioning	CNRM	1,026,174	CMRD	1,699,409	
Maintenance of facilities	NFFA	258,125	N/A	-	
Backlog mtce of facilities (Title VIII funds)	***	-	DMDM	-	

<u>Budget Line Item</u>	<u>Plan EBLI</u>	<u>Plan Budget Estimate</u>	<u>FY2005 EBLI</u>	<u>FY2005 Budget</u>	<u>FY2005 Budget Difference</u>
Cooperative work - other	CWFS	442,862	CWFS	56,800	
Infrastructure improvement and maintenance	***	-	CMII	75,000	
Facilities maintenance	***	-	CMFC	312,051	
Federal highway program	***	-	HTAE	8,500	
Federal Highway Public Roads	***	-	HTRP	-	
Operations & maintenance - FS quarters	***	-	QMQM	16,000	
Reforestation of forest lands	***	-	RIRI	-	
Roads and trails for states (10% Fund)	***	-	TRTR	97,013	
General Administration					927,979
General administration	NFGA	1,586,710	N/A	-	
Cooperative work - KV	CWKV	961,642	CWKV	73,145	
Cooperative work - other	CWFS	125,267	CWFS	68,212	
Timber - salvage sales	SSSS	60,735	SSSS	-	
Operations & maintenance - FS quarters	QMQM	25,306	QMQM	-	
Indirect cost pools	***	-	POOL	3,115,619	
Roads and trails for states (10% Fund)	***	-	TRTR	-	

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<u>Budget Line Item</u>	<u>Plan EBLI</u>	<u>Plan Budget Estimate</u>	<u>FY2005 EBLI</u>	<u>FY2005 Budget</u>	<u>FY2005 Budget Difference</u>
Reforestation trust fund	***	-	RTRT	-	
Law enforcement	***	-	NFLE	-	
Senior citizens employment program	***	-	NFSD/ NFSA	419,664	
Visitor maps	***	-	MVIS	11,000	
External Agreements					492,315
External agents	***	-	NFEX/ CMXN	492,315	
Total (in FY2005 dollars)		\$ 23,760,161		\$ 18,064,821	\$ (5,695,340)

Appendix B

Avian Population Trends

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).

Kisatchie National Forest				
Common Name	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	= =	-	= =	+
Louisiana Waterthrush	= =	=	=	=

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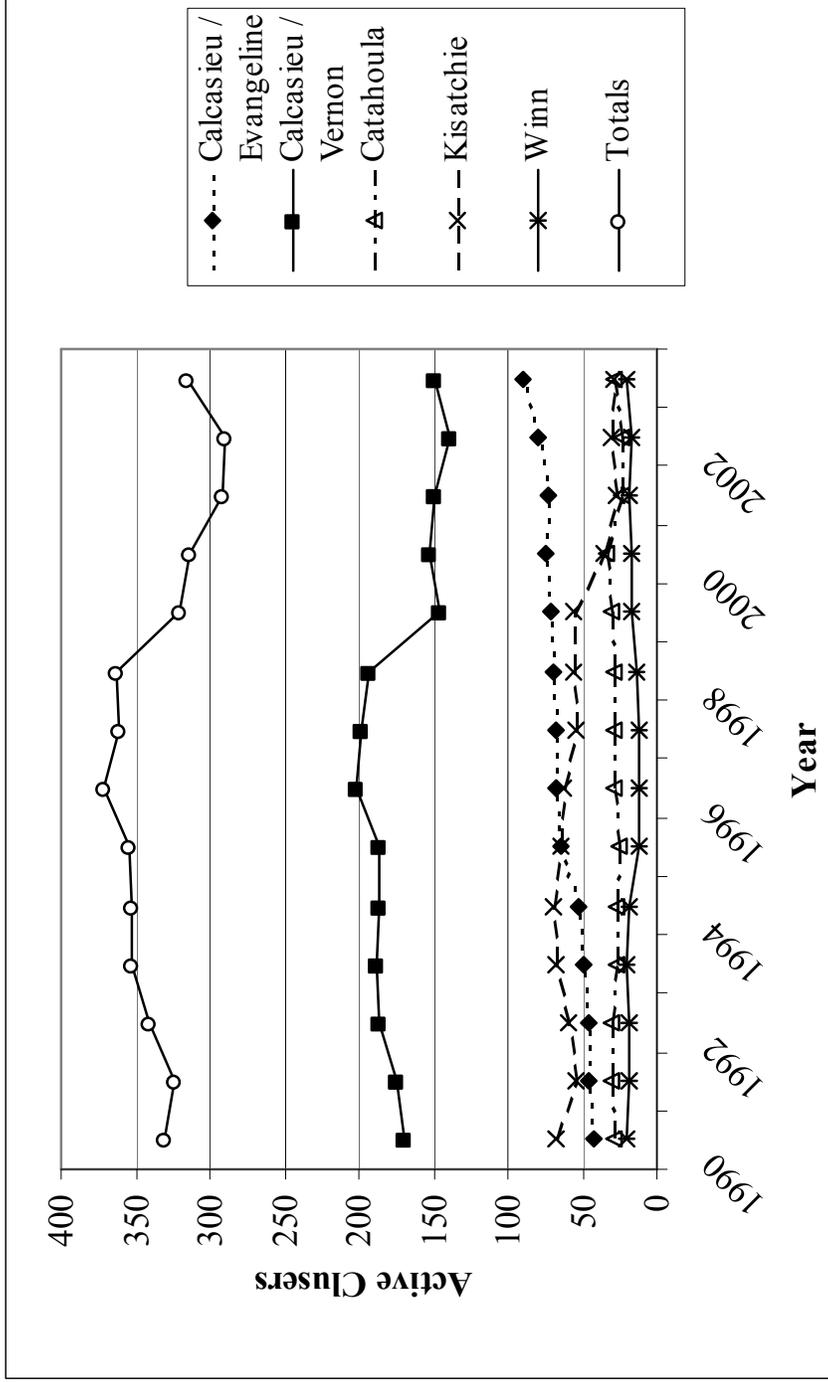
Northern Bobwhite	-	-	-	-	==
Northern Parula	==	==	==	=	==
Pileated Woodpecker	==	==	==	==	+
Prairie Warbler	==	-	-	=	-
Red-cockaded Woodpecker	+	=	=	=	-
Red-headed Woodpecker	==	==	==	=	==
Summer Tanager	==	==	==	==	==
Warbling Vireo	+	NA	NA	NA	=
White-breasted Nuthatch	==	NA	NA	NA	=
White-eyed Vireo	==	-	-	==	==
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
Caney ¹	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 MIS⁵

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.

⁵ 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 – Ecosystem Assessment/Planning</i>
Bobby Sebastian	<i>Team Leader – Timber/Engineering</i>
Ed Bratcher	<i>Team Leader – Fire, Lands, Minerals, Safety</i>
Calvin Baker	<i>Team Leader – Ecosystem Conservation</i>
Jim Caldwell	<i>Public Affairs/Recreation/Heritage Resources</i>
Carl Brevelle	<i>Forester/Resource Planner</i>
Deberoah Collins	<i>Budget Officer</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/Tony Rivers	<i>Fire Management Officer/Asst. FMO</i>
Ken Dancak	<i>Forest Wildlife Biologist</i>
Bruce Prudhomme	<i>Forest Hydrologist</i>
Jo Ann Smith	<i>Forest Silviculturist</i>
Peter Nilles	<i>Forest Botanist/Ecologist</i>
David Byrd	<i>Forest Fisheries Biologist</i>
Charlie Crothers	<i>Lands Program Manager</i>
Jim Pace	<i>Sup. Civil Engineer</i>