

FY2003



Kisatchie National Forest

Monitoring and Evaluation Action Plan & Report

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

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I. Introduction to Monitoring and Evaluation Report

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

Monitoring and evaluation is an ongoing process, specifically designed to insure that Plan goals and objectives (Plan, pages 2-1 to 2-7) are being achieved; standards and guidelines (S&Gs) are being properly implemented; and environmental effects are occurring as predicted. It also indicates whether the application of management area prescriptions is responding to public issues as well as management concerns; and if the costs of implementing the Plan are on target. The evaluation of monitoring results allows the Forest Supervisor to initiate action to improve compliance with management direction where needed, improve cost effectiveness, and determine if any amendments to the Plan are needed to improve resource management.

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

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

This report includes the implementation status of the previous fiscal year's monitoring recommendations in addition to the detailed results and action plan for this year's report. Below is 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 2003, 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 2004, 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.

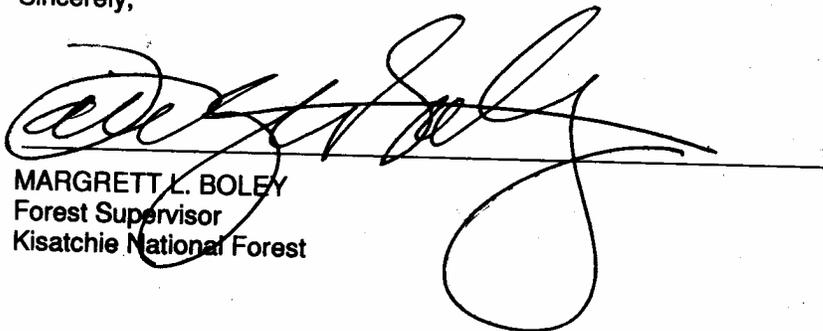
Sincerely,

MARGRETT L. BOLEY
Forest Supervisor
Kisatchie National Forest

Date

[Scanned original signature below:]

Sincerely,



MARGRETT L. BOLEY
Forest Supervisor
Kisatchie National Forest

9/22/04

II. Summary of M&E Results and Report Findings

A. Ecosystem Condition, Health, and Sustainability

- There were 150 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 4,436 acres.
- 500 acres were planted with longleaf pine seedlings in FY2003. First year survival checks have already been done on these stands with 88% survival rate. These stands all have well over 600 seedlings per acre. 55 acres were planted with shortleaf pine seedlings in FY2003. The planting spacing (350 trees/acre) was wide enough to allow for a hardwood component. First year survival was poor. No mixed hardwood-loblolly pine forest areas were planted in FY2003.
- When compared to the Forest Plan's estimate of acres in different landscape community habitats, the Forest presently has an excess of mid- to late-stage shortleaf pine/oak-hickory and a scarcity of early-stage mixed hardwood-loblolly pine.
- Early successional (0-10 years) pine habitat has diminished significantly since 1999. Older successional pine habitats have increased significantly since 1999. Stand ages for all habitat types generally are older as a result of the diminished timber-harvesting program.
- Louisiana pearlshell mussel populations appear to be stable from recent surveys. The FS is working with the USFWS and several partners to establish an active task force with a panel of experts and interested parties for the betterment of the pearlshell.
- One 2003 project-level decision included management practices designed to develop old-growth forest attributes.
- The prescribed burning goals were accomplished due to having sufficient burning windows. The Forest accomplished 136,551 acres; of which 99,167 acres were dormant season and 37,384 acres were growing season burns. Growing season acres almost tripled from the previous year.
- Monitoring data indicates that the NAAQS for particulates is being met.
- Wildland fire preparedness was still below the most efficient level. As a result, wildland fire losses were not being minimized due to the funding shortfall. The Forest still could not fill vacant firefighter positions.
- Resources identified in NFMAS are being made available in accordance with budget funding level. The Forest lost 1,863 acres to wildland fires in FY2003. The acceptable range in NFMAS was 2,108. The Forest had 42 statistical fires for 298 acres and 24 non-statistical fires for 1,565 acres.
- Over 3,000 acres of thinning specific to high hazard southern pine beetle (SPB) stands were planned in Decision Notices signed in FY2003. The Kisatchie National Forest did not have any reported SPB spots during FY2003.
- Four timber removal units on the Winn District and four burn units on the Calcasieu District were randomly selected and rated for compliance with standards and guidelines to protect soil resources. Implementation of erosion control practices was excellent on most of these sites.

- Soil loss was measured on Compartment 36, Unit 10, of the Catahoula District that was site prepared by chopping and burning methods. The estimated annual soil loss ranged from 1.3 to 3.4 and averaged 2.1 tons per acre per year on the unit. This amount of soil loss is below the maximum allowable soil loss for the soil type affected.
- 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 findings from the Long Term Soil Productivity Study 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.
- Timber management units were rated using a scorecard designed to measure the effectiveness of soil and water standards and guidelines. The effectiveness of practices as rated on the scorecards was indicated to be excellent on three of the units.
- In FY2002 thru 2003, water samples were collected monthly at sites on three of the streams on the Calcasieu District that are habitat of the threatened Louisiana Pearlshell mussel. The data from the streams will be analyzed and related to LDEQ/US EPA water quality standards and other water quality criteria. The study will address any effects on water quality due to burning activities in these watersheds and any potential effects on the Pearlshell mussel.
- Artificial reefs (castles and logs) were placed in the Blue Hole and Valentine Lakes with the help of Louisiana College students through a Challenge Cost Share Agreement. The artificial reefs will be monitored and are expected to increase overall standing crop of fishes, both forage and prey.
- Presence of forage fish and omnivores were evaluated in FS lakes and action was taken to ensure a continuation of fish population balance. The Fall/Winter draw-down prescribed for Corney Lake for aquatic weed control, habitat restoration, and fish population manipulation (balance the ratio of predator/prey/omnivores) was successful. The levee that failed on Fullerton Lake during a flood event was repaired and the 70-year-old lake has reached pool stage and has been re-stocked.

B. Sustainable Multiple Forest and Range Benefits

- Populations of squirrels were stable. Deer populations are and have been considerably below the habitats' carrying capacity. Bobwhite populations are low region-wide.
- Shifts in ROS class eligibility probably did not occur because only minor road construction or decommissioning was planned and accomplished.
- During FY2001 through FY2003, 4.2 miles of local and collector roads were reconstructed or constructed. Of this total, 4.2 miles were reviewed. Of the roads reviewed, 97.6% 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. Only 0.1 miles of road length were observed to be not serviceable by the intended user due to a pipe culvert failure caused by inadequate size of end opening.
- The Forest evaluated 16 new applications for a variety of special uses. 29 authorizations were granted or renewed in 2003 after all other means and alternatives were thoroughly examined. A total of 431 permits were administered on the Forest.
- No land ownership adjustments were made in 2003.

- An increase in volume of forest products offered for sale was observed in FY2003. A total of 34,180 CCF (17.2 MMBF) was offered. This is a substantial increase over FY2002.
- The harvest level on the Forest continues to fluctuate. Nearly 16,000 CCF (8 MMBF) were harvested, compared to an FY2002 harvest of 51,000 CCF (26 MMBF).
- The Forest received Economic Recovery (ER) grant proposals from three communities totaling \$18,244, which was less than the \$23,000 in requests for FY2002.
- National Meaningful Measures standards for wilderness management were completed. Management of Kisatchie Hills Wilderness is in compliance with Forest Plan standards and guidelines.
- Regeneration harvests continue to be far below the anticipated Forest Plan outputs.
- The level of special forest products continues at about the same level of interest as in FY2002.
- All compliance reviews and consultations pursuant to Section 106 of the National Historic Preservation Act (NHPA) were completed prior to agency decisions. However, requests for inventory were much reduced from years past. In FY2003, a total of 5,561.5 acres were inventoried. Sixteen new sites were added to the KNF heritage data base.
- In 2003, the Forest started relations with the Choctaw Tribe of Oklahoma.
- No damage attributable to Forest activities were recorded and no additional cultural evidence was observed in activity buffer zones surrounding heritage sites.
- The Forest began to evaluate one potentially significant heritage sites for eligibility to the National Register of Historic Places, and the number of backlogged sites remains at 416.

C. Organizational Effectiveness

- 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). 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.
- A number of cooperative studies with Southern Research Station Units (FMR-4111 and FMR4501) and LSU continued.
- Federal and state agencies were consulted as new proposals were developed and underwent the NEPA process.
- Soil and water staff and GIS staff cooperated with NRCS in developing the 5th level watershed delineations that contain National Forest lands in Louisiana. These watersheds are used to facilitate the evaluation of effects of forest management activities at the watershed level, and to prioritize watershed restoration.
- A Hydrologic Condition Assessment (HCA) of the Cane River (Kisatchie Bayou) Watershed was completed. The HCA will be used as a vehicle to collaborate with Louisiana DEQ on the Total Maximum Daily Load process, which is being conducted on Kisatchie Bayou. Kisatchie Bayou, which flows through the Kisatchie RD, is a Section 303d listed (impaired stream) with sedimentation/ turbidity listed as causes.
- The soil and water and GIS staff cooperated with the LDEQ Source Water Protection program to protect water supply wells on the KNF. The KNF cooperated with LDEQ on the inventory of water well data on the KNF. The well data has been placed in the KNF Geographical Information System to use in ensuring protection of these waters sources.

- The Kisatchie National Forest has a Participating Agreement with Northwestern State University (NSU). This partnership agreement coordinates one or more graduate level/advanced undergraduate Intern position in NSU's Masters Program in History with Cultural Resource Management emphasis or anthropology program. 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 the NSU will graduate students in Cultural Resource Management with balanced, marketable skills, and experience in the workplace.
- The Forest Service and LSU established a challenge cost share agreement to help one another accomplish mutually beneficial objectives related to the impacts of off road vehicles (ORV) to soil, water and other resources of the Kisatchie National Forest. The current Kisatchie National Forest ratings will be refined and modified in order to classify the suitability of areas for ORV traffic. These data will be incorporated into the Forest Service's GIS database.

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)

FY2003 Findings: Three landscape level environmental documents were completed during FY2003, with the focus on silvicultural needs and RCW management objectives. All projects were designed to restore, maintain or improve the forest ecosystems and plant communities of the forest. There were 150 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 4,436 acres. An increased emphasis on growing season prescribed burning further aided restoration and enhancement.

FY2004 Recommended Actions: Every year continue to prepare documents addressing management practices, which will be implemented on approximately 10 percent of the Kisatchie National Forest. Longleaf restoration cuts remain far below 10% of the RLRMP estimated acres, however the 4,436 acres of thinning were designed to move stands from offsite species to

longleaf. Forest Silviculturist will field check samples of implemented project decisions. Include thinning to determine forest type changes.

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

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)

FY2003 Findings: 500 acres were planted with longleaf pine seedlings in FY2003. First year survival checks have already been done on these stands with 88% survival rate. These stands all have well over 600 seedlings per acre. Satisfactorily stocked sites require a minimum of 300 well-distributed seedlings per acre.

55 acres were planted with shortleaf pine seedlings in FY2003. The planting spacing (350 tree/acre) was wide enough to allow for a hardwood component. First year survival was poor.

No mixed hardwood-loblolly pine forest areas were planted in FY2003. Species conversion may occur from natural hardwood regeneration. No harvest cuts were planned in this landscape ecosystem in FY2003.

Review of 2003 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.

FY2004 Recommended Actions: Continue to monitor sites for additional treatment needs. Increase the number of acres burned during the growing season. Increase final harvest cut acres of off-site species on longleaf pine sites so an increase of planted longleaf can occur. Acres planted to longleaf are below the targeted 1400 acres of longleaf restoration. Post implementation field checks will be done by Forest Silviculturist on thinning areas to promote longleaf and to determine species composition changes. Continue to apply growing season burns on a three year rotation starting with the second growing season after planting.

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

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

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

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:

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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)

FY2003 Findings: This monitoring task calls for using the herbarium database to track the status of habitats for management indicators. This database was created, but does not provide the needed data. Instead, data is being collected on management indicator species using a series of plots scattered across the Kisatchie National Forest landscapes. Data collection continued in early 2003, prior to the transfer of both botanist/ecologists on the forest. The initial review of this data found that the methods being used had two problems. First, data collected by different observers was collected using slightly different methods. Second, some plant MIS species were not found within the plots. Data collected to date has proven very useful in establishing a baseline for the frequency and distribution of plant management indicators

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

| Landscape Community | Forest Plan goal (acres) | FY2001 acres | FY2002 acres | FY2003 acres |
|--|---------------------------|--------------|--------------|--------------|
| Longleaf pine, all stages: | 121,000 | 127,415 | 120,483 | 122,503 |
| Shortleaf pine / oak-hickory, early stages: | 0 | 1,633 | 2,897 | 626 |
| Shortleaf pine / oak-hickory, mid-late stages: | 16,000 | 48,050 | 34,912 | 45,610 |
| Mixed hardwood-loblolly pine, early stages: | 42,000 | 14,351 | 15,519 | 6,811 |
| Mixed hardwood-loblolly pine, mid-late stages: | 252,000 | 261,024 | 247,710 | 259,284 |
| Riparian, small streams: | 85,000 (no annual change) | 85,000 | 85,000 | 85,000 |
| Riparian, large streams: | 92,000 (no annual change) | 92,000 | 92,000 | 92,000 |

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Considering Kisatchie NF habitat types and the Forest Plan goals:

| Successional Habitat (all Forest Types) | Forest Plan goal (acres) | FY2001 acres ¹ | FY2002 acres ² | FY2003 acres |
|---|--------------------------|---------------------------|---------------------------|--------------|
| Early (0-10 yrs) | >= 20,000 | 26,882 | 24,921 | 13,189 |
| Middle (31-50 yrs) | >= 50,000 | 86,898 | 55,265 | 82,780 |
| Late (71+ yrs) | >= 75,000 | 163,120 | 151,111 | 179,201 |

Kisatchie NF has a surplus of shortleaf pine/oak-hickory (mid-late stages) and a deficiency of mixed hardwood-loblolly pine (early stages); overall, Kisatchie NF is meeting its goal of providing a biologically diverse ecosystem.

FY2004 Recommended Actions:

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

Continue to adhere to Revised KNF Plan guidance.

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

FY2003 Findings: Monitoring of plant management indicators (MI) was conducted in a series of MI plots located across the Forest. These plots will establish a baseline of data on MI populations from which future trends can be compared. Plot methodology has yet to capture adequate data on some plants. One of the tasks for the new Forest botanist/ecologist will be to resolve this issue.

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

¹ Total Forest acreages for the three years shown differ because of irreconcilable coding errors for some stand characteristics in the inventory data. Where coding for a stand in CISC was definitely incompatible or missing, the entire stand was not counted towards any successional habitat.

² The numbers in this column are lower than actual because of coding errors on approximately 36,000 acres, which had no stand age in the inventory data. This was corrected before reporting the FY2003 figures shown in the next column.

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| Management Indicator (terrestrial) | KNF 2003 Number ³ | KNF 1998-1999 Average ⁴ | KNF 2001-2003 Average ³ | Found in Habitat Types ⁵ |
|------------------------------------|------------------------------|------------------------------------|------------------------------------|-------------------------------------|
| Bachman's Sparrow | 0.12 | 0.07 | 0.12 | A |
| Northern Bobwhite | 0.12 | 0.11 | 0.08 | A |
| Prairie Warbler | 0.13 | 0.26 | 0.17 | A,B |
| Red-Cockaded Woodpecker | 0.01 | 0.04 | 0.03 | A,C,E |
| Red-Headed Woodpecker | 0.09 | 0.09 | 0.09 | A |
| Cooper's Hawk | 0.00 | 0.00 | 0.00 | C |
| Eastern Wood-Pewee | 0.08 | 0.44 | 0.09 | C |
| Pileated Woodpecker | 0.39 | 0.47 | 0.38 | C,E,G |
| Summer Tanager | 0.53 | 0.53 | 0.42 | C |
| Hooded Warbler | 0.64 | 0.77 | 0.53 | E |
| Wood Thrush | 0.10 | 0.23 | 0.12 | E |
| White-Eyed Vireo | 0.45 | 0.36 | 0.38 | D,F |
| Yellow-Billed Cuckoo | 0.64 | 0.56 | 0.58 | E,F |
| Acadian Flycatcher | 0.34 | 0.10 | 0.25 | F |
| Louisiana Waterthrush | 0.02 | 0.03 | 0.03 | F |
| Kentucky Warbler | 0.22 | 0.15 | 0.25 | G |
| Northern Parula | 0.07 | 0.13 | 0.11 | G |
| Warbling Vireo | 0.00 | 0.00 | 0.00 | G |
| White-Breasted Nuthatch | 0.05 | 0.16 | 0.06 | G |
| Worm-Eating Warbler | 0.08 | 0.30 | 0.09 | G |

³ cumulative number of individuals detected on all KNF Districts / 130 (which is the total number of point-count sites)

⁴ cumulative number of individuals detected on all KNF Districts / 130 (which is the total number of point-count sites) / the number of years in the range; green-colored values = possible increases from baseline years; red-colored values = possible decreases from baseline years

⁵ **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)

FY2004 Recommended Actions: Continue to develop method for capturing MIS plant species that are not showing up in current survey methodology. Consult with University for possible CCS project to monitor the species. Plot location will also be reconsidered, in an effort to capture data on several species that were not found in sufficient numbers in the present plant MI plots.

Continue bird surveys on Kisatchie NF.

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)

FY2003 Findings: No known occurrences of threatened or endangered plant species exist on the Kisatchie National Forest. On a small scale some prairies and bogs were managed for the benefit of sensitive and conservation species. Completed projects did meet at least 90% compliance with Forest Plan direction, project design, and NEPA decision direction

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.

FY2004 Recommended Actions: Strive to implement harvesting levels consistent with Plan levels. 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. Continue to maintain/increase the number of growing season prescribed burns.

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

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

FY2003 Findings: There continues to be no known occurrences of threatened or endangered plant species on the Kisatchie National Forest. No significant changes in acres or site quality of habitat for sensitive and conservation plant species were found. Active management of sites was hampered somewhat due to vacant botany/ecology positions on the Forest, but the vacancies are expected to be filled early in FY2004.

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

| Pine | Successional Classes | | | | | | | |
|---------------------|-----------------------------|-------------|--------------------|-------------|--------------------|-------------|------------------|-------------|
| | 0-10 years | | 11-30 years | | 31-80 years | | 81+ years | |
| Forest Types | 2003 | 1999 | 2003 | 1999 | 2003 | 1999 | 2003 | 1999 |
| Year: | 2003 | 1999 | 2003 | 1999 | 2003 | 1999 | 2003 | 1999 |
| Longleaf | 5,752 | 13,614 | 13,601 | 10,179 | 90,808 | 95,690 | 12,029 | 4,162 |
| Slash | 28 | 618 | 5,838 | 7,392 | 31,484 | 31,273 | 37 | 11 |
| Loblolly | 6,396 | 38,880 | 92,969 | 81,214 | 151,265 | 147,014 | 23,549 | 15,382 |
| Shortleaf | 626 | 938 | 765 | 927 | 7,011 | 8,000 | 5,777 | 4,799 |
| Sub-Total | 12,802 | 54,050 | 113,173 | 99,712 | 280,568 | 281,977 | 41,392 | 24,354 |
| Sub-Total % | 2.9 | 11.7 | 25.3 | 21.7 | 62.6 | 61.3 | 9.2 | 5.3 |
| Forestwide % | 2.2 | 9.0 | 19.1 | 16.6 | 47.4 | 47.0 | 7.0 | 4.1 |

| Mixed | Successional Classes | | | | | | | |
|---------------------|-----------------------------|-------------|--------------------|-------------|--------------------|--------------|------------------|-------------|
| | 0-10 years | | 11-30 years | | 31-80 years | | 81+ years | |
| Forest Types | 2003 | 1999 | 2003 | 1999 | 2003 | 1999 | 2003 | 1999 |
| Year: | 2003 | 1999 | 2003 | 1999 | 2003 | 1999 | 2003 | 1999 |
| Pine-Hwd | 337 | 1,200 | 4,608 | 4,593 | 13,082 | 15,024 | 7,948 | 4,438 |
| Hwd-Pine | 50 | 371 | 1,633 | 2,958 | 20,132 | 25,071 | 13,226 | 8,229 |
| Sub-Total | 387 | 1,571 | 6,241 | 7,551 | 33,214 | 40,095 | 21,174 | 12,667 |
| Sub-Total % | 0.6 | 4.9 | 10.2 | 23.7 | 54.4 | 125.8 | 34.7 | 39.7 |
| Forestwide % | 0.1 | 0.3 | 1.1 | 1.3 | 5.6 | 6.7 | 3.6 | 2.1 |

| Hardwood | Successional Classes | | | | | | | |
|---------------------|-----------------------------|-------------|--------------------|-------------|--------------------|-------------|------------------|-------------|
| | 0-10 years | | 11-30 years | | 31-80 years | | 81+ years | |
| Forest Types | 2003 | 1999 | 2003 | 1999 | 2003 | 1999 | 2003 | 1999 |
| Year: | 2003 | 1999 | 2003 | 1999 | 2003 | 1999 | 2003 | 1999 |
| Upland | 0 | 522 | 3,301 | 2,752 | 22,569 | 24,809 | 9,100 | 5,480 |
| Bottomland | 0 | 311 | 2,292 | 2,664 | 26,304 | 29,917 | 19,887 | 12,045 |
| Sub-Total | 0 | 833 | 5,593 | 5,416 | 48,873 | 54,726 | 28,987 | 17,525 |
| Sub-Total % | 0 | 1.1 | 6.7 | 6.9 | 58.6 | 69.7 | 34.7 | 22.3 |
| Forestwide % | 0 | 0.1 | 0.9 | 0.9 | 8.2 | 9.1 | 4.9 | 2.9 |

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| Forestwide ⁶ | Successional Classes | | | | | | | |
|-------------------------|----------------------|--------|-------------|---------|-------------|---------|-----------|--------|
| | 0-10 years | | 11-30 years | | 31-80 years | | 81+ years | |
| Year: | 2003 | 1999 | 2003 | 1999 | 2003 | 1999 | 2003 | 1999 |
| Total Acres | 13,189 | 56,454 | 125,007 | 112,679 | 362,655 | 376,798 | 91,553 | 54,546 |
| Forestwide % | 2.2 | 9.4 | 21.1 | 18.8 | 61.2 | 62.7 | 15.5 | 9.1 |

Early successional (0-10 years) pine habitat has diminished significantly since 1999. Older successional pine habitats have increased significantly since 1999. Stand ages for all habitat types generally are older as a result of the diminished timber-harvesting program. The older forested habitat, compared to the relatively younger forested habitat off-Forest, generally is beneficial to the rare species on Kisatchie NF.

FY2004 Recommended Actions: Strive to implement harvesting levels consistent with Plan levels. 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. Continue to maintain/increase the number of growing season burns.

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

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

FY2003 Findings:

RCW Population Survey Results:

| RCW Populations | # Active Clusters | | | | | |
|---------------------|-------------------|------------------------|------------|------------|------------|------------|
| | Recovery Goal | Year 2004 ⁷ | Year 2003 | Year 2002 | Year 2001 | Year 2000 |
| Catahoula | 250 | 31 | 27 | 25 | 36 | 34 |
| Evangeline | 231 | 100 | 89 | 79 | 73 | 74 |
| Kisatchie | 292 | 26 | 29 | 30 | 27 | 37 |
| Winn | 263 | 23 | 20 | 17 | 12 | 17 |
| Vernon | 350 | 144 | 149 | 142 | 149 | 152 |
| Forest Total | 1386 | 325 | 314 | 293 | 297 | 314 |

⁶ Total Forest acreages for the two years shown differ because of irreconcilable coding errors for some stand characteristics in the inventory data. Where coding for a stand in CISC was definitely incompatible or missing, the entire stand was not counted towards any habitat type or successional class.

⁷ Note that these numbers are current as of the date of this report, not during FY2003.

Louisiana pearlshell mussel populations appear to be stable from recent surveys. Activities from ORVs and urban sprawl continue to threaten the pearlshell's habitat. The FS is working with the 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.

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

FY2004 Recommended Actions: Closely monitor all populations for signs of stability. Prescribe burn the foraging habitat as much as feasible. Engage in RCW translocations to bolster populations, if feasible. Continue consultations with the USFWS.

Continue beaver control, enforcement of FS regulations prohibiting ORVs from riding in streams, and implementation of Best Management Practices (BMPs) and Streamside Habitat Protection Zones (SHPZs) that protect Louisiana pearlshell mussel habitat. Encourage collaboration from other agencies, 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 Evangeline Unit of Calcasieu Ranger District to assess the population and identify any potential threats.

Objective 2–4: Develop or maintain old-growth forest attributes, for their contribution to biological and visual diversity, habitats for plant and animal species, and maintenance of a natural gene pool, within designated patches on approximately 13 percent of the Forest based upon representation of the major forest ecosystems and old-growth community types. Long-term old-growth forest objectives are as follows:

Longleaf pine forest dominated patches: 48,800 acres.

- Coastal plain upland mesic hardwood: 2,550 acres.
- Upland longleaf, woodland, and savanna: 45,350 acres.
- Southern wet pine forest, woodland, and savanna: 780 acres.
- Dry and xeric oak forest, woodland, and savanna: 120 acres.

Shortleaf pine/oak-hickory forest dominated patches: 13,500 acres.

- Coastal plain upland mesic hardwood: 1,290 acres.
- Dry and dry-mesic oak-pine forest: 11,630 acres.
- Dry and xeric oak forest, woodland, and savanna: 60 acres.
- Xeric pine and pine-oak forest and woodland: 50 acres.
- Seasonally wet oak-hardwood woodland: 350 acres.
- River floodplain hardwood forest: 120 acres.

Mixed hardwood-loblolly pine forest dominated patches: 6,100 acres.

- Coastal plain upland mesic hardwood: 700 acres.
- Seasonally wet oak-hardwood woodland: 300 acres.
- Dry and dry-mesic oak-pine forest: 4,650 acres.
- River floodplain hardwood forest: 450 acres.

Riparian forest dominated patches: 12,700 acres.

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- 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)

FY2003 Findings: One 2003 project-level decision document involved management practices designed to develop old-growth forest attributes. Thinning activities to remove loblolly and hardwood and enhance RCW and old-growth characteristics were planned on 266 acres. Actions meet Plan standards and guidelines for longleaf pine-dominated old growth patches.

FY2004 Recommended Actions: SO staff personal should complete field visits and review NEPA documents involving old-growth patches to determine compliance with the Forest Plan.

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

FY2003 Findings: Management actions consistent with Forest Plan direction were proposed on 266 acres within longleaf pine-dominated old growth patches. Scorecards for evaluating old-growth attributes within these patches have been developed.

FY2004 Recommended Actions: Begin field visits, with botanist, to the proposed area within the old-growth patch before and after implementation and rank for 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)**

FY2003 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.

FY2004 Recommended Actions: Every year, conduct silvicultural surveys and prepare documents addressing management practices where needed, on approximately ten percent of the Kisatchie National Forest. Document the streamside habitat protection zones and actions taken to manage in and near these areas. Monitor streamside habitat protection zones as outlined for this task.

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

FY2003 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.

FY2004 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)

FY2003 Findings: The prescribed burning goals were accomplished due to having sufficient burning windows. The Forest accomplished 136,551 acres; of which 99,167 acres were dormant season and 37,384 acres were growing season burns. Growing season acres almost tripled from the previous year. Prescribed burning occurred in the following landtype associations (LTAs):

| LTA | Dormant Season Acres | Growing Season Acres |
|-----|----------------------|----------------------|
| 1 | 58,678 | 23,891 |
| 2 | 17,564 | 4,875 |
| 3 | 6,891 | 0 |
| 4 | 1,018 | 0 |
| 5 | 3,102 | 5,977 |
| 6 | 6,438 | 2,641 |
| 9 | 5,476 | 0 |

FY2004 Recommended Actions: The Forest should continue to monitor the weather and take advantage of every burning opportunity. Strive to maximize the implementation of growing season burns on longleaf pine plant community landscapes. The Forest needs two Regional Fuels Helicopters to increase the production and reduce the current cost of helicopters.

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

FY2003 Findings: Prescribed burning in 2003 exceeded goals in both acres and percent (27%) of growing season burns.

FY2004 Recommended Actions: Continue to work with research to determine effectiveness.

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)

FY2003 Findings: The Kisatchie National Forest follows 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 Calcasieu District. The district is continuing to identify sensitive sites and to project smoke dispersal so that these sites are protected. The District indicated the need to develop better methods to identify and map sensitive areas. The Geographical Information Systems staff worked with the district to accomplish this using Arc View.

FY2004 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.

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

FY2003 Findings: All areas of the Kisatchie National Forest are in attainment of the National Ambient Air Quality Standards (NAAQS) including NAAQS for ozone. Monitoring data for ozone is continuously collected at the LDEQ air monitoring station located on the Catahoula Ranger District at the Bentley site in Grant Parish.

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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.

FY2004 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)

FY2003 Findings: Wildland fire preparedness was still below the most efficient level. As a result, wildland fire losses were not being minimized due to the funding shortfall. The Forest still could not fill vacant firefighter positions.

FY2004 Recommended Actions: Continue to request wildland fire preparedness funding at the 100% efficiently level and staff accordingly.

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

FY2003 Findings: Resources identified in NFMAS are being made available in accordance with budget funding level. The Forest lost 1,863 acres to wildland fires in FY2003. The acceptable range in NFMAS was 2,108. The Forest was within the acceptable range. The Forest had 42 statistical fires for 298 acres and 24 non-statistical fires for 1,565 acres.

FY2004 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)

FY2003 Findings: The Forest continues to implement restoration of longleaf and shortleaf on areas where off-site loblolly occurs.

Over 3000 acres of thinning specific to high hazard SPB stands were planned in Decision Notices signed in FY2003. The Kisatchie National Forest did not have any reported SPB spots during FY2003.

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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.

FY2004 Recommended Actions: Continue to identify restoration and forest health needs through the inventory process. Complete NEPA documentation that will allow the application of final harvest operations and thinning treatments through timber sales.

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

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

FY2003 Findings: Insect and disease population trends on the Kisatchie National Forest were stable and low in FY2003 and are predicted to be low through 2004.

FY2004 Recommended Actions: Continue to monitor for possible SPB attacks through aerial observations. Field check for increased mortality from Annosus root disease on thinned loblolly stands on high hazard sites.

3. WATERSHED CONDITIONS

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

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

FY2003 Findings: Four timber removal units on the Winn District and four burn units on the Calcasieu District were randomly selected and rated for compliance with standards and guidelines to protect soil resources. Implementation of erosion control practices was excellent on most of these sites. Equipment was used on the sites during dry conditions and there was no evidence of rutting or compaction. There was good placement of skid trails and landings. Implementation of erosion control practices (water bars and re-vegetation) was very good on these sites. There was special effort made to retain slash on site and to spread the slash over skid trails and bare soils. This practice is an excellent way to prevent soil loss and accelerated erosion as well as to retain soil productivity.

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 on the Calcasieu was conducted as a part of this review. The erosion control guidelines were discussed. A dozer was used on one of the burned areas to conduct a training exercise to demonstrate construction of effective erosion control structures.

The eight areas were rated using a scorecard designed to measure the effectiveness of standards and guidelines to prevent soil erosion and maintain soil productivity. The effectiveness of practices as rated on the scorecards was indicated to be excellent on 7 of the units and good on one of the units. Soil erosion, compaction and rutting were minimal on these units.

FY2004 Recommended Actions: Continue monitoring timber silvicultural management activities for implementation of Forest standards and guidelines.

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

FY2003 Findings: Soil loss was measured on Compartment 36, Unit 10, of the Catahoula District that was site prepared by chopping and burning methods. Soil loss was estimated by measuring bare soil on the sites using the KAT method and applying the Universal Soil Loss Equation. Results were compared to the maximum allowable soil loss for the Smithdale soil type on which the unit was located. The maximum allowable soil loss is an indicator of loss of soil productivity. The estimated annual soil loss ranged from 1.3 to 3.4 and averaged 2.1 tons per acre per year on the unit. This amount of soil loss is below the maximum allowable soil loss for the Smithdale soil.

Watershed improvement work is ongoing. There were 41 acres of watershed improvement work accomplished in FY2003 with watershed improvement funding and 12 acres with KV funding. Maintenance on FY2002 projects was done, as needed, to shorten recovery times on the 41 acres of projects from the previous year. Projects were located on all districts and all included erosion and sediment control measures. Projects included stream bank stabilization along FS539, sediment control above Moses Blake pond and stabilization of a gully that is threatening RCW trees. Projects on four districts included erosion/sediment control for ORV related damage.

FY2004 Recommended Actions: Continue to restore and revegetate disturbed areas.

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

FY2003 Findings: Preliminary findings from the Long Term Soil Productivity Study being conducted by the Southern Research Station indicate that when sites located on several soil types with a severe compaction hazard rating were subjected to experimental compaction, bulk densities recovered to near original undisturbed levels within ten years and pine productivity was unaffected. However, the experimental compaction did not disturb the soils in a manner similar to harvesting, and wet-weather harvesting without remediation may reduce productivity. Preliminary results also indicate that soil productivity may be decreased by slash removal or increased by phosphorus fertilization on phosphorus-deficient sites. In general, less productive sites are more susceptible to detrimental harvesting impacts than highly productive sites. The Long Term Soil Productivity Study is a national study being conducted to evaluate the effects of various timber management practices on the productivity of soil. Research plots are located at various locations around the U. S. including the Catahoula and Calcasieu Ranger Districts.

FY2004 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)

FY2003 Findings: Timber removal operations were monitored on the Winn Ranger District using procedures developed for assessing implementation of Forest Plan standards and guidelines for protection of water quality (Best Management Practices) on October 9, 2002. The review team consisted of KNF District and Supervisor's Office timber staff, the Ecological Conservation Team Leader and Hydrologist/Soil Scientist.

Two sites were on blow-down areas in Compartments 70/73 and 69/75. Two sites were on thinned units in Compartments 56 and 84. As indicated on the rating forms district personnel did an excellent job of implementing the standards and guidelines. There was good placement of skid trails and landings. Implementation of erosion control practices (water bars and re-vegetation) was very good on these sites. There was special effort made to retain slash on site and to spread the slash over skid trails and bare soils. This practice is an excellent way to prevent accelerated erosion and sedimentation.

Streamside zone protection was implemented on all streams. Although the thinned areas were older sales, almost all the zones on these units would comply with the requirements for Streamside Habitat Protection Zones (SHPZs) in the revised KNF Land Management Plan. The timber removal areas in Compartments 70/73 and 69/75 had been extensively impacted by the blow-down. Standards and guidelines that were designed for normal timber removal operations did not apply to some aspects of the timber removal on these areas, but extra effort had been made to prevent sedimentation of drainages by carefully cutting and pulling out blow-down timber near stream channels or leaving trees if removal would cause soil disturbance.

There was good sale layout on these units to reduce the need to come close to streams or riparian areas and to avoid the need for stream crossings. Logs and a culvert were used to cross an intermittent stream channel on the Plane Rd. salvage area so that the channel would not be disturbed. The logs and culvert were removed after timber activities were completed. We discussed using a portable bridge to cross the stream for site prep activities. A trail across an ephemeral drainage on a thinned area was well placed and showed minimal signs of soil disturbance.

Timber management units were rated using a scorecard designed to measure the effectiveness of soil and water standards and guidelines. The effectiveness of practices as rated on the scorecards was indicated to be excellent on three of the units. Sedimentation was minimal on these units. The Plane Rd blow-down was rated as good due to sedimentation at an old stream crossing and incised access road that was present on the area. We discussed contouring the steep incised bank of the crossing to reduce sedimentation. We also discussed sloping the eroding incised sides of an old access road. In general, impacts to soil and water resources on the Plane Rd blow-down area and the other timber removal areas were minimal due to the careful work by district timber staff.

Monitoring prescribed burning activities on the Calcasieu Ranger District was conducted on May 20, 2003. Four burned areas were rated for compliance with soil and water standards and guidelines (BMPs) by the District Ranger, Fire Management Officer and Hydrologist /Soil

Scientist. In addition, the effectiveness of practices in reducing sedimentation was rated on these areas using soil and water monitoring "scorecards".

District personnel did an excellent job of implementing the standards and guidelines. The use of natural barriers, roads, etc., as much as possible, minimized the length of fire lines on these areas. This minimizing of fire lines is the best way to reduce erosion/sedimentation. Bladed lines as opposed to plowed lines were constructed which greatly reduced the potential for sedimentation. The blading that was done near Kincaid Lake was exceptionally light so that soil disturbance was minimal and waterbars were not needed. Lines were hand raked long distances through sensitive riparian areas near the lake and up to streams. Permanent fire lines and water bars, which can be reused, are being constructed along private land. The effectiveness of practices as rated on the scorecards was indicated to be excellent on the four areas that were monitored.

The area that was burned in compartments 34/369 in the Loving Creek watershed was examined. Loving Creek contains La. Pearlshell mussel habitat. Roads and natural barriers were used to conduct this burn so that no fire lines were constructed that would be potential sources of sediment. Care was taken to insure that the burn was "cool" so that it would not burn into the riparian areas along the stream. Loving Creek and two other La. Pearlshell streams that had watersheds burned in FY2002 are being sampled monthly to monitor any change in water quality that could affect the threatened mussel. An LSU graduate student plans to analyze the data for a master's theses.

FY2004 Recommended Actions: Continue to monitor silvicultural management activities for implementation of Best Management Practices.

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

FY2003 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. The monitoring is being done according to a cooperative arrangement with LDEQ under the KNF's Non-Point Source Pollution Control Memorandum of Agreement with the State. The measured parameters include suspended solids and turbidity. The monitoring data indicates that all these streams meet the criteria for designated uses, including propagation for fish and wildlife. Almost all samples from these streams have turbidity levels well below 25 NTU, which is the criterion for natural and scenic streams. The stream are being monitored for metals (arsenic, chromium, cadmium, copper, lead, mercury, and nickel), nutrients (carbon, phosphates, potassium, nitrogen, nitrites, and nitrates) and sulfates, suspended solids etc. The monitoring data indicates minimal or trace levels of some of these substances but no contamination that would affect fish or wildlife.

In addition, in FY2002 thru 2003, water samples were collected monthly at sites on three of the streams on the Calcasieu District that are habitat of the threatened La. Pearlshell mussel. Most of the watersheds draining into these streams were burned by the Forest Service in January 2002. The data from the streams will be analyzed by a graduate student at Louisiana State University and related to LDEQ/US EPA water quality standards and other water quality criteria. The study will address any effects on water quality due to the burning activities in these watersheds and any potential effects on the threatened La. Pearlshell mussel.

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

FY2004 Recommended Actions: Continue to coordinate with LDEQ on monitoring the water quality of streams on the KNF. Continue monitoring on streams draining watersheds where

management burning was conducted to determine any impacts on water quality. Continue required monitoring of water quality of KNF swim beaches.

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

Are lake predator-prey populations in balance? Are management practices sufficiently protecting stream and lake habitats? Are primary aquatic food chain organisms being impacted by siltation?

(I)

FY2003 Findings: Predator/prey populations across the Forest are sufficient for a sustainable recreational fishery. To maintain and enhance the resource, supplemental stocking of 3,500 largemouth bass fingerlings (provided by the USFWS) were stocked in Caney Lakes, the Bombing Range Pond, and Highline Pond.

Sixteen 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 2001 MIS report) suggest that BMPs and SHPZs are adequately protecting the integrity and quality of watersheds within the Forest.

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

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

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

The diversion dam constructed at Anderson Pond was successful in stopping sediment and debris that was entering the pond due to road construction by the Parish. A track-hoe was rented to restore the banks and levees at Anderson Pond, which will also reduce the amount of invasive aquatic weeds (water shield *Brasenia schreberi*).

FY2004 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)**

FY2003 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 FS lakes and action was taken to ensure a continuation of fish population balance. The Fall/Winter draw-down prescribed for Corney Lake for aquatic weed control, habitat restoration, and fish population manipulation (balance the ratio of predator/prey/omnivores) was successful. The levee that failed on Fullerton Lake during a flood event was repaired and the 70-year-old lake has reached pool stage and has been re-stocked.

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

Water quality on 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 101 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.

FY2004 Recommended Actions: Continue monitoring. Stock catfish fingerlings when available. Continue restoration and enhancement projects.

B. Sustainable Multiple Forest and Range Benefits

1. OUTDOOR RECREATION OPPORTUNITIES

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

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

(E)

FY2003 Findings:

| Successional Habitat (all Forest Types) ⁸ | Forest Plan goal (acres) | FY2001 acres | FY2002 acres | FY2003 acres |
|--|--------------------------|--------------|--------------|--------------|
| Early (0-10 yrs) | >= 20,000 | 26,882 | 24,921 | 13,189 |
| Middle (31-50 yrs) | >= 50,000 | 86,898 | 55,265 | 82,780 |
| Late (71+ yrs) | >= 75,000 | 163,120 | 151,111 | 179,201 |

FY2004 Recommended Actions: Continue to adhere to Revised Plan guidance.

⁸ 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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Are habitat objectives for selected demand species management indicators providing game and fish populations sufficient for quality recreational opportunities? (V)

FY2003 Findings: Estimated population densities of select game species on Kisatchie NF are as follows:

| White-Tailed Deer (acres/animal) | | <u>Year 2000</u> | <u>Year 2001</u> | <u>Year 2002</u> | <u>Year 2003</u> |
|--|---------------------|------------------|------------------|------------------|------------------|
| | Catahoula District | 60 | 90 | 90 | 100 |
| | Evangeline District | 75 | 90 | 90 | 100 |
| | Kisatchie District | 75 | 90 | 90 | 100 |
| | Winn District | 55 | 75 | 75 | 85 |
| | Vernon District | 75 | 75 | 75 | 75 |
| | Caney District | 40 | 50 | 50 | 50 |
| Wild Turkey (acres/animal) | | <u>Year 2000</u> | <u>Year 2001</u> | <u>Year 2002</u> | <u>Year 2003</u> |
| | Catahoula District | 100 | 200 | 200 | 200 |
| | Evangeline District | 200 | 300 | 300 | 300 |
| | Kisatchie District | 75 | 100 | 100 | 100 |
| | Winn District | 75 | 150 | 150 | 150 |
| | Vernon District | 75 | 250 | 250 | 250 |
| | Caney District | 200 | 300 | 300 | 300 |
| Fox Squirrel (acres/animal in upland hardwoods) | | <u>Year 2000</u> | <u>Year 2001</u> | <u>Year 2002</u> | <u>Year 2003</u> |
| | Catahoula District | 5 | 5 | 5 | 5 |
| | Evangeline District | 5 | 5 | 5 | 5 |
| | Kisatchie District | 5 | 5 | 5 | 5 |
| | Winn District | 5 | 5 | 5 | 5 |
| | Vernon District | 5 | 5 | 5 | 5 |
| | Caney District | 5 | 5 | 5 | 5 |
| Gray Squirrel (acres/animal in bottomland hardwood) | | <u>Year 2000</u> | <u>Year 2001</u> | <u>Year 2002</u> | <u>Year 2003</u> |
| | Catahoula District | 3 | 3 | 3 | 3 |
| | Evangeline District | 3 | 3 | 3 | 3 |
| | Kisatchie District | 3 | 3 | 3 | 3 |
| | Winn District | 3 | 3 | 3 | 3 |
| | Vernon District | 3 | 3 | 3 | 3 |
| | Caney District | 3 | 3 | 3 | 3 |
| Northern Bobwhite (acres/covey) | | <u>Year 2000</u> | <u>Year 2001</u> | <u>Year 2002</u> | <u>Year 2003</u> |
| | Catahoula District | 1,300 | 1,800 | 1,800 | 1,800 |
| | Evangeline District | 1,300 | 1,800 | 1,800 | 1,800 |
| | Kisatchie District | 1,300 | 1,800 | 1,800 | 1,800 |
| | Winn District | 1,300 | 1,800 | 1,800 | 1,800 |
| | Vernon District | 1,200 | 1,200 | 1,200 | 1,800 |
| | Caney District | 1,300 | 1,800 | 1,800 | 1,800 |

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

FY2004 Recommended Actions: Assess hunting season's lengths to those of Louisiana Department of Wildlife and Fisheries' Wildlife Management Areas with similar habitat in central and northern Louisiana. Attempt to restrict the training of free-ranging hunting dogs during spring and summer.

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

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

FY2003 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.

FY2004 Recommended Actions: To be determined by KNF Management Team, if any.

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

FY2003 Findings: KNF provides 48,483 acres of riparian/bottomland habitat for waterfowl and wetland wildlife.

FY2004 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)

FY2003 Findings: Consultations with district staff reveal recent management actions are in compliance the SIOs.

FY2004 Recommended Actions: Continue to review proposed projects for SIO compliance.

Objective 4–2: Provide visitors the opportunity to pursue a wide variety of developed and dispersed recreation activities, with a minimum amount of regulation, consistent with the assigned recreation opportunity spectrum (ROS) class. The Forest's ROS class objectives are as follows:

Primitive: 8,700 acres.

Semiprimitive nonmotorized: 57,269 acres.

Semiprimitive motorized: 89,963 acres.

Roaded natural-appearing: 217,152 acres.

Roaded natural modified: 191,671 acres.

Rural: 6,162 acres.

Has class eligibility shifted significantly? (E)

FY2003 Findings: Comparisons were not made due to staffing limitations. However, shifts in ROS class eligibility are not likely to have occurred because only minor road construction or decommissioning was planned and accomplished. ROS class eligibility changes are dependant, primarily, on changes in road density and OHV management status.

FY2004 Recommended Actions: Evaluate the feasibility of developing an automated GIS system that would periodically determine the ROS class eligibility of forest lands.

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

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

FY2003 Findings: Meaningful Measures costing data was migrated 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.

FY2004 Recommended Actions: Continue the update of the spreadsheet data converted to INFRA. Continue management of the recreation program using the Meaningful Measures system. The Forest will continue to participate in the Regional comment card beta test which was extended through FY2005.

2. INFRASTRUCTURE

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

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

FY2003 Findings: During FY2001 through FY2003, 4.2 miles of local and collector roads were reconstructed or constructed. Of this total, 4.2 miles were reviewed. Of the roads reviewed, 97.6% 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. Only 0.1 miles of road length were observed to be not serviceable by the intended user due to a pipe culvert failure caused by inadequate size of end opening.

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

FY2004 Recommended Actions: Continue use of appropriate design standards for road reconstruction and construction. Continue monitoring road condition and use.

3. HUMAN INFLUENCES

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

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

FY2003 Findings: One land exchange proposal by the Lower Saline Homeowners Association is being evaluated in full compliance with Manual and Forest Plan Direction. No rights-of-ways were acquired in 2003.

We evaluated 16 new applications for a variety of special uses including roads, utilities, recreation events, recreation residences, and other uses. 29 authorizations were granted or renewed in 2003 after all other means and alternatives were thoroughly examined. A total of 431 permits were administered on the Forest.

FY2004 Recommended Actions: Continue to manage and monitor the lands program to the level 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)

FY2003 Findings: No land ownership adjustments were made in 2003. Landlines will continue to be established, maintained and protected on the established 7 to 8 year cycle as long as funding allows, to discourage encroachments.

FY2004 Recommended Actions: Continue to manage and monitor the lands program to the level funding will allow.

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

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

FY2003 Findings: The harvest level on the Forest continues to fluctuate. Nearly 16,000 CCF (8 MMBF) were harvested, compared to an FY2002 harvest of 51,000 CCF (26 MMBF). This was driven more by prices and markets and the changing macro-economic climate of the Southern marketplace. Another measurement of commodity flow that has been used in the past is payments to states. The measurement of commodity flow can no longer be used due to the 'disconnect' between payments to the parishes and the harvest of forest products.

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

FY2004 Recommended Actions: Continue to monitor this situation. Strive to implement the Forest Plan and accompanying harvest levels.

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

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

FY2003 Findings: The Forest received Economic Recovery (ER) grant proposals from three communities totaling \$18,244, which was less than the \$23,000 in requests for FY2002. All three proposals were funded. This amount is down from previous years. All three communities had received ER funds in the past.

FY2004 Recommended Actions: Continue outreach to new communities, emphasizing capacity building or comprehensive Action Planning project proposals. Consider adding outreach to KNF web page.

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

FY2003 Findings: One FY2003 grant foci was provided to rural landowners, minority landowners, small-scale landowners and new landowners through workshops on basic economic development awareness.

FY2004 Recommended Actions: Continue emphasis on new communities and capacity-building projects that result in increased local job opportunities and local incomes. Stress environmental concerns for the future.

4. ROADLESS AREA/WILDERNESS/WILD & SCENIC RIVERS

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

Is Forest Plan SIA direction being applied? (I)

FY2003 Findings: Comparisons of project plans and Environmental Assessments with SIA Forest Plan direction were not made due to staffing limitations.

FY2004 Recommended Actions: Dedicate additional resources to accomplishing this task in future years.

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)

FY2003 Findings: National Meaningful Measures standards for wilderness management have been completed. Management of Kisatchie Hills Wilderness is in compliance with Forest Plan standards and guidelines.

FY2004 Recommended Actions: Strive to manage Kisatchie Hills Wilderness in compliance with the new national Wilderness Meaningful Measures Standards.

5. TIMBER

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

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

FY2003 Findings: An increase in volume of forest products offered for sale was observed in FY2003. A total of 34,180 CCF (17.2 MMBF) was offered. This is a substantial increase over FY2002. To reach the level outlined in the Forest Plan will require a time period of between 2-3 years.

FY2004 Recommended Actions: In FY2004, continue to monitor this situation for an anticipated improvement.

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

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

FY2003 Findings: Decisions signed in 2003 include a wide variety of prescribed treatments. These include:

- Uneven-age management through group selection on 314 acres of designated uneven age area for longleaf restoration
- Even-age management using clear cut with reserves to restore longleaf on 116 Acres
- Site preparation treatments, offering a range of methods, including fire, mechanical and herbicide
- Commercial thinning (10,277 Ac.) is used to accomplish a mixture of goals including RCW habitat enhancement, longleaf ecosystem restoration and forest health/pest prevention.

Prescribed activities in 2003 are much closer to Forest Plan estimated outputs. Regeneration harvests continue to be far below the anticipated Forest Plan outputs.

FY2004 Recommended Actions: Continue to complete field exams and prescriptions to meet Forest Plan goals.

6. FORAGE

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

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

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

FY2003 Findings: A 25-year trend in a decrease in 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 FY2003. The two active allotments are meeting the current demand for for allotment based forage resources.

FY2004 Recommended Actions: Given the continued non-use of the majority of KNF allotments, carefully scrutinize future expenditure as to their cost-effectiveness.

7. OTHER PRODUCTS

Objective 3–3: Make all U.S. minerals available for lease except in areas where consent has been legislatively or administratively withdrawn. Development of federal minerals will be allowed within the constraints of the lease and accompanying stipulations and restrictions. To the extent legally possible, manage surface occupancy to avoid or minimize environmental effects where reserved and outstanding mineral rights exist. As allowed by state and federal law and under the terms of the severance deed, ensure that surface resources will not be adversely affected to an unacceptable degree by the exercise of reserved and outstanding mineral rights.

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

FY2003 Findings: Parcels are being made available for lease according to the latest U.S. ownership (based on court judgments) and management restrictions.

Applications are being processed according to directions and in a timely manner. Operating plans for private minerals are being reviewed for compliance with existing state and federal laws.

FY2004 Recommended Actions: Continue efforts to hire Lands/Minerals/Special Use Forester to maintain current level and monitor results.

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)

FY2003 Findings: The level of special forest products continues at about the same level of interest as in FY2002. There is still insufficient supply of firewood, but that varies with the severity of the winter.

FY2004 Recommended Actions: None.

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

FY2003 Findings: Low demand for special forest products continues. There are no known negative impacts on forest health or resources noted.

FY2004 Recommended Actions: None.

8. HERITAGE RESOURCES

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

Are significant archeological and historical sites being identified, prior to project decisions, through inventories conducted in consultation with the Louisiana State Historic Preservation Officer (SHPO) according to the National Historic Preservation Act (NHPA), 36 CFR 800, NEPA, and the Southern Regional Heritage Programmatic Agreements (PA)? (I)

FY2003 Findings: All compliance reviews and consultations pursuant to Section 106 of the National Historic Preservation Act (NHPA) were completed prior to agency decisions. However, FY2003 was a year proceeding years of injunctions. These resulted in the lack of management activities. As a result, requests for inventory were much reduced from years past. In FY2003, a total of 5561.5 acres were inventoried. All these acres were in support of timber, recreation or special use. Sixteen new sites were added to the KNF heritage data base. In FY2003, the Forest continued government-to-government relations with five 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, and the Tunica Biloxi Tribe. Also in 2003, the Forest started relations with the Choctaw Tribe of Oklahoma.

FY2004 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.

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)

FY2003 Findings: Six heritage sites were monitored and revisited to determine the extent of internal or externally caused damage. No evidence of damage due to Forest activities 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.

FY2004 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)

FY2003 Findings: No damage attributable to Forest activities were recorded and no additional cultural evidence was observed in activity buffer zones surrounding sites.

FY2004 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)

FY2003 Findings: The Forest began to evaluate one potentially significant heritage sites for eligibility to the National Register of Historic Places, and the number of backlogged sites remains at 416. Given FY2003 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.

FY2004 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)

FY2003 Findings: The Forest Service was a contributor to Louisiana Archaeology Week for the 14th 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. Specialist also taught continuing education to the Louisiana Forest Association.

FY2004 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.

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

FY2003 Findings: Public responses from public presentations indicate a general increase in awareness and sensitivity about the nonrenewable cultural resource base.

FY2004 Recommended Actions: Continue to offer PIT projects, classroom and civic organization presentations, and partner with the LA SHPO in Louisiana Archeology Week.

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

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

FY2003 Findings: The full scope of forest management practices and philosophy was incorporated in presentations to the public, schools and media during FY2003. Numerous Forest tours, fairs, and festivals were attended providing presentations on National Forest management activities.

FY2004 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.

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

FY2003 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.

FY2004 Recommended Actions: Provide increased funding for environmental education projects, printed materials, and video productions. Increase presentations to civic groups, increase participation with non-profit organizations such as Boy Scouts and Girl Scouts; travel to destinations outside Forest boundary to reach various user groups and work with nontraditional audiences.

C. Organizational Effectiveness

1. ECONOMICS

FY2003 Findings: (See Appendix B)

FY2004 Recommended Actions: Continue providing funds as needed to meet Plan objectives.

2. EVALUATION OF NEW INFORMATION

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

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

FY2003 Findings: Yes, this report documents monitoring results for FY2003 activities and shows recommendations for FY2004. 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>).

FY2004 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)

FY2003 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.

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

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)

FY2003 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 is being conducted.

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

The Forest Service and LSU continued to implement a challenge cost share agreement to help one another accomplish mutually beneficial objectives related to the impacts of off road vehicles (ORV) on soil, water and other resources of the Kisatchie National Forest. The objectives were achieved by utilizing soil properties, rainfall events, soil trafficability ratings, Keetch-Byram Drought Index (KBDI), and infiltration parameters. Various GIS techniques, spatial statistics program, and mathematical models were employed. The spatial variability of KNF soils was determined using the choropleth and summarize zones techniques through ArcView

The current KNF ratings were refined in order to classify the suitability of areas. Reports were prepared containing maps showing suitability ratings for ORV traffic and for the Kisatchie, Catahoula and the Calcasieu Ranger Districts. This study will help the Forest Service determine how to best manage these areas.

Following are some preliminary findings:

- Predicted ORV ownership in LA would double in next 10 yrs.
- Results mainly confirm/support the existing KNF ORV soil suitability ratings
- Their analyses shows that most soils are suitable within the Catahoula District (Livingston) and Evangeline unit (Claiborne) and trails can be maintained.
- Recommend that all the user created and designated trails within Kisatchie RD be closed due to poor soil suitability for ORVs - 49% have severe erosion potential - 11% severe rutting potential
- Recommended closing trails in areas where there is potential erosion and rutting during wet conditions:
 - Close trail if 2 inches of rainfall within about 1 day -- keep trail closed a week after there is no ponded water.
 - Based on seasonal soil moisture data - closures from December through March or April
 - Low KBDI values could be used as a basis for closing the trails in the forest.
- San Dimas Technology and Development Center is conducting a study of ATV impacts on the natural environment. Kisatchie National Forest was selected as a test site.
- The Forest Supervisor has approved a cooperative project with San Dimas TDC to evaluate "Blanket 510" for use as an odor & insect abatement treatment in our "SST's".

Kisatchie NF has maintained a Challenge Cost Share Agreement with Louisiana State University since 2001 to ascertain quail abundance and distribution on the Winn and Caney Districts.

FY2004 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)

FY2003 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

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- Management impacts on soil productivity and the resulting longleaf pine ecosystem
- Effectiveness of the Kisatchie National Forest standards and guidelines in reducing non-point source pollution
- Effectiveness and suitability of poultry litter amendments in restoring disturbed and degraded sites.
- Reducing soil loss due to burning on erosive soils particularly the Kisatchie severely eroded soil type

Kisatchie NF conducted a Challenge Cost Share Agreement with Louisiana State University to ascertain quail abundance and distribution on the Winn and Caney Districts.

FY2004 Recommended Actions: The Kisatchie National Forest should continue to assist the Southern Research Station in ongoing studies. The Forest will help initiate additional studies when requested and as funding allows.

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

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

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

FY2003 Findings: Federal and state agencies are consulted as new proposals are developed and undergo the NEPA process. SHPO and THPO (Tribal Historic Preservation Officials) contribute during the preparation and analysis done EA's. The USFWS and LDWF provide consultation and effects analysis for game and non-game animals potentially affected by project proposals. The Natural Heritage Program (with the LDWF) provides comment on the effects of proposed actions on plants in general, and/or at known locations.

FY2004 Recommended Actions: Coordinate with federal and state agencies as needed.

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

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

FY2003 Findings: The Memorandum of Understanding between the Kisatchie NF and the Louisiana Department of Wildlife and Fisheries needs revision to stress greater cooperation between the two agencies, especially in the establishment of hunting seasons on Kisatchie NF.

Additionally, KNF has a Challenge Cost Share Agreement with Louisiana State University to ascertain quail abundance and distribution on the Winn and Caney Districts.

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 La. on Non-Point Source Pollution Control. (Clean Water Act Section 319)

The KNF continues to conduct water quality monitoring on 9 streams. The monitoring is being 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 states 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 La. Pearlshell Mussel streams.

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

A Hydrologic Condition Assessment (HCA) of the Cane River (Kisatchie Bayou) Watershed was completed. The HCA will be used as a vehicle to collaborate with La. DEQ on the Total Maximum Daily Load process, which is being conducted on Kisatchie Bayou. Kisatchie Bayou, which flows through the Kisatchie RD, is a Section 303d listed (impaired stream) with sedimentation/ turbidity listed as causes.

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

The Kisatchie National Forest has a Participating Agreement with Northwestern State University (NSU). This partnership agreement coordinates one or more graduate level/advanced undergraduate Intern position in NSU's Masters Program in History with Cultural Resource Management emphasis or anthropology program. NSU has a need to provide these Interns with real life experience and training to complement training gained in their academic endeavors while the Forest has need for additional Heritage Resource Management program presence in Natchitoches Parish, specifically the Kisatchie Ranger District. The Forest will achieve an increased level of compliance with NEPA, Sections 106 and 110 of the National Historic Preservation Act and the Southern Regional PA while the 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 that awareness and understanding and through such programs as this, the degradation of archeological and historical sites or values on Forest, state, private and other federal lands in Louisiana, and the data they contain, will diminish.

The Forest Service and LSU established a challenge cost share agreement to help one another accomplish mutually beneficial objectives related to the impacts of off road vehicles (ORV) to soil, water and other resources of the Kisatchie National Forest. The current Kisatchie National Forest ratings will be refined and modified in order to classify the suitability of areas for ORV traffic. These data will be incorporated into the Forest Service's GIS database and should help the Forest Service determine how to best manage these areas.

FY2004 Recommended Actions: Continue to participate in existing agreements. Amend Challenge Cost Share agreement with Louisiana State University to continue ORV study described above. Continue to seek interested partners who wish to participate in implementing the revised Forest Plan.

IV. Evaluation of Outcomes on the Land

This section of the Report evaluates the perceived outcome of the monitoring results for this reporting fiscal year (FY2003). The effectiveness of much of the Plan's direction will be more thoroughly evaluated during the *5-Year Review*, which is scheduled for year 2004 - 2005. Based on monitoring results, the following observations were made:

- An increased emphasis on growing season prescribed burning is helping restoration and enhancement of native plant communities.
- Overall, Kisatchie NF is meeting its goal of providing a biologically diverse ecosystem.
- The Forest's older forested habitat, compared to relatively younger forested habitat off-Forest, is generally beneficial to the rare species on Kisatchie NF.
- Activities from ORVs and urban sprawl continue to threaten Louisiana pearlshell mussel habitat.
- Deer herd densities are too low to provide adequate aesthetic enjoyment for non-consumptive users.
- Most local and collector roads appear to be serviceable by the intended user and require no significant increase in the level or frequency of maintenance.
- Because regeneration harvest levels are less than planned, replacement of off-site plant communities with native communities is not occurring as rapidly as anticipated in the Forest Plan.
- There is still an insufficient supply of firewood to meet local demand.
- Given FY2003 funding and staffing levels, heritage resource managers were not able to satisfy compliance with Section 110 of the NHPA, requiring assessments of NRHP eligibility for all known cultural properties.
- The Forest Service and LSU's challenge cost share agreement to study impacts of ORV use should provide information that will help the Forest Service determine how to best manage use on these areas.

V. Summary of M&E Recommendations Planned for FY2004

This section of the Report provides information on all monitoring items that need action during the current fiscal year (FY2004). In addition to the specific recommended actions listed below, the general recommendation for FY2004 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 several monitoring items that need attention follow:

- Prepare documents addressing management practices, which will be implemented on approximately 10 percent of the Kisatchie National Forest.
- Increase the number of acres burned during the growing season. Increase final harvest cut acres of off-site species on longleaf pine sites so an increase of planted longleaf can occur.
- Prescribe regeneration cuts on off-site stands where there is a high priority for regeneration.
- 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.
- Continue the current prescribed burn program of 125,000 to 150,000 acres per year.
- Establish size and creel limits on the Forest to ensure recruitment and sustainability of the resource.
- Assess hunting season's lengths 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.
- 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.
- Evaluate the feasibility of developing an automated GIS system that would periodically determine the ROS class eligibility of forest lands.
- Dedicate additional resources to comparisons of project plans and Environmental Assessments with SIA Forest Plan direction.
- Continue efforts to hire Lands/Minerals/Special Use Forester to maintain current level and monitor results.
- The Forest still needs to request and receive funding to increase monitoring of heritage sites, with an eye towards using remote sensing-technology to supplement physical monitoring.
- Amend the Forest Plan as new direction is needed or new allocations are required for changing land uses. Continue to collect monitoring data and compile it for the 5-Year Review to be done in FY2004.
- Amend Challenge Cost Share agreement with Louisiana State University to continue ORV study.

VI. Status of FY2002 Monitoring & Evaluation Report Recommendations

✓ Every year continue to prepare documents addressing management practices, which will be implemented on approximately 10 percent of the Kisatchie National Forest ownership. Strive to implement harvesting levels consistent with Plan levels. Increase the number of prescribed burn acres to allow the completion of 125,000 to 150,000 acres per year. Growing season burns are critical for successful gains in our restoration efforts; continue to increase the number of growing season burns. Identify by calendar date when growing season burns begin in the spring and end in the summer. Publish these dates in the fire management handbook.

STATUS in FY2003: Only four percent of the Forest had silvicultural exams completed in 2003. Harvest levels were still below Plan levels. Prescribed burning was increased to 136,551 acres, of which 27% was growing season.

Fire Management Handbook supplements for the Forest will be updated after the Regional Supplement is completed. Growing season burn dates should follow the Louisiana Office of State Climatology climate reports for first and last freeze. Caney RD - March 20th through November 5th, North Winn RD - March 15th through November 10th, Catahoula, Calcasieu and Kisatchie RD's - March 10th through November 15th. However, actual conditions for growing season burns should be based on yearly conditions at the site.

✓ Apply growing season burns on a three year rotation starting with the second growing season after planting. Continue to monitor sites for additional treatment needs. Increase the number of acres burned during the growing season. Increase final harvest cut acres of off-site species on longleaf pine sites so an increase of planted longleaf can occur.

Monitor shortleaf pine plantations in FY2003 for adequate stocking, species composition and for additional treatment needs.

Monitor previously planted loblolly pine plantations for treatment needs.

Monitor management practices being implemented within 150 feet of streamside and riparian area protection zones for compliance with the Forest Plan.

STATUS in FY2003: Growing season burns in 2003 more that doubled previous years. 410 acres were planted to longleaf.

Survival was low due to drought conditions. Replanting was scheduled.

There was increased emphasis on 1st thinning in loblolly plantations, with over 8,000 acres being planned for treatment

Four timber sale units were monitored during random (Best Management Practices) BMP monitoring checks.

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

Continue to adhere to Revised KNF Plan guidance.

STATUS in FY2003: Forest Botanist position remained empty during most of 2003. Direction was not put into action.

Kisatchie NF has a surplus of shortleaf pine/oak-hickory (mid-late stages) and a deficiency of mixed hardwood-loblolly pine (early stages). Amounts of longleaf habitat, shortleaf pine/oak-hickory (early stages), mixed hardwood-loblolly pine (mid-late stages, and riparian habitat are approximately equal to the goals in the revised KNF Forest Plan.

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

Continue bird surveys on Kisatchie NF.

STATUS in FY2003: The transfers of both the Supervisors Office and District botanist/ecologists in FY03 limited progress on MIS work and CCS project. These will continue to be a high priority once vacant positions, especially the Supervisors Office position is re-filled.

Bachman's Sparrows and Acadian Flycatchers might be increasing on the Kisatchie NF. Northern Bobwhites, Prairie Warblers, Eastern Wood-Pewees, Pileated Woodpeckers, Summer Tanagers, Hooded Warblers, Wood Thrushes, White-Breasted Nuthatches, and Worm-Eating Warblers might be decreasing on the KNF. All other KNF MIS appear to have stable populations.

✓ 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 FY2003: RCW habitat management activities such as thinning of foraging habitat and midstory removal on the KNF intensified. RCW coordination work, especially in translocation matters, continued with the USFWS and Louisiana Natural Heritage Program.

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

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

STATUS in FY2003: The Forest dramatically increased the amount of timber harvesting over previous years with 34.1 CCF offered during the year. The highest amount of prescribed burning ever recorded was accomplished in FY2003. A total of approximately 136,511 acres were burned with 37,334 being growing season burns. This represents 27% of total burning program. The Regional supplement to FSM 5140 identifies the dormant season as beginning on November 1 and ending on when new foliage emerges in the spring. However, seasonal weather patterns can significantly influence when new foliage begins to actively grow.

Early successional (0-10 years) pine habitat has diminished significantly since 1999. Older successional pine habitats have increased significantly since 1999. Stand ages for all habitat types generally are older as a result of the diminished timber-harvesting program. The older forested habitat, compared to the relatively younger forested habitat off-Forest, generally is beneficial to the rare species on Kisatchie NF.

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

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

STATUS in FY2003: Overall, the KNF RCW population increased 3.4% from last year.

Louisiana Pearlshell populations appeared to be stable across the Forest. Continue monitoring.

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

STATUS in FY2003: Inventories were made on designated old growth though silvicultural field examinations on the Catahoula in Compartments 57, 58 and 59. Forest Botanist and Silviculturist positions were vacant so they did not visit these sites.

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

STATUS in FY2003: Forest Botanist and Silviculturist positions were vacant so they did not visit these sites.

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

STATUS in FY2003: Less than five percent of the Forest had silvicultural surveys completed in 2003. Silvicultural surveys were focused on Habitat Management Areas (HMAs) during the fiscal year, rather than ten percent of the forest. Streamside habitat protection zones continued to be incorporated into all management decisions. Monitoring of streamside zones by the Forest soils scientist/hydrologist revealed continued protection of the zones. Streamside protection zones were also checked for compliance during random BMP checks.

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

STATUS in FY2003: The highest amount of prescribed burning ever recorded was accomplished in FY2003. A total of approximately 136,511 acres were burned with 37,334 being growing season burns. This represents 27% of total burning program.

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

STATUS in FY2003: Growing season burns in 2003 more that doubled previous years.

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

STATUS in FY2003: The implementation of standards and guidelines for smoke management activities were reviewed on the Calcasieu District.

- ✓ Continue to coordinate with LDEQ Air Quality Dept. on monitoring.

STATUS in FY2003: Monitoring data for ozone continued to be collected at the LDEQ air monitoring station located on the Catahoula Ranger District in Grant Parish. LDEQ continued to

provide information about the status of attainment of National Ambient Air Quality Standards on the KNF.

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

STATUS in FY2003: Funded at 40% of most efficient level. This prevented the KNF from hiring needed positions.

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

STATUS in FY2003: Had no catastrophic wildland fires and no measurable resource damage from wildland fires.

✓ Identify restoration and forest health needs through the inventory process. Complete NEPA documentation that will allow the application of final harvest operations and thinning treatments through timber sales. Continue to implement timber stand improvement treatments, including pre-commercial thinning, where appropriate. Early growing season burns within young longleaf pine plantations are especially beneficial.

STATUS in FY2003: Three watershed project level EA's were completed in FY2003, along with multiple Decision Memos. Proposed were:

- 150 acres of longleaf restoration cuts, with subsequent prescribed burning
- thinning to favor longleaf was proposed on 4,436 acres
- over 8,000 acres of 1st thinning in plantations (mainly loblolly).

Rotational prescribed burning continues to be planned for the majority of pine type forested acres.

✓ Monitor for possible insect and/or disease infestations.

STATUS in FY2003: Three SPB flights were completed in FY2003. No SPB activity was documented.

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

STATUS in FY2003: Four timber removal units on the Winn District and four burn units on the Calcasieu District were randomly selected and rated for compliance with standards and guidelines designed to minimize soil erosion, compaction and loss of soil productivity.

✓ Continue to restore and re-vegetate disturbed areas.

STATUS in FY2003: There were 41 acres of watershed improvement work accomplished in FY2003 with watershed improvement funding and 12 acres with KV funding. Maintenance on FY2002 projects was done, as needed, to shorten recovery times on the 41 acres of projects from the previous year.

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

STATUS in FY2003: Meetings were held with Research staff and Catahoula and Calcasieu District Rangers and staff and a field trip was conducted on the Longleaf Tract to discuss management burning and improving maintenance around the study plots. The process was initiated to contract wood gator work around the plots.

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

STATUS in FY2003: Timber removal operations were monitored on the Winn Ranger District using procedures developed for assessing implementation of Forest Plan standards and guidelines for protection of water quality (Best Management Practices) on October 9, 2002. The review team consisted of KNF District and Supervisor's Office timber staff, the Ecological Conservation Team Leader and Hydrologist/Soil Scientist.

Monitoring prescribed burning activities on the Calcasieu Ranger District was conducted on May 20, 2003. Four burned areas were rated for compliance with BMPs by a review team consisting of the District Ranger, Fire Management Officer and Hydrologist /Soil Scientist.

- ✓ 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 FY2003: The water quality of nine streams on the KNF continued to be monitored quarterly in cooperation with the Louisiana Department of Environmental Quality (LDEQ). The data is being incorporated into the state's Clean Water Act Section 305b Water Quality Inventory (www.deq.state.la.us/surveillance/wqdata/wqnsites.stm). Water samples continued to be collected monthly at sites on three of the streams on the Calcasieu District that are habitat of the threatened Louisiana Pearlshell mussel. Most of the watersheds draining into these streams were burned by the Forest Service in January 2002. Any effects on water quality due to the burning activities in these watersheds and any potential effects on the threatened Louisiana Pearlshell mussel will be analyzed.

Bi-weekly testing of fecal coliform levels at Stuart Lake, Kincaid Lake and Caney Lake swim beaches was continued.

- ✓ Stock threadfin shad in Fullerton and Valentine Lakes to improve the forage base. Continue to monitor and assess (analyze and interpret data) the effectiveness of management strategies on the Forest concerning aquatic resources. Continue to identify any future restoration projects.

STATUS in FY2003: Management plans were implemented to enhance the resource.

- ✓ Stock catfish fingerlings when available. Continue to monitor. Continue restoration and enhancement projects.

STATUS in FY2003: Management plans were implemented to enhance the resource.

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- ✓ 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 FY2003: Deer populations on all districts except the Caney are very low. Wild turkey and squirrel populations are moderate. Bobwhite populations are low nationwide.

- ✓ Accomplish comparison of project designs with SIO guidance after Recreation Assistant is on board.

STATUS in FY2003: Planned projects are in compliance with SIO objectives.

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

STATUS in FY2003: Not accomplished, should be assigned a higher priority.

- ✓ Continue the update of the Meaningful Measures costing spreadsheet data converted to INFRA. Continue management of the recreation program using the Meaningful Measures system.

STATUS in FY2003: Accomplished, Meaningful Measures spreadsheet data was migrated in to INFRA database.

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

STATUS in FY2003: Monitoring of road condition and use indicates that appropriate design standards for reconstruction and construction are being used.

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

STATUS in FY2003: Outreach was confined to previous year's addressees.

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

STATUS in FY2003: Capacity building projects have remained with communities which have applied in the past.

- ✓ Dedicate additional resources to accomplishing Comparisons of project plans and Environmental Assessments with SIA Forest Plan direction.

STATUS in FY2003: Not accomplished due to staffing limitations.

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

STATUS in FY2003: This was accomplished.

- ✓ To reach the level outlined in the Forest Plan will require a time period of between 2-3 years. In FY2003, continue to monitor this situation for an anticipated improvement.

STATUS in FY2003: As the Forest approves more NEPA projects, there should be the opportunity to offer more volumes of forest products for commercial timber sale. This situation should be monitored in order to evaluate the achievement of volume proposed from the KNF Forest Plan.

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

STATUS in FY2003: Growing season burns in FY2003 more that doubled previous years. Three watershed project level EA's were completed, along with multiple Decision Memos. Proposed were: 150 acres of longleaf restoration cuts, with subsequent prescribed burning, thinning to favor longleaf on 4,436 acres, and over 8,000 acres of 1st thinning in plantations (mainly loblolly). Rotational prescribed burning continues to be planned for the majority of pine type forested acres.

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

STATUS in FY2003: Utilization of range allotments continued to be very low in FY2003. Only two allotments remained active. The transfer of the person responsible for range administration prevented any analysis of cost-effectiveness of range expenditures. Additional analysis is expected when the botany-ecologist position is re-filled in the Supervisors Office.

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

STATUS in FY2003: This position is contingent upon the qualifications of the vacant supervisory Lands and Minerals position that is being filled at this time. As soon as the supervisory position is filled we will be advertising the Lands/Minerals/Special Uses position.

- ✓ Continue the current course of pre-decisional inventories and consultations pursuant to Section 106 of the National Historic Preservation Act (NHPA). Continue working with interested tribes to establish required government-to-government relations and partnerships.

STATUS in FY2003: This is occurring.

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

STATUS in FY2003: This is occurring.

- ✓ Current strategies for heritage site and buffer zone delineation appear effective and should be continued.

STATUS in FY2003: This is occurring

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

STATUS in FY2003: Additional funds are not available.

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

STATUS in FY2003: We had 3 PIT projects in FY 2003 and have partnered with LA SHPO in Louisiana Archaeology Week.

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

STATUS in FY2003: Funding was available for PIT projects.

- ✓ 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 FY2003: Done.

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

STATUS in FY2003: The FY2002 Monitoring and Evaluation Report was completed and posted on the Forest and Regional websites in September of 2003.

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

STATUS in FY2003: Amendment #1 was finalized in October 2002. This amendment provides 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.

- ✓ All cooperative studies with the Southern Research Station Unit FMR-4111 are ongoing. Continue studies.

STATUS in FY2003: Cooperation continues.

Kisatchie NF continued a Challenge Cost Share Agreement with Louisiana State University to ascertain quail abundance and distribution on the Winn and Caney Districts. Kisatchie NF initiated a Challenge Cost Share Agreement with the Louisiana Chapter of the National Wild

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Turkey Federation to improve Wild Turkey habitat on the Evangeline, Catahoula, and Winn Districts.

✓ 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.

In addition to the Memorandum of Understanding between the Kisatchie NF and the Louisiana Department of Wildlife and Fisheries and a Challenge Cost Share Agreement with Louisiana State University to ascertain quail abundance and distribution on the Winn and Caney Districts, continue accommodating interested partners who wish to participate in implementing the revised Forest Plan.

In addition to the Participating Agreement with Northwestern State University (NSU) and a Participating Agreement with the Louisiana Division of Archaeology (the Division), continue to accommodate interested partners who wish to form partnerships, cooperative agreements, memorandums of agreements consistent to Forest Plan goals and objectives.

Continue to participate in existing agreements with 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). Amend Challenge Cost Share agreement with Louisiana State University to continue ORV study described above. Continue to seek interested partners who wish to participate in implementing the revised Forest Plan.

STATUS in FY2003: Cooperation continues. Monitoring was continued according to a cooperative arrangement with LDEQ under the KNF's MOA with the State. LDEQ was invited to attend KNF Best Management Practices monitoring reviews. The Cane River (Kisatchie Bayou) Hydrological Condition Analyses was prepared and coordinated with the LDEQ. LDEQ Water Quality Assessment Staff and Total Maximum Daily Load coordinator provided substantial input for the assessment. The Forest Service and LSU amended the challenge cost share agreement to continue the ORV study.

The effect of deer dog training and hunting on Kisatchie NF, while all other Louisiana public lands remain closed to these activities, remains an issue that needs investigation. The Memorandum of Understanding between the Kisatchie NF and the Louisiana Department of Wildlife and Fisheries, signed in 1985, needs revision according to USFS R8. The Challenge Cost Share Agreement with Louisiana State University to ascertain quail abundance and distribution on the Winn and Caney Districts and the Challenge Cost Share Agreement with the Louisiana Chapter of the National Wild Turkey Federation continue.

Appendix A

Comparison of FY2003 Budget with Revised Plan Annual Budget

| <u>Budget Line Item</u> | <u>Plan EBLI</u> | <u>Plan Budget Estimate</u> | <u>FY2003 EBLI</u> | <u>FY2003 Budget</u> | <u>FY2003 Difference</u> |
|--|------------------|-----------------------------|--------------------|----------------------|--------------------------|
| Ecosystem Planning, Inventory, Monitoring | | | | | \$ (228,396) |
| Ecosystem management | NFEM | \$ 701,915 | N/A | \$ - | |
| Inventory and monitoring | *** | - | NFIM | 379,282 | |
| Land management planning | *** | - | NFPN | 94,237 | |
| Recreation Use | | | | | (103,667) |
| Recreation management | NFRM | 966,303 | N/A | - | |
| Wilderness management | NFWM | 53,813 | N/A | - | |
| Heritage resources | NFHR | 233,972 | N/A | - | |
| Recreation, Heritage, Wilderness | *** | - | NFRW | 834,772 | |
| Cooperative work - other | CWFS | 35,096 | CWFS | - | |
| Trails, Capital Improvements & Mtce. | *** | - | CMTL | 237,745 | |
| Recreation fee collection | *** | - | FEFR | - | |
| Fee Demo - collection | *** | - | FDCL | 13,000 | |
| Fee Demo - projects | *** | - | FDSD | 100,000 | |
| Rangeland Management | | | | | (361,646) |
| Range management | NFRG | 70,192 | NFRG | 26,635 | |
| Range vegetation management | NFRV | 163,780 | N/A | - | |
| Cooperative work - KV | CWKV | 233,972 | CWKV | 79,662 | |
| Wildlife and Fish Management | | | | | (1,613,845) |
| Wildlife habitat operations and improvement | NFWL | 256,199 | N/A | - | |
| Wildlife and fisheries management | *** | - | NFWF | 755,389 | |
| Inland fish operations and improvement | NFIF | 105,287 | N/A | - | |

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| <u>Budget Line Item</u> | <u>Plan EBLI</u> | <u>Plan Budget Estimate</u> | <u>FY2003 EBLI</u> | <u>FY2003 Budget</u> | <u>FY2003 Difference</u> |
|--|------------------|-----------------------------|--------------------|----------------------|--------------------------|
| T&E species operations and improvement | NFTE | 618,855 | N/A | - | |
| Cooperative work - KV | CWKV | 2,078,839 | CWKV | 719,193 | |
| Cooperative work - other | CWFS | 29,246 | CWFS | - | |
| Forestland Management | | | | | (4,029,770) |
| Timber management | NFTM | 2,807,661 | NFTM | 1,458,014 | |
| Forest vegetation management | NFFV | 498,360 | N/A | - | |
| Vegetation and watershed management | *** | - | NFVW | 472,804 | |
| Reforestation trust fund | RTRT | 128,684 | RTRT | 21,093 | |
| Cooperative work - KV | CWKV | 1,637,802 | CWKV | 847,520 | |
| Timber roads - purchaser election | PEPE | 62,003 | PEPE | - | |
| Timber roads - purchaser construction | PUCR | 1,403,830 | N/A | - | |
| Timber salvage sales | SSSS | 315,862 | SSSS | - | |
| Forest health protection | *** | - | SPS4 | 25,000 | |
| Timber pipeline - Rec. backlog | *** | - | TPCD | - | |
| Timber pipeline - Sale prep. | *** | - | TPPS | - | |
| Soil, Water and Air Management | | | | | (404,463) |
| Soil, water, air operations | NFSO | 76,041 | N/A | - | |
| Soil and water improvement | NFSI | 106,457 | N/A | - | |
| Cooperative work - KV | CWKV | 54,983 | CWKV | 18,818 | |
| Cooperative work - other | CWFS | 233,972 | CWFS | 48,172 | |
| Hazardous waste management | *** | - | HWHW | - | |
| Minerals and Geology Management | | | | | (58,004) |
| Minerals | NFMG | 374,355 | NFMG | 316,351 | |
| Land Ownership Management | | | | | 7,238 |
| Lands - real estate management | NFLA | 216,424 | N/A | - | |
| Landline location | NFLL | 163,780 | N/A | - | |
| Landownership management | *** | - | NFLM | 387,442 | |

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| <u>Budget Line Item</u> | <u>Plan EBLI</u> | <u>Plan Budget Estimate</u> | <u>FY2003 EBLI</u> | <u>FY2003 Budget</u> | <u>FY2003 Difference</u> |
|---|------------------|-----------------------------|--------------------|----------------------|--------------------------|
| Rural Development | | | | | 52,800 |
| Resource conservation and development | *** | - | RCRC | - | |
| Economic recovery program | *** | - | SPEA | 5,000 | |
| State fire assistance | *** | - | SPFH | - | |
| Coop.lands forest health mgt. | *** | - | SPCH | - | |
| Urban community forestry | *** | - | SPUF | 47,800 | |
| Forest stewardship | *** | - | SPST | - | |
| Construction | | | | | 1,236,227 |
| Recreation construction | CNRF | 1,362,885 | N/A | - | |
| Trail construction | CNTR | 62,003 | N/A | - | |
| Roads reconstruction and construction | CNRD | 1,099,667 | N/A | - | |
| Facilities capital improv & mtce | *** | - | CMFC | 2,023,956 | |
| Roads capital improv & mtce | *** | - | CMRD | 1,736,826 | |
| Facilities capital improv and mtce (Title IV funds) | *** | - | CMC2 | - | |
| Land Acquisition | | | | | (39,993) |
| Land acquisition - L&W Cons. Fund | LALW | 58,493 | LALW | 18,500 | |
| Forest Service Fire Protection | | | | | 885,621 |
| Forest fire pre-suppression | WFPR | 1,023,626 | WFPR | 813,871 | |
| Forest fuel reduction | WFHF | 584,929 | WFHF | 1,422,306 | |
| Hazardous Fuel Reduction (Title IV funds) | *** | - | WFW3 | - | |
| Vegetation treatments to improve condition class | *** | - | NFCC | 258,000 | |
| Infrastructure Management | | | | | (993,415) |
| Road maintenance and decommissioning | CNRM | 948,755 | CMII | 325,500 | |
| Maintenance of facilities | NFFA | 238,651 | N/A | - | |
| Backlog mtce of facilities (Title VIII funds) | *** | - | DMDM | - | |
| Cooperative work - other | CWFS | 409,450 | CWFS | 143,844 | |

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| <u>Budget Line Item</u> | <u>Plan EBLI</u> | <u>Plan Budget Estimate</u> | <u>FY2003 EBLI</u> | <u>FY2003 Budget</u> | <u>FY2003 Difference</u> |
|--|------------------|-----------------------------|--------------------|----------------------|--------------------------|
| Federal highway program | *** | - | HTAE | 6,700 | |
| Federal Highway Public Roads | *** | - | HTRP | - | |
| Operations & maintenance - FS quarters | *** | - | QMQM | 8,846 | |
| Reforestation of forest lands | *** | - | RIRI | - | |
| Roads and trails for states (10% Fund) | *** | - | TRTR | 118,552 | |
| General Administration | | | | | 1,460,114 |
| General administration | NFGA | 1,467,003 | N/A | - | |
| Cooperative work - KV | CWKV | 889,093 | CWKV | 371,265 | |
| Cooperative work - other | CWFS | 115,816 | CWFS | 56,384 | |
| Timber - salvage sales | SSSS | 56,153 | SSSS | - | |
| Operations & maintenance - FS quarters | QMQM | 23,397 | QMQM | - | |
| Indirect cost pools | *** | - | N/A | 3,097,706 | |
| Roads and trails for states (10% Fund) | *** | - | TRTR | 47,195 | |
| Reforestation trust fund | *** | - | RTRT | 28,388 | |
| Law enforcement | *** | - | NFLE | - | |
| Senior citizens employment program | *** | - | NFSD | 410,638 | |
| External Agreements | | | | | 374,000 |
| External agents | *** | - | NFEX | 374,000 | |
| Total (in FY2003 dollars) | | \$ 21,967,604 | | 18,150,406 | \$ (3,817,198) |

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).

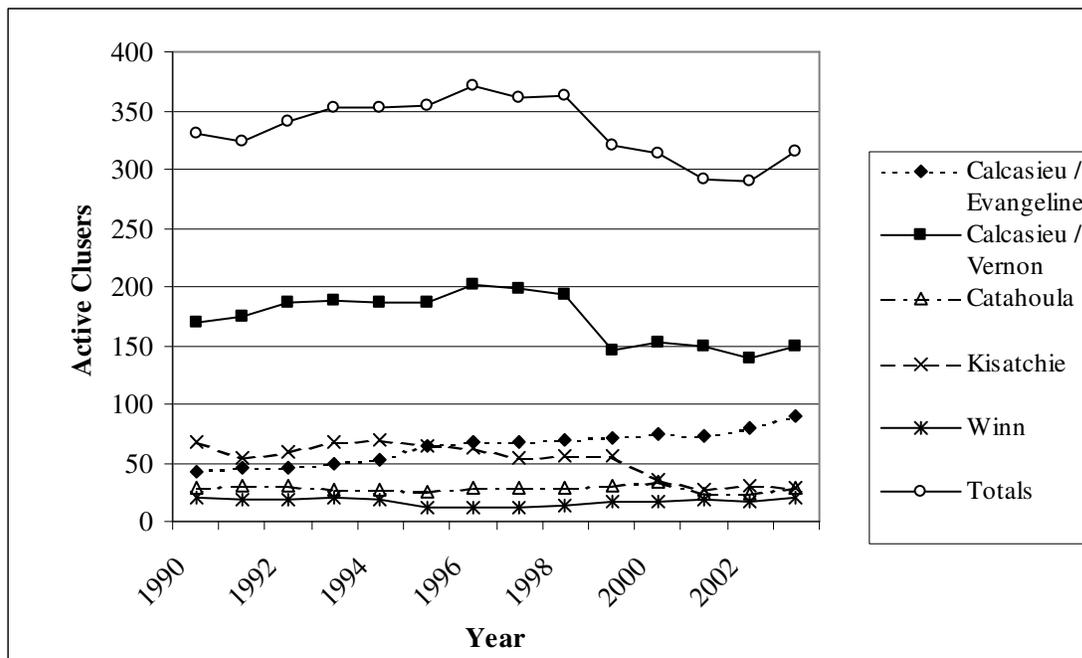
| Common Name | Kisatchie National Forest | | | |
|-------------------------|---------------------------|-------------------|----------|-------------|
| | Upper Coastal Plain | State - Louisiana | BBS Data | Forest Data |
| Acadian Flycatcher | = = | = = | = = | = = |
| Bachman’s Sparrow | = = | - | - | = = |
| Cooper’s Hawk | = = | = | NA | = |
| Eastern Wood-pewee | - | = = | = = | - |
| Hooded Warbler | = = | = = | = = | = = |
| Kentucky Warbler | = = | - | = = | + |
| Louisiana Waterthrush | = = | = | = | = |
| Northern Bobwhite | - | - | - | = = |
| Northern Parula | = = | = = | = | = = |
| Pileated Woodpecker | = = | = = | = = | + |
| Prairie Warbler | = = | - | = | - |
| Red-cockaded Woodpecker | + | = | = | - |
| Red-headed Woodpecker | = = | = = | = | = = |
| Summer Tanager | = = | = = | = = | = = |
| Warbling Vireo | + | NA | NA | = |
| White-breasted Nuthatch | = = | NA | NA | = |
| White-eyed Vireo | = = | - | = = | = = |
| Wood Thrush | - | = = | - | = = |
| Worm-eating Warbler | + | - | = | = = |
| Yellow-billed Cuckoo | - | = = | + | = = |

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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

List of Preparers

| <u>Name</u> | <u>Title</u> |
|-------------------|--|
| Cynthia Dancak | <i>Team Leader – Ecosystem Assessment/Planning</i> |
| Thomas M. Webb | <i>Team Leader – Public Uses and Services</i> |
| Ed Bratcher | <i>Team Leader – Fire, Lands, Minerals, Safety</i> |
| Calvin Baker | <i>Team Leader – Ecosystem Conservation Management</i> |
| Jim Caldwell | <i>Public Affairs</i> |
| Carl Brevelle | <i>Forester/Resource Planner</i> |
| Deberoah Collins | <i>Financial Manager</i> |
| Velicia Bergstrom | <i>Forest Archeologist</i> |
| Michael Miller | <i>Forest Landscape Architect</i> |
| Mike Dawson | <i>Forester/Timber Sales Specialist</i> |
| John Nobles | <i>Forester/Fire Management Officer</i> |
| Ken Dancak | <i>Forest Wildlife Biologist</i> |
| John Novosad | <i>Forest Soil Scientist & Hydrologist</i> |
| Jo Ann Smith | <i>Forest Silviculturist</i> |
| [Vacant] | <i>Forest Botanist</i> |
| David Byrd | <i>Forest Fisheries Biologist</i> |
| [Vacant] | <i>Zone Geologist</i> |
| Don Ranne | <i>Forester/Lands & Special Uses</i> |