

APPENDIX E

MONITORING TASKS

This appendix contains the detailed monitoring task sheets referred to in Chapter 5. These task sheets are used to develop the details, priorities and budgets for answering the monitoring questions. Estimated costs for a monitoring task does not include data collection for data bases and reports which are maintained routinely, irrespective of Forest Plan requirements. The task sheets will be modified as new techniques, methods, or approaches are developed. Changes to the task sheets will not require a Forest Plan amendment. Significant changes to these task sheets will be communicated to the public by the Annual Monitoring and Evaluation (M&E) Report. To the fullest extent possible, ongoing research will be included.

Task sheets are a tool used to facilitate monitoring and do not contain all information on methods of collection and analysis. For example: conclusions about population trends for MIS species and their relationship to habitat are developed through a variety of approaches (page E-48). The approaches include:

1. Measurement of habitat conditions and trends (i.e. the amount and condition of habitat over time) for species for which the relationship between population measures and habitat are well known so that trends in habitat provide a reliable indication of population trends.
2. The use of population occurrence and presence/absence data to improve knowledge of species distribution, relative abundance, and habitat relationships. These measures repeated over time, may provide information on trends in distribution and relative abundance.
3. The use of population indices to track relative population trends. These indices are not actual population estimates, but are aimed at reflecting trends or possibly relative abundance for a species. Examples could include state hunting/fishing information, track counts, and bird point counts. Some of this information may also be useful in validating species/habitat relationships.
4. Actual population estimates and demographic information based on 100% population counts or sampling. This is the most intensive and rigorous methodology usually reserved for some federally listed species or high risk globally impaired species selected as MIS.
5. Development of research studies with the objective of determining species/habitat relationships, and species response to the types of habitat change created through land management activities.

Monitoring Task Sheet

Goal/DFC: 1 5 _____

 _____ _____ _____

 _____ _____ _____

Objective: _____ 1 _____

 _____ _____ _____

Standard: _____ _____ _____

 _____ _____ _____

Monitoring purpose:
 Question(s): Are people satisfied with service from the national forests in Florida?

Monitoring item: Public survey.
 Public complaints received as congressionals, as letters, or verbally.

Range of acceptable results: Baseline

 Reliability: Moderate Precision: Moderate

Collection of Information

Who collects: Public Affairs (PA), all Staff areas
 (district, research, co-op, etc.)

Method of collection: Public survey distributed as widely as possible in Florida.
 (specific) Tally of complaints received.

Time and frequency of collection: Survey every 2-5 years, annually monitor complaints.

Source of data (field, research, data base, etc.): PA files for complaints, survey.

Cost of collections: \$5,000

Analysis/Evaluation of Findings

Who conducts: Public Affairs, Planning Interdisciplinary (ID) Team

Method of analysis: To be determined in survey data.

Results:

Within range of acceptable results:		Y	N
Monitoring purpose achieved:		Y	N
Further monitoring required:		Y	N
Recommended actions:	Y	N	

Recommended actions implemented: (Date)

Cost of A/E: \$1,000

Total cost of monitoring: \$6,000

Report of Findings

Information to be reported: Results of survey, number and summary of complaints.

Frequency of report: 2-5 years, survey, annually for complaints

Method of reporting: 5-year review, results of survey, Annual M&E Report, complaints

Target audience for report: General

Monitoring Task Sheet

Goal/DFC: 2 _____ The public participates in planning, management,
and monitoring of the national forests in Florida.

Objective: 2 _____

Standard: _____

Monitoring purpose:
Question(s): How much public participation do we have?

Monitoring item: Status report on public involvement efforts

Range of acceptable results: Baseline

Reliability: Moderate Precision: Moderate

Collection of Information

Who collects: Public Affairs, Planning Staff
(district, research, co-op, etc.)

Method of collection: During a 3-month time frame, analyze participation in all public forums.
(specific) Summarize sample of public involvement on selected projects.

Time and frequency of collection: 2-5 year public forum, annually, NEPA documentation.

Source of data (field, research, data base, etc.): Public forums, NEPA documentation,
mailing lists, comment letters.

Cost of collections: \$2,500

Analysis/Evaluation of Findings

Who conducts: Public Affairs, Planning ID Team

Method of analysis: Determine if all groups are represented and if participants represent
a cross-section of Florida's demographics.

Results:

Within range of acceptable results:	Y	N
Monitoring purpose achieved:	Y	N
Further monitoring required:	Y	N
Recommended actions:	Y	N

Recommended actions implemented: _____ (Date)

Cost of A/E: \$1,000

Total cost of monitoring: \$3,500

Report of Findings

Information to be reported: Summary of public involvement efforts.

Frequency of report: Annually

Method of reporting: Annual M&E Report

Target audience for report: General

Monitoring Task Sheet

Goal/DFC: 3 4 Partnership with other national forests, agencies, tribal governments, organizations, groups, and local communities provide a collaborative approach to national forest management.

Objective: 2

Standard:

Monitoring purpose:
 Question(s): Have partnerships been strengthened?

Monitoring item: Status report on projects initiated and completed with partnerships

Range of acceptable results: Baseline

Reliability: Moderate Precision: Moderate

Collection of Information

Who collects: Public Affairs
 (district, research, co-op, etc.)

Method of collection: Survey of partners
 (specific)

Time and frequency of collection: Every 2-5 years

Source of data (field, research, data base, etc.): Survey

Cost of collections: \$2,500

Analysis/Evaluation of Findings

Who conducts: Public Affairs, Planning ID Team

Method of analysis: To be determined in survey design.

Results:

Within range of acceptable results:	Y	N
Monitoring purpose achieved:	Y	N
Further monitoring required:	Y	N
Recommended actions:	Y	N

Recommended actions implemented: (Date)

Cost of A/E: \$1,000

Total cost of monitoring: \$3,500

Report of Findings

Information to be reported: Status report of partnerships

Frequency of report: 2-5 years

Method of reporting: 5-year review

Target audience for report: General

Monitoring Task Sheet

Goal/DFC: 5 _____ _____ _____ _____ _____ Economic benefits from wood products are maintained, while benefits from wildlife and recreation are a larger proportion of forest benefits.

Objective: _____ _____ _____ _____ _____ _____ _____ _____

Standard: _____ _____ _____ _____ _____ _____ _____ _____

Monitoring purpose:
 Question(s): How are we contributing to the socioeconomic well-being?

Monitoring item: Returns to counties, direct and indirect benefits through timber, recreation, range, minerals, and special uses.

Range of acceptable results: Baseline

Reliability: Moderate Precision: Moderate

Collection of Information

Who collects: Planning Staff, Budget & Finance
 (district, research, co-op, etc.)

Method of collection: Payment to States Report, run IMPLAN model with annual timber, wildlife & fish user-day and recreation visitor-day outputs.
 (specific)

Time and frequency of collection: Annually

Source of data (field, research, data base, etc.): Payment to States Report, IMPLAN, Sale Tracking and Reporting System (STARS), Recreation Information Management (RIM).

Cost of collections: \$2,000

Analysis/Evaluation of Findings

Who conducts: Planning ID Team

Method of analysis: Establish trends at end of 5th year and assess needs.

Results:

Within range of acceptable results:		Y	N
Monitoring purpose achieved:	Y		N
Further monitoring required:	Y		N
Recommended actions:	Y	N	

Recommended actions implemented: (Date)

Cost of A/E: \$500

Total cost of monitoring: \$2,500

Report of Findings

Information to be reported: Returns to counties, IMPLAN results, total fees collected.

Frequency of report: Annually

Method of reporting: Annual M&E Report

Target audience for report: General

Monitoring Task Sheet

Goal/DFC: 5 _____ Economic diversity of the local economy is increased.

 Objective: _____
 Standard: _____
 Monitoring purpose:
 Question(s): What rural development programs have been implemented?
 Monitoring item: Status report
 Range of acceptable results: Baseline
 Reliability: High Precision: High

Collection of Information

Who collects: Planning Staff
 (district, research, co-op, etc.)
 Method of collection: Assemble status report on rural development programs.
 (specific)
 Time and frequency of collection: Annually
 Source of data (field, research, data base, etc.): Rural development files
 Cost of collections: \$1,000

Analysis/Evaluation of Findings

Who conducts: Planning ID Team
 Method of analysis: Compare programs implemented with needs and opportunities.
Project future needs.
 Results:
 Within range of acceptable results: Y N
 Monitoring purpose achieved: Y N
 Further monitoring required: Y N
 Recommended actions: Y N
 Recommended actions implemented: (Date)
 Cost of A/E: \$1,000
 Total cost of monitoring: \$2,000

Report of Findings

Information to be reported: Rural Development Status Report
 Frequency of report: Annually
 Method of reporting: Annual M&E Report
 Target audience for report: General

Monitoring Task Sheet

Goal/DFC: 6 8 Management of forest vegetation focuses on maintaining
9 10 or restoring the natural range of diversity in age, species,

Objective: 3 _____

Standard: VG-16 _____

Monitoring purpose:
Question(s): How much off-site slash pine has been restored to other types?

Monitoring item: Acres type-converted from slash pine forest type to other types.

Range of acceptable results: Within objective range.

Reliability: High Precision: High

Collection of Information

Who collects: Ecosystem Staff, District Silviculturist
(district, research, co-op, etc.)
Method of collection: Manual data report by District Silviculturist
(specific)
Time and frequency of collection: Annually
Source of data (field, research, data base, etc.): Field records
Cost of collections: \$375

Analysis/Evaluation of Findings

Who conducts: Ecosystem Staff, Planning ID Team
Method of analysis: Compare acreage to objective at end of 5th year.
If outside acceptable range, determine cause.
Results:
Within range of acceptable results: Y N
Monitoring purpose achieved: Y N
Further monitoring required: Y N
Recommended actions: Y N
Recommended actions implemented: (Date)
Cost of A/E: \$125
Total cost of monitoring: \$500

Report of Findings

Information to be reported: Acres of off-site slash pine restored to other forest types.

Frequency of report: Annually
Method of reporting: Annual M&E Report
Target audience for report: General

Monitoring Task Sheet

Goal/DFC:	<u>6</u>	<u>8</u>	<u>Soil productivity is maintained. National forests sustain timber harvesting without impairing the health of ecosystems.</u>
	<u>9</u>	<u>10</u>	
	<u> </u>	<u> </u>	
	<u> </u>	<u> </u>	
Objective:	<u> </u>	<u> </u>	<u> </u>
Standard:	<u>VG-18</u>	<u> </u>	<u> </u>
Monitoring purpose:	<u> </u>		
Question(s):	<u>Has soil disturbance been minimized in preparing longleaf and slash pine sites for tree regeneration?</u>		
Monitoring item:	<u>Percent of the area treated with soil displacement.</u>		
Range of acceptable results:	<u>No more than 10% of the area treated with soil displacement as result of the treatment.</u>		
	Reliability:	<u>Moderate</u>	Precision: <u>Moderate</u>

Collection of Information

Who collects:	<u>Ecosystem Staff, District Silviculturist, Botanist</u>		
	<u>(district, research, co-op, etc.)</u>		
Method of collection:	<u>Sample plots in area treated to determine percent of soil surface displaced</u>		
	<u>(specific)</u>		
Time and frequency of collection:	<u>Annually</u>		
Source of data (field, research, data base, etc.):	<u>Field</u>		
Cost of collections:	<u>\$ 1,000</u>		

Analysis/Evaluation of Findings

Who conducts:	<u>Ecosystem Staff, Planning ID Team</u>		
Method of analysis:	<u>Sort by site-preparation method and report findings.</u>		
Results:	<u> </u>		
Within range of acceptable results:	<u> </u>	<u>Y</u>	<u>N</u>
Monitoring purpose achieved:	<u> </u>	<u>Y</u>	<u>N</u>
Further monitoring required:	<u> </u>	<u>Y</u>	<u>N</u>
Recommended actions:	<u>Y</u>	<u>N</u>	<u> </u>
Recommended actions implemented:	<u>(Date)</u>		
Cost of A/E:	<u>\$3,000</u>		
Total cost of monitoring:	<u>\$4,000</u>		

Report of Findings

Information to be reported:	<u>Acres treated using ground-disturbing site-prep method and the percent of soil displacement in the treated areas.</u>		
Frequency of report:	<u>Annually</u>		
Method of reporting:	<u>Annual M&E Report</u>		
Target audience for report:	<u>General</u>		

Monitoring Task Sheet

Goal/DFC: 6 8 Vegetation patterns reflect natural disturbances, as well as
 9 10 planned harvest activities. Management of forest vegetation
 _____ _____ focuses on maintaining or restoring the natural range of di-
 _____ _____ versity in age, species, and conditions for ecosystem health.
 _____ _____ _____

Objective: _____ _____ _____

Standard: _____ _____ _____

Monitoring purpose:
 Question(s): Are we collecting data on understory structure?

Monitoring item: Stands with understory data in Continuous Inventory of Stand
 Conditions (CISC) data base.

Range of acceptable results: Increasing trend in stands with data collected.

Reliability: High Precision: High

Collection of Information

Who collects: Ecosystem Staff
 (district, research, co-op, etc.)

Method of collection: Query CISC data base for stands with understory codes,
 (specific) sort by category.

Time and frequency of collection: Annually

Source of data (field, research, data base, etc.): CISC data base

Cost of collections: \$375

Analysis/Evaluation of Findings

Who conducts: Ecosystem Staff, Planning ID Team

Method of analysis: Compare stands with understory codes at the end of 5th year.
 Should be an increasing trend (only if not currently being coded).

Results:

Within range of acceptable results:	Y	N
Monitoring purpose achieved:	Y	N
Further monitoring required:	Y	N
Recommended actions:	Y	N

Recommended actions implemented: (Date)

Cost of A/E: \$125

Total cost of monitoring: \$500

Report of Findings

Information to be reported: Acres by understory category, percent of stand with
 information.

Frequency of report: Annually

Method of reporting: Annual M&E Report

Target audience for report: General

Monitoring Task Sheet

Goal/DFC: 6 8 Longleaf pine ecosystems are burned frequently during
9 10 growing season to mimic the extent, duration, and
_____ _____ intensity fire naturally played in this ecosystem.

Objective: 4 _____

Standard: _____

Monitoring purpose:
 Question(s): What is the burning interval of upland pine acres?

Monitoring item: Acres of upland pine burned.

Range of acceptable results: A 3-year average interval over a 10-year period.

Reliability: Moderate Precision: High

Collection of Information

Who collects: Fire Staff, Districts
 (district, research, co-op, etc.)

Method of collection: Existing records.
 (specific) Enter burning records into Geographic Information System (GIS).
Query from GIS.

Time and frequency of collection: Annually

Source of data (field, research, data base, etc.): Historic prescribed burn records,
data base.

Cost of collections: \$500

Analysis/Evaluation of Findings

Who conducts: Fire Staff, Planning ID Team

Method of analysis: Compare actual accomplishments with objective at end of 5th year.
If outside acceptable range, determine cause.

Results:

Within range of acceptable results:	Y	N
Monitoring purpose achieved:	Y	N
Further monitoring required:	Y	N
Recommended actions:	Y	N

Recommended actions implemented: (Date)

Cost of A/E: \$200

Total cost of monitoring: \$700

Report of Findings

Information to be reported: Percent of longleaf acres burned in last 3 years.

Frequency of report: Annually

Method of reporting: Annual M&E Report

Target audience for report: General

Monitoring Task Sheet

Goal/DFC: 6 8 Longleaf pine ecosystems are burned frequently during
 9 10 growing season to mimic the extent, duration, and
 _____ _____ intensity fire naturally played in this ecosystem.
 _____ _____ _____
 _____ _____ _____

Objective: 4 _____ _____

Standard: _____ _____ _____

Monitoring purpose:
 Question(s): In what months have upland pine acres been burned?

Monitoring item: Acres burned by month.

Range of acceptable results: Increasing trend toward 50% between March 15 and
 September 30 and 20% between May 1 and July 31.
 Reliability: High Precision: High

Collection of Information

Who collects: Fire Staff, Districts
 (district, research, co-op, etc.)

Method of collection: Existing records.
 (specific) Enter burning records into GIS. Query GIS.

Time and frequency of collection: Annually

Source of data (field, research, data base, etc.): Data base, historic records

Cost of collections: \$500

Analysis/Evaluation of Findings

Who conducts: Fire Staff, Planning ID Team

Method of analysis: Compare actual results with objective at end of 5th year.
 If outside acceptable range, determine cause.

Results:

Within range of acceptable results:		Y	N
Monitoring purpose achieved:	Y		N
Further monitoring required:	Y		N
Recommended actions:	Y	N	

Recommended actions implemented: (Date)

Cost of A/E: \$200

Total cost of monitoring: \$700

Report of Findings

Information to be reported: Percent of acres burned between March 15 and
 September 30.

Frequency of report: Annually

Method of reporting: Annual M&E Report

Target audience for report: General

Monitoring Task Sheet

Goal/DFC:	<u>6</u>	<u>8</u>	<u>Vegetation patterns reflect natural disturbances, as well as planned harvest activities. Longleaf and slash pine stands contain different ages, sizes, and densities of trees.</u>
	<u>9</u>	<u>10</u>	
	<u> </u>	<u> </u>	
	<u> </u>	<u> </u>	
Objective:	<u>6</u>	<u> </u>	<u> </u>
Standard:	<u> </u>	<u> </u>	<u> </u>
Monitoring purpose:	<u>On how many acres have we initiated uneven-aged management harvests?</u>		
Question(s):	<u> </u>		
Monitoring item:	<u>Number of acres offered with uneven-aged management harvest.</u>		
Range of acceptable results:	<u>Within objective range.</u>		
	Reliability:	<u>High</u>	Precision: <u>High</u>

Collection of Information

Who collects:	<u>Ecosystem Staff, District Staff</u>		
	<u>(district, research, co-op, etc.)</u>		
Method of collection:	<u>Query STARS data base.</u>		
	<u>(specific)</u>		
Time and frequency of collection:	<u>Annually</u>		
Source of data (field, research, data base, etc.):	<u>STARS data base.</u>		
Cost of collections:	<u>\$375</u>		

Analysis/Evaluation of Findings

Who conducts:	<u>Ecosystem Staff, Planning ID Team</u>		
Method of analysis:	<u>Compare results with objective at end of 5th year.</u>		
	<u>If outside acceptable range, determine reason.</u>		
Results:			
Within range of acceptable results:		Y	N
Monitoring purpose achieved:	Y		N
Further monitoring required:	Y		N
Recommended actions:	Y	N	
Recommended actions implemented:	<u>(Date)</u>		
Cost of A/E:	<u>\$125</u>		
Total cost of monitoring:	<u>\$500</u>		

Report of Findings

Information to be reported:	<u>Acres offered with uneven-aged harvest.</u>		
Frequency of report:	<u>Annually</u>		
Method of reporting:	<u>Annual M&E Report</u>		
Target audience for report:	<u>General</u>		

Monitoring Task Sheet

Goal/DFC: 6 8 Vegetation patterns reflect natural disturbances, as
9 10 well as planned harvest activities.

Objective: 18 _____

Standard: _____

Monitoring purpose:
Question(s): On how many acres have we initiated irregular shelterwood harvests?

Monitoring item: Number of acres offered with irregular shelterwood

Range of acceptable results: Within objective range.

Reliability: High Precision: High

Collection of Information

Who collects: Ecosystem Staff, District Staff
(district, research, co-op, etc.)
Method of collection: Query STARS data base
(specific)
Time and frequency of collection: Annually
Source of data (field, research, data base, etc.): STARS data base
Cost of collections: \$ 375

Analysis/Evaluation of Findings

Who conducts: Ecosystem Staff, Planning ID Team
Method of analysis: Compare results with objective at end of 5th year.

Results:
Within range of acceptable results: Y N
Monitoring purpose achieved: Y N
Further monitoring required: Y N
Recommended actions: Y N
Recommended actions implemented: (Date)
Cost of A/E: \$200
Total cost of monitoring: \$250

Report of Findings

Information to be reported: Acres offered with irregular shelterwood harvest.

Frequency of report: Annually
Method of reporting: Annual M&E Report
Target audience for report: General

Monitoring Task Sheet

Goal/DFC: 11 _____ Management and attributes of significant botanical, scenic, geological, and historical/cultural sites and resources are interpreted.

Objective: _____

Standard: _____

Monitoring purpose:
 Question(s): Do forest visitors understand Forest Service (FS) management practices and do they value and respect the resources being interpreted?

Monitoring item: Number of interpretive facilities/opportunities per district and their level of quality.

Range of acceptable results: More than or equal to 2 facilities at each district that meet or exceed Meaningful Measures (MM) Standards.
 Reliability: High Precision: High

Collection of Information

Who collects: Forest Interpretive Specialist
 (district, research, co-op, etc.)

Method of collection: Observation/Evaluation
 (specific)

Time and frequency of collection: Once every 2 years per district.

Source of data (field, research, data base, etc.): Field visits

Cost of collections: \$2,600/year

Analysis/Evaluation of Findings

Who conducts: Forest Interpretive Specialist

Method of analysis: Compare findings to MM standards established for interpretive facilities.

Results:

Within range of acceptable results:	Y	N
Monitoring purpose achieved:	Y	N
Further monitoring required:	Y	N
Recommended actions:	Y	N

Recommended actions implemented: (Date)

Cost of A/E: \$

Total cost of monitoring: \$2,600/year

Report of Findings

Information to be reported: Compliance to MM Standards and number of facilities.

Frequency of report: Every 2 years for each district

Method of reporting: Annual M&E Report

Target audience for report: General

Monitoring Task Sheet

Goal/DFC: 12 _____

 Objective: 11 _____

 Standard: _____

 Monitoring purpose:
 Question(s): What percent of each type of recreation sites are accessible? (Level 3+)

 Monitoring item: Percentage of level 3 developed recreation facilities in compliance and number of ADA accessible swim areas, hiking trails, & fishing/boating piers.

 Range of acceptable results: As stated in objective.

 Reliability: High Precision: High

Collection of Information

Who collects: Forest Accessibility Coordinator
 (district, research, co-op, etc.)
 Method of collection: Field visits/observation
 (specific)
 Time and frequency of collection: Cover every district every 3 years.
 Source of data (field, research, data base, etc.): _____
 Cost of collections: \$1,000/year

Analysis/Evaluation of Findings

Who conducts: Forest Accessibility Coordinator
 Method of analysis: Compare to ADA standards.

 Results:
 Within range of acceptable results: Y N
 Monitoring purpose achieved: Y N
 Further monitoring required: Y N
 Recommended actions: Y N
 Recommended actions implemented: (Date)
 Cost of A/E: \$ _____
 Total cost of monitoring: \$1,000/year

Report of Findings

Information to be reported: Level of compliance to ADA and Objective #11 (above).

 Frequency of report: Every 3 years per district
 Method of reporting: Annual M&E Report
 Target audience for report: General

Monitoring Task Sheet

Goal/DFC: 14 _____ Many areas and a variety of trails provide semiprimitive recreational opportunities.

Objective: 13 & 14 _____

Standard: _____

Monitoring purpose:
 Question(s): What system of trails has been designated on the ground and are they maintained at the appropriate level?
 Monitoring item: Miles of trails by type and condition.

Range of acceptable results: Baseline

 Reliability: High Precision: High

Collection of Information

Who collects: Recreation Staff
 (district, research, co-op, etc.)

Method of collection: Query infrastructure data base. Verify with each district.
 (specific)

Time and frequency of collection: Annually

Source of data (field, research, data base, etc.): Infrastructure data base, field reviews.

Cost of collections: \$2,500

Analysis/Evaluation of Findings

Who conducts: Recreation Staff, Planning ID Team

Method of analysis: Establish baseline.

Results:

Within range of acceptable results:		Y	N
Monitoring purpose achieved:	Y		N
Further monitoring required:	Y		N
Recommended actions:	Y	N	

Recommended actions implemented: (Date)

Cost of A/E: \$500

Total cost of monitoring: \$3,000

Report of Findings

Information to be reported: Miles of trails established by type and condition.

Frequency of report: Annually

Method of reporting: Annual M&E Report

Target audience for report: General

Monitoring Task Sheet

Goal/DFC: 14 _____ Most of the Florida National Scenic Trail (FNST) is
 _____ dedicated to long-term public use.

Objective: 13, 14 _____

Standard: _____

Monitoring purpose:
 Question(s): How many miles of FNSTrail have been certified for public use?

Monitoring item: Miles of FNST certified for public use.

Range of acceptable results: ≥ 750 miles

Reliability: High Precision: High

Collection of Information

Who collects: Recreation Staff
 (district, research, co-op, etc.)

Method of collection: Review certification agreements.
 (specific)

Time and frequency of collection: Annually

Source of data (field, research, data base, etc.): Certification agreements.

Cost of collections: \$ _____

Analysis/Evaluation of Findings

Who conducts: Recreation Staff, Planning ID Team

Method of analysis: Compare amount to objective at end of 5th year.
If outside range of acceptable results, determine cause.

Results:

Within range of acceptable results:		Y	N
Monitoring purpose achieved:	Y		N
Further monitoring required:		Y	N
Recommended actions:	Y	N	

Recommended actions implemented: _____ (Date)

Cost of A/E: \$100

Total cost of monitoring: \$100

Report of Findings

Information to be reported: Miles of FNST certified for public use.

Frequency of report: Annually

Method of reporting: Annual M&E Report

Target audience for report: General

Monitoring Task Sheet

Goal/DFC: 15 Several rivers are added to the National Wild and Scenic Rivers System.

Objective: _____

Standard: _____

: _____

Monitoring purpose: _____

Question(s): Have rivers been recommended as wild and scenic, and what is their status?

Monitoring item: Status of Record of Decision (ROD)/Legislative EIS.

Range of acceptable results: Recommend = yes

Reliability: High Precision: High

Collection of Information

Who collects: Recreation Staff, Forest Planner
(district, research, co-op, etc.)

Method of collection: Track status of Regional Office (RO) and Washington Office (WO) actions on this recommendation of the ROD.

Time and frequency of collection: Quarterly

Source of data (field, research, data base, etc.): Planning, Legislative Affairs contact in RO and WO.

Cost of collections: \$100

Analysis/Evaluation of Findings

Who conducts: Recreation Staff, Planning ID Team

Method of analysis: If Legislative EIS for the Forest Plan ROD has not been written within 5 years, meet with WO staff to develop EIS to recommend to Congress.

Results:

Within range of acceptable results:	Y	N
Monitoring purpose achieved:	Y	N
Further monitoring required:	Y	N
Recommended actions:	Y	N

Recommended actions implemented: _____ (Date)

Cost of A/E: \$600 (GS-11 for 3 days)

Total cost of monitoring: \$700

Report of Findings

Information to be reported: Status report of wild and scenic river recommendation.

Frequency of report: Annually

Method of reporting: Annual M&E Report

Target audience for report: General

Monitoring Task Sheet

Goal/DFC: 16 _____ Additional areas are added to the wilderness system.

 Objective: _____
 Standard: _____
 Monitoring purpose:
 Question(s): Have wilderness opportunities been increased and has Clear Lake been recommended for wilderness status?
 Monitoring item: Status of ROD/Legislative EIS.
 Range of acceptable results: Recommend = yes
 Reliability: High Precision: High

Collection of Information

Who collects: Recreation Staff, Forest Planner
 (district, research, co-op, etc.)
 Method of collection: Track status of RO and WO actions on this recommendation of the ROD.
 (specific)
 Time and frequency of collection: Quarterly
 Source of data (field, research, data base, etc.): Planning, Legislative Affairs contact in RO and WO.
 Cost of collections: \$100

Analysis/Evaluation of Findings

Who conducts: Recreation Staff, Planning ID Team
 Method of analysis: If Legislative EIS for the Forest Plan ROD has not been written within 5 years, meet with WO staff to develop EIS to recommend to Congress.
 Results:
 Within range of acceptable results: Y N
 Monitoring purpose achieved: Y N
 Further monitoring required: Y N
 Recommended actions: Y N
 Recommended actions implemented: _____ (Date)
 Cost of A/E: \$600 (GS-11 for 3 days)
 Total cost of monitoring: \$700

Report of Findings

Information to be reported: Status report of wilderness recommendation.
 Frequency of report: Annually
 Method of reporting: Annual M&E Report
 Target audience for report: General

Monitoring Task Sheet

Goal/DFC: 16 _____ Forests provide a refuge and tranquil retreat for people.

 Objective: _____
 Standard: _____
 Monitoring purpose:
 Question(s): Has wilderness character been protected?
 Monitoring item: Percent of land in primitive and semiprimitive Recreation Opportunity Spectrum (ROS) classes. Ecosystem plots, number of obstacles and number of wildlife sightings on canoe trails.
 Range of acceptable results: Baseline
 Reliability: Moderate Precision: High

Collection of Information

Who collects: Districts, Recreation Staff
 (district, research, co-op, etc.)
 Method of collection: Reinventory of wilderness ecosystem plots, review ROS data base, talley of obstacles, wildlife sightings, and canoe spacing quarterly.
 (specific)
 Time and frequency of collection: Ecosystem plots every 3 years, trail observations, quarterly.
 Source of data (field, research, data base, etc.): Field data and GIS data base
 Cost of collections: \$8,300

Analysis/Evaluation of Findings

Who conducts: Recreation Staff, Planning ID Team
 Method of analysis: Determine changes in ecosystem plots, % changes in ROS classes as land is acquired or exchanged. Establish baseline for obstacles and wildlife viewing. Evaluate canoe spacing related to complaints.
 Results:
 Within range of acceptable results: Y N
 Monitoring purpose achieved: Y N
 Further monitoring required: Y N
 Recommended actions: Y N
 Recommended actions implemented: (Date)
 Cost of A/E: \$600
 Total cost of monitoring: \$8,900

Report of Findings

Information to be reported: Baseline ecosystem plot data, trends in ROS class changes. Baseline data for canoe experiences.
 Frequency of report: 5 years for ecosystem and ROS data, annually for canoe trail data
 Method of reporting: 5-year review, Annual M&E Report
 Target audience for report: General

Monitoring Task Sheet

Goal/DFC: 6 7 Nutrient levels and nutrient-cycling processes continue to function.

 Objective: _____
 Standard: WL-21 _____

 Monitoring purpose:
 Question(s): Which water bodies were fertilized?

 Monitoring item: Report which water bodies were fertilized.

 Range of acceptable results: Within standards.

 Reliability: High Precision: High

Collection of Information

Who collects: Ecosystem Staff
 (district, research, co-op, etc.)
 Method of collection: Survey
 (specific) _____
 Time and frequency of collection: Yearly
 Source of data (field, research, data base, etc.): Districts
 Cost of collections: \$500

Analysis/Evaluation of Findings

Who conducts: Ecosystem Staff, Planning ID Team
 Method of analysis: Survey

 Results:
 Within range of acceptable results: Y N
 Monitoring purpose achieved: Y N
 Further monitoring required: Y N
 Recommended actions: Y N
 Recommended actions implemented: (Date)
 Cost of A/E: \$500
 Total cost of monitoring: \$1,000

Report of Findings

Information to be reported: Water bodies fertilized.

 Frequency of report: Annually
 Method of reporting: Annual M&E Report
 Target audience for report: General

Monitoring Task Sheet

Goal/DFC: 5 _____

 Objective: _____

 Standard: VG-33 _____

 Monitoring purpose:
 Question(s): How much of each "special forest product" did we give permits to be collected and in what locations?
 Monitoring item: Quantity of each type, ranger district, and compartment.
 Range of acceptable results: Baseline
 Reliability: High Precision: High

Collection of Information

Who collects: Districts, Ecosystem Staff
 (district, research, co-op, etc.)
 Method of collection: Manual examination of each permit to record type product, quantity, and location.
 (specific)
 Time and frequency of collection: Every 6 months
 Source of data (field, research, data base, etc.): Individual permits
 Cost of collections: \$950/year

Analysis/Evaluation of Findings

Who conducts: Ecosystem Staff, Planning ID Team
 Method of analysis: Establish trends after 5th year.
Determine if any mitigating actions are needed.
 Results:
 Within range of acceptable results: Y N
 Monitoring purpose achieved: Y N
 Further monitoring required: Y N
 Recommended actions: Y N
 Recommended actions implemented: (Date)
 Cost of A/E: \$200
 Total cost of monitoring: \$1,150

Report of Findings

Information to be reported: Quantity of each product and location.
 Frequency of report: Annually
 Method of reporting: Annual M&E Report
 Target audience for report: General

Monitoring Task Sheet

Goal/DFC: 5 _____

 National forests sustain timber harvesting without
 impairing the health of ecosystems. The forests
 continue to produce large, quality pine sawtimber
 products.

Objective: 5, 6, 7, & 10 _____

Standard: VG-29 _____

Monitoring purpose:
 Question(s): How much timber was offered for sale? _____

Monitoring item: Thousand cubic feet (MCF) of timber offered annually by type, product,
 and forest. _____

Range of acceptable results: Not to exceed average annual allowable sale quantity (ASQ). _____

Reliability: High Precision: High

Collection of Information

Who collects: Ecosystem Staff _____
 (district, research, co-op, etc.)

Method of collection: Query STARS, ATSA (Automated Timber Sale Accounting), and
 (specific) FLSALE data bases. _____

Time and frequency of collection: Annually _____

Source of data (field, research, data base, etc.): STARS, ATSA, & FLSALE data bases. _____

Cost of collections: \$125 _____

Analysis/Evaluation of Findings

Who conducts: Ecosystem Staff, Planning ID Team _____

Method of analysis: Compare results with ASQ at end of 5th year.
 If outside acceptable range, determine reason. _____

Results:

Within range of acceptable results:	Y	N
Monitoring purpose achieved:	Y	N
Further monitoring required:	Y	N
Recommended actions:	Y	N

Recommended actions implemented: (Date) _____

Cost of A/E: \$125 _____

Total cost of monitoring: \$250 _____

Report of Findings

Information to be reported: MCF of timber products offered by forest. _____

Frequency of report: Annually _____

Method of reporting: Annual M&E Report _____

Target audience for report: General _____

Monitoring Task Sheet

Goal/DFC: 6 7 Fire plays an increased role in maintaining many upland forest ecosystems. Soil productivity is maintained.
8 9

 Objective: _____

 Standard: FI-7 & FI-8

 Monitoring purpose:
 Question(s): How many miles of firelines were plowed for prescribed fire and wildfires?
How many miles were restored to natural conditions?
 Monitoring item: Miles of plowed firelines for prescribed fire and wildfire.
Miles of plowed firelines restored.
 Range of acceptable results: Baseline, decreasing trend for plowed line construction.
Increasing trend for plowed line restoration.
 Reliability: Moderate Precision: Low

Collection of Information

Who collects: Districts, Fire Staff
 (district, research, co-op, etc.)
 Method of collection: Estimate from prescribed burn maps and wildfire information. Map
 (specific) wheel measure prescribed burn maps. Incident Commander (IC)
estimate on wildfires.
 Time and frequency of collection: Annually
 Source of data (field, research, data base, etc.): Office review
 Cost of collections: \$500

Analysis/Evaluation of Findings

Who conducts: Fire Staff, Planning ID Team
 Method of analysis: Compare results at end of 5th year.
If outside acceptable range, determine cause.
 Results:
 Within range of acceptable results: Y N
 Monitoring purpose achieved: Y N
 Further monitoring required: Y N
 Recommended actions: Y N
 Recommended actions implemented: (Date)
 Cost of A/E: \$200
 Total cost of monitoring: \$700

Report of Findings

Information to be reported: Miles of plowed firelines for prescribed fire and wildfire by forest. Miles of plowed lines restored.
 Frequency of report: Annually
 Method of reporting: Annual M&E Report
 Target audience for report: General

Monitoring Task Sheet

Goal/DFC: _____

 Objective: _____

 Standard: LA-8 through
LA-15
 Monitoring purpose:
 Question(s): Are special-use permits in compliance and if not, what actions are taken?
 Monitoring item: Special-use permits in noncompliance.
Report of actions taken.
 Range of acceptable results: Adequate action taken to bring permits in compliance.
 Reliability: High Precision: High

Collection of Information

Who collects: Districts, Lands Staff
 (district, research, co-op, etc.)
 Method of collection: Lands staff assemble cases in noncompliance.
 (specific)
 Time and frequency of collection: Annually
 Source of data (field, research, data base, etc.): Special-use Permit files
 Cost of collections: \$500

Analysis/Evaluation of Findings

Who conducts: Lands Staff, Planning ID Team
 Method of analysis: Review permits and in noncompliance, report of action taken.
Determine if permit is in compliance or what further action is needed.
 Results:
 Within range of acceptable results: Y N
 Monitoring purpose achieved: Y N
 Further monitoring required: Y N
 Recommended actions: Y N
 Recommended actions implemented: (Date)
 Cost of A/E: \$500
 Total cost of monitoring: \$1,000

Report of Findings

Information to be reported: Cases in noncompliance and action taken.
 Frequency of report: Annually
 Method of reporting: Annual M&E Report
 Target audience for report: General

Monitoring Task Sheet

Goal/DFC: 7 15 Water quality is maintained and, in some cases,
 _____ _____ improved.
 _____ _____ _____
 _____ _____ _____
 _____ _____ _____

Objective: _____

Standard: WA-1 through
 WA-7 _____

Monitoring purpose:
 Question(s): Is water quality being maintained at swim sites?

Monitoring item: Fecal coliform - swim sites.

Range of acceptable results: Within State water quality criteria.

Reliability: Moderate Precision: High

Collection of Information

Who collects: District Staff
 (district, research, co-op, etc.)

Method of collection: Grab samples
 (specific) 20 stations

Time and frequency of collection: Biweekly, May through September

Source of data (field, research, data base, etc.): Field

Cost of collections: \$6,000

Analysis/Evaluation of Findings

Who conducts: County Laboratory

Method of analysis: Membrane filter technique.

Results:

Within range of acceptable results:		Y	N
Monitoring purpose achieved:	Y		N
Further monitoring required:	Y		N
Recommended actions:	Y	N	

Recommended actions implemented: (Date)

Cost of A/E: \$10,000

Total cost of monitoring: \$16,000

Report of Findings

Information to be reported: Summary of sample data.

Frequency of report: Annually

Method of reporting: Annual M&E Report

Target audience for report: General

Monitoring Task Sheet

Goal/DFC: 7 15 Water quality is maintained and, in some cases, improved.
 ____ ____ ____
 ____ ____ ____
 ____ ____ ____
 Objective: _____

 Standard: _____

 Monitoring purpose:
 Question(s): Is groundwater quality being maintained?

 Monitoring item: Potable water (drinking water) sources.
 Recreation areas and administration sites.

 Range of acceptable results: Zero coliform

 Reliability: Moderate Precision: High

Collection of Information

Who collects: District Staff
 (district, research, co-op, etc.)
 Method of collection: Grab sample
 (specific) _____
 Time and frequency of collection: Monthly
 Source of data (field, research, data base, etc.): Field
 Cost of collections: \$19,350

Analysis/Evaluation of Findings

Who conducts: County, private, or Department of Environmental Protection Laboratory
 Method of analysis: Membrane filter technique.

 Results:
 Within range of acceptable results: Y N
 Monitoring purpose achieved: Y N
 Further monitoring required: Y N
 Recommended actions: Y N
 Recommended actions implemented: _____
 (Date)
 Cost of A/E: \$6,450
 Total cost of monitoring: \$25,800

Report of Findings

Information to be reported: Summary of data.

 Frequency of report: Monthly
 Method of reporting: Annual M&E Report
 Target audience for report: General

Monitoring Task Sheet

Goal/DFC: 6 _____ _____ Air quality is maintained, although portions of the forests may experience some temporary reduction.
_____ _____ _____
_____ _____ _____
_____ _____ _____
Objective: _____ _____ _____
Standard: WA-8 & WA-9 _____ _____
_____ _____ _____
Monitoring purpose:
Question(s): Is air quality being maintained? _____
_____ _____ _____
Monitoring item: Ozone injury to vegetation. _____
_____ _____ _____
Range of acceptable results: None to slight. Reevaluate if injury rises to moderate. _____
_____ _____ _____
Reliability: Moderate Precision: Moderate

Collection of Information

Who collects: Ecosystem Staff _____
(district, research, co-op, etc.)
Method of collection: Vegetation surveys _____
(specific)
Time and frequency of collection: Five-year survey. Protocol to be developed. _____
Source of data (field, research, data base, etc.): Field _____
\$1,000/year/sit
Cost of collections: e _____

Analysis/Evaluation of Findings

Who conducts: Ecosystem Staff, Planning ID Team _____
Method of analysis: Determine significance of injury and causes. _____
_____ _____ _____
Results:
Within range of acceptable results: _____ Y N
Monitoring purpose achieved: _____ Y N
Further monitoring required: _____ Y N
Recommended actions: _____ Y N
Recommended actions implemented: (Date) _____
Cost of A/E: \$1,000
Total cost of monitoring: \$4,000

Report of Findings

Information to be reported: Summary of analysis. _____
_____ _____ _____
Frequency of report: 5 years
Method of reporting: 5-year review
Target audience for report: General

Monitoring Task Sheet

Goal/DFC: 6 _____ _____ Air quality is maintained, although portions of the
_____ _____ forests may experience some temporary reduction.
_____ _____ _____
_____ _____ _____

Objective: _____ _____ _____
_____ _____ _____

Standard: WA-8 & WA-9 _____ _____
_____ _____ _____

Monitoring purpose:
 Question(s): Is air quality being maintained? _____
_____ _____ _____

Monitoring item: Particulates _____
_____ _____ _____

Range of acceptable results: Within State air quality standards. _____
_____ _____ _____

Reliability: Moderate Precision: High _____

Collection of Information

Who collects: Ecosystem Staff, Cooperative Partner _____
 (district, research, co-op, etc.)

Method of collection: PM 10 sampler operated by partnership with State. _____
 (specific)

Time and frequency of collection: Continuous through fire season for 5 years. _____

Source of data (field, research, data base, etc.): Field _____
\$2,000/year/sit

Cost of collections: e _____

Analysis/Evaluation of Findings

Who conducts: Ecosystem Staff, Planning ID Team _____

Method of analysis: Determine reason for any samples outside standards. _____
_____ _____ _____

Results:

Within range of acceptable results:		Y	N
Monitoring purpose achieved:	Y		N
Further monitoring required:	Y		N
Recommended actions:	Y	N	

Recommended actions implemented: (Date) _____

Cost of A/E: \$1,000 _____

Total cost of monitoring: \$7,000 _____

Report of Findings

Information to be reported: Summary of sample date and analysis. _____
_____ _____ _____

Frequency of report: 5 years _____

Method of reporting: 5-year review _____

Target audience for report: General _____

Monitoring Task Sheet

Goal/DFC: 6 _____

 Objective: _____

 Standard: _____

 Monitoring purpose:
 Question(s): What are the effects of cattle grazing on the vegetation?

 Monitoring item: Biotic index along a transect. Include a transect across fence lines.

 Range of acceptable results: No significant change in vegetation over time.

 Reliability: Moderate Precision: Moderate

Collection of Information

Who collects: District Ecosystem Staff, Research
 (district, research, co-op, etc.)
 Method of collection: Census transects
 (specific)
 Time and frequency of collection: Growing season, every 2 years.
 Source of data (field, research, data base, etc.): Field/data base
 Cost of collections: \$400/year

Analysis/Evaluation of Findings

Who conducts: District Ecosystem Staff
 Method of analysis: Compare relative abundance of plant species as well as actual number of proposed, endangered, threatened, or sensitive species (PETS) plants.
 Results:
 Within range of acceptable results: Y N
 Monitoring purpose achieved: Y N
 Further monitoring required: Y N
 Recommended actions: Y N
 Recommended actions implemented: _____ (Date)
 Cost of A/E: \$100
 Total cost of monitoring: \$500/year

Report of Findings

Information to be reported: Effects of cattle grazing on vegetation.

 Frequency of report: 5 years
 Method of reporting: 5-year review
 Target audience for report: General

Monitoring Task Sheet

Goal/DFC: 5 _____ A higher proportion of roads are closed to motorized travel than in previous decades.

Objective: 13 _____

Standard: _____

Monitoring purpose:
 Question(s): How many miles of system roads have been converted to another use or otherwise closed?

Monitoring item: Miles of roads reduced and deleted in transportation inventory system (TIS) updates.

Range of acceptable results: 2-3% reduction of miles annually.

Reliability: Moderate Precision: Moderate

Collection of Information

Who collects: Districts, Engineering Staff
 (district, research, co-op, etc.)

Method of collection: Engineering zones track changes in system roads year-round.
 (specific)

Time and frequency of collection: Annual inventory update.

Source of data (field, research, data base, etc.): Actual field data

Cost of collections: \$5,100/year

Analysis/Evaluation of Findings

Who conducts: Planning Staff, Engineering Staff

Method of analysis: Evaluate TIS records against trends in road closures/redesignations.

Results:

Within range of acceptable results:	Y	N
Monitoring purpose achieved:	Y	N
Further monitoring required:	Y	N
Recommended actions:	Y	N

Recommended actions implemented: _____ (Date)

Cost of A/E: \$100 (pull -up report)

Total cost of monitoring: \$5,200

Report of Findings

Information to be reported: Miles of road deleted in TIS update.

Frequency of report: 5 years

Method of reporting: 5-year review

Target audience for report: General

Monitoring Task Sheet

Goal/DFC: 6 _____ Sand pine scrub forests are characterized by large, even-aged stands.

 Objective: 9 _____
8.1-3 & 8.2-3 _____
 Standard: _____

 Monitoring purpose:
 Question(s): What is the size of openings in sand pine? _____
 Monitoring item: Size of openings. _____
 Range of acceptable results: None exceed maximum size (160 or 320 acres). _____
Increase toward maximum size _____
 Reliability: High Precision: High (for size)
Low High (for distribution)

Collection of Information

Who collects: Ecosystem Staff _____
 (district, research, co-op, etc.)
 Method of collection: Query CISC and GIS for stand size. _____
 (specific)
 Time and frequency of collection: Annually _____
 Source of data (field, research, data base, etc.): CISC and GIS _____
 Cost of collections: \$125 _____

Analysis/Evaluation of Findings

Who conducts: Ecosystem Staff, Planning ID Team _____
 Method of analysis: Compare average size of openings at end of 5th year. _____
If not an increasing trend, determine reason. _____
 Results:
 Within range of acceptable results: Y N
 Monitoring purpose achieved: Y N
 Further monitoring required: Y N
 Recommended actions: Y N
 Recommended actions implemented: (Date) _____
 Cost of A/E: \$125 _____
 Total cost of monitoring: \$250 _____

Report of Findings

Information to be reported: Average size of openings. _____

 Frequency of report: Annually _____
 Method of reporting: Annual M&E Report _____
 Target audience for report: General _____

Monitoring Task Sheet

Goal/DFC:	<u>6</u>	<u>8</u>	<u>Adequate habitat is provided for threatened, endangered, and sensitive species so populations are no longer considered at risk.</u>
	<u>9</u>	<u>10</u>	
Objective:	<u>8 & 21</u>		
Standard:			
Monitoring purpose:			
Question(s):	<u>Are we maintaining red-cockaded woodpecker (RCW) populations on the Apalachicola, Ocala, and Osceola NFs?</u>		
Monitoring item:	<u>Number of active groups, number of nesting groups, compartment group survey per EIS.</u>		
Range of acceptable results:	<u>500 clusters, stable to increasing, Apalachicola; 150 increasing, Wakulla; 45 increasing, Osceola; 4 increasing, Ocala.</u>		
	Reliability:	<u>High</u>	Precision: <u>High</u>

Collection of Information

Who collects:	<u>District Biologist</u>
	(district, research, co-op, etc.)
Method of collection:	<u>Field survey, RCW guidelines</u>
	(specific)
Time and frequency of collection:	<u>Annually, April-June</u>
Source of data (field, research, data base, etc.):	<u>Field</u>
Cost of collections:	<u>\$110,000/year</u>

Analysis/Evaluation of Findings

Who conducts:	<u>District Biologist, SO Biologist</u>		
Method of analysis:	<u>Tally number of active clusters and percent of nesting success.</u>		
Results:			
Within range of acceptable results:		Y	N
Monitoring purpose achieved:		Y	N
Further monitoring required:		Y	N
Recommended actions:	Y	N	
Recommended actions implemented:		<u>(Date)</u>	
Cost of A/E:	<u>\$1,000/year</u>		
Total cost of monitoring:	<u>\$111,000/year</u>		

Report of Findings

Information to be reported:	<u>Number of active clusters and percent of nesting success.</u>
Frequency of report:	<u>Annually</u>
Method of reporting:	<u>Annual M&E Report</u>
Target audience for report:	<u>General</u>

Monitoring Task Sheet

Goal/DFC: 6 7 Adequate habitat is provided for threatened, endan-
8 9 gered, and sensitive species so populations are no
10 18 longer considered at risk.

Objective: 3, 4, 5, 6
7, 8, & 9

Standard: VG-27, WL-1
through WL-
19

Monitoring purpose:
 Question(s): Are we maintaining viable populations of PETS animal species and
habitats to support them?

Monitoring item: Number of PETS animals and related habitats.

Range of acceptable results: Population at least at baseline levels, any increase acceptable.
with low viability ranking due to lack of information will have a monitoring design
that provides high to moderate reliability/precision results.

Reliability: Moderate Precision: Moderate

Collection of Information

Who collects: District Staff, SO Staff, Research Staff, State Cooperators
 (district, research, co-op, etc.)

Method of collection: Specific methods for each species.
 (specific)

Time and frequency of collection: Annually

Source of data (field, research, data base, etc.): Field, research, data base

Cost of collections: \$40,000

Analysis/Evaluation of Findings

Who conducts: Ecosystem Staff, Planning ID Team

Method of analysis: Compare populations with previous inventories. Correlate trends
with habitat changes, if possible evaluate vigor of population.

Results:
 Within range of acceptable results: Y N
 Monitoring purpose achieved: Y N
 Further monitoring required: Y N
 Recommended actions: Y N

Recommended actions implemented: (Date)

Cost of A/E: \$7,000

Total cost of monitoring: \$47,000

Report of Findings

Information to be reported: Population trend of PETS animals.

Frequency of report: 5 years

Method of reporting: 5-year review

Target audience for report: General

Monitoring Task Sheet

Goal/DFC:	<u>6</u>	<u>7</u>	<u>Adequate habitat is provided for threatened, endangered, and sensitive species so populations are no longer considered at risk.</u>
	<u>8</u>	<u>9</u>	
	<u>10</u>	<u>18</u>	
Objective:	<u>3, 4, 5, 6, 7</u>		
Standard:	<u>VG-1, -15, -16, -34, -35, -36</u>		
Monitoring purpose:			
Question(s):	<u>Are we maintaining viable populations of PETS plant species and the habitats to support them?</u>		
Monitoring item:	<u>Locations and numbers of PETS plant populations.</u>		
Range of acceptable results:	<u>Populations should remain at baseline level or increase. Species with low viability ranking due to lack of information will have a monitoring design that provides high to moderate reliability/precision results.</u>		
	Reliability:	<u>Moderate</u>	Precision: <u>Moderate</u>

Collection of Information

Who collects:	<u>SO and District Ecosystem Management Staff</u> (district, research, co-op, etc.)		
Method of collection:	<u>Permanent monitoring plots.</u> (specific) <u>Seasonally/Annually</u>		
Time and frequency of collection:	<u>Annually</u>		
Source of data (field, research, data base, etc.):	<u>Field/data base</u>		
Cost of collections:	<u>\$6,000/year</u>		

Analysis/Evaluation of Findings

Who conducts:	<u>Ecosystem Staff, Planning ID Team</u>		
Method of analysis:	<u>Compare number of individuals in populations monitored with previous inventories. If reduced, determine cause.</u>		
Results:			
Within range of acceptable results:		<u>Y</u>	<u>N</u>
Monitoring purpose achieved:		<u>Y</u>	<u>N</u>
Further monitoring required:		<u>Y</u>	<u>N</u>
Recommended actions:	<u>Y</u>	<u>N</u>	
Recommended actions implemented:	<u>(Date)</u>		
Cost of A/E:	<u>\$400</u>		
Total cost of monitoring:	<u>\$6,400/year</u>		

Report of Findings

Information to be reported:	<u>Population trends for PETS plants/delistings.</u>		
Frequency of report:	<u>5 Years</u>		
Method of reporting:	<u>5-year review</u>		
Target audience for report:	<u>General</u>		

Monitoring Task Sheet

Goal/DFC: 6 7 Health of natural communities is being maintained
8 9 or improved.
10 18 _____

 Objective: 3-9 & 18-21 _____
 Standard: _____

Monitoring purpose:
 Question(s): Is the health of natural forest communities being maintained or improved?

 Monitoring item: Indicator species/conditions determined to indicate community health
within the various communities? (Table 5.2 and Table 5.3)

 Range of acceptable results: Community health should be improved/maintained.
Indicator species trends should be stable or increasing.
 Reliability: Moderate Precision: Moderate

Collection of Information

Who collects: Supervisor's Office, District Staff
 (district, research, co-op, etc.)
 Method of collection: Censusing of vegetative plots shown in Table 5.3.
 (specific) Sampling of indicator species as outlined in Table 5.3.
 Time and frequency of collection: 5 years
 Source of data (field, research, data base, etc.): Field/data base
 Cost of collections: \$40,000/year

Analysis/Evaluation of Findings

Who conducts: Supervisor's Office, District Staff, or Contractor
 Method of analysis: Compare community structure/composition with previous data.
Evaluate indicator species trends with activities.
 Results:
 Within range of acceptable results: Y N
 Monitoring purpose achieved: Y N
 Further monitoring required: Y N
 Recommended actions: Y N
 Recommended actions implemented: (Date)
 Cost of A/E: \$7,800
 Total cost of monitoring: \$47,800/year

Report of Findings

Information to be reported: Trends toward achieving DFCs.
Population trends of indicator species.
 Frequency of report: 5 years
 Method of reporting: 5-year review
 Target audience for report: General

Monitoring Task Sheet

Goal/DFC: 17 _____ Significant botanical, scenic, geological, and cultural/
 _____ historical sites are protected, managed, and
 _____ interpreted.

Objective: _____ 15 _____ Evaluate for significance 5 archeological sites each
 _____ year.

Standard: HE-1 through _____
HE-17 _____

Monitoring purpose:
 Question(s): Are heritage resource sites being evaluated and protected? _____

Monitoring item: Number of sites evaluated. _____
Report on protection efforts. _____

Range of acceptable results: ≥ 5 evaluations per year. _____

Reliability: High Precision: High

Collection of Information

Who collects: Heritage Staff _____
 (district, research, co-op, etc.)

Method of collection: Evaluation reports to State Historic Preservation Office _____
 (specific)

Time and frequency of collection: Annually _____

Source of data (field, research, data base, etc.): Integrating data from documents into GIS. _____

Cost of collections: \$5,000 _____

Analysis/Evaluation of Findings

Who conducts: Heritage Staff, Planning ID Team _____

Method of analysis: Annual accomplishment report reviewed. _____
If not within acceptable range, make recommendations. _____

Results:

Within range of acceptable results:		Y	N
Monitoring purpose achieved:	Y		N
Further monitoring required:		Y	N
Recommended actions:	Y	N	

Recommended actions implemented: _____ (Date) _____

Cost of A/E: \$1,000 _____

Total cost of monitoring: \$6,000 _____

Report of Findings

Information to be reported: Number of sites evaluated, protection efforts. _____

Frequency of report: Annually _____

Method of reporting: Annual M&E Report _____

Target audience for report: General _____

Monitoring Task Sheet

Goal/DFC: 6 8 An adaptive, ecological approach is used in multiple-use man-
9 10 agement by blending the needs of people with environmental
_____ _____ values to ensure that forest ecosystems are diverse, healthy,
_____ _____ productive, and sustainable.

Objective: 6 _____
Standard: VG-9, -10, -11, _____
-12, -13, -17, -21 _____

Monitoring purpose:

Question(s): Is the group selection method producing the anticipated desired conditions in the
longleaf pine ecosystem & what are the effects of group selection harvests in longleaf pine?

Monitoring item: Tree stem diameter and frequency, seed crops, regeneration and survival,
seedling growth and development, pine midstory development and distribution, costs and
returns of implementation, costs and effects of burning within harvest units, plant species
frequency and distribution, PETS species population trends/habitat conditions, manage-
ment indicator species (MIS) plant/animal population trends/habitat conditions.

Range of acceptable results: Researchers and partners will be involved in determining the
appropriate and needed trigger points for changing management.

Reliability: Moderate Precision: Moderate

Collection of Information

Who collects: District Staff, Forest Staff, Forest Research, Partners, Collaborators
(district, research, co-op, etc.)

Method of collection: Monitoring will be designed to allow comparison of effects to desired
(specific) community conditions, MIS and PETS population trends/habitat conditions
between areas treated with group selection vs. areas not treated.

Time and frequency of collection: To be determined later.

Source of data (field, research, data base, etc.): Field and research

Cost of collections: Unknown

Analysis/Evaluation of Findings

Who conducts: Planning Staff, Planning ID Team, Research, Partners, Collaborators

Method of analysis: Researchers will be involved in designing monitoring scheme along with the
appropriate statistical analysis needed to provide reliable information to determine the
need for change.

Results:

Within range of acceptable results: Y N

Monitoring purpose achieved: Y N

Further monitoring required: Y N

Recommended actions: Y N

Recommended actions implemented: (Date)

Cost of A/E: Unknown

Total cost of monitoring: Unknown

Report of Findings

Information to be reported: Report findings as available.

Frequency of report: 5 years or as findings are available

Method of reporting: Efforts and any findings in the 5-year review

Target audience for report: General

Monitoring Task Sheet

Goal/DFC:	<u>6</u>	<u>8</u>	<u>An adaptive, ecological approach is used in multiple-use management by blending the needs of people with environmental values to ensure that forest ecosystems are diverse, healthy, productive, and sustainable.</u>
	<u>9</u>	<u>10</u>	
	<u> </u>	<u> </u>	
	<u> </u>	<u> </u>	
Objective:	<u>18</u>	<u> </u>	<u> </u>
Standard:	<u> </u>	<u> </u>	<u> </u>
Monitoring purpose:	<u> </u>		
Question(s):	<u>What are the effects of irregular shelterwood harvest on slash pine?</u>		
Monitoring item:	<u>Growth and development of seedlings, costs and returns of harvesting and burning, plant species frequency and distribution, PETS effects.</u>		
Range of acceptable results:	<u>Baseline to be determined in project monitoring design.</u>		
Reliability:	<u>Moderate</u>	Precision:	<u>Moderate</u>

Collection of Information

Who collects:	<u>District Staff, Forest Staff, Forest Research, Partners, Collaborators</u> (district, research, co-op, etc.)		
Method of collection:	<u>To be determined later.</u> (specific)		
Time and frequency of collection:	<u>To be determined later.</u>		
Source of data (field, research, data base, etc.):	<u>Field and research</u>		
Cost of collections:	<u>Unknown</u>		

Analysis/Evaluation of Findings

Who conducts:	<u>Planning Staff, Planning ID Team, Research</u>		
Method of analysis:	<u>To be determined.</u>		
Results:	<u> </u>		
Within range of acceptable results:	<u> </u>	<u>Y</u>	<u>N</u>
Monitoring purpose achieved:	<u> </u>	<u>Y</u>	<u>N</u>
Further monitoring required:	<u> </u>	<u>Y</u>	<u>N</u>
Recommended actions:	<u>Y</u>	<u>N</u>	<u> </u>
Recommended actions implemented:	<u>(Date)</u>		
Cost of A/E:	<u>Unknown</u>		
Total cost of monitoring:	<u>Unknown</u>		

Report of Findings

Information to be reported:	<u>Report findings as available.</u>		
Frequency of report:	<u>5 years or as findings are available</u>		
Method of reporting:	<u>Efforts and any findings in the 5-year review</u>		
Target audience for report:	<u>General</u>		

Monitoring Task Sheet

Goal/DFC: 6 8 An adaptive, ecological approach is used in multiple-
9 use management by blending the needs of people with
environmental values to ensure that forest ecosystems
are diverse, healthy, productive, and sustainable.

Objective: 20

Standard: VG-40

Monitoring purpose:
 Question(s): Have old-growth stands been designated in each community type?

Monitoring item: Acres of old growth by community type designated in CISC.

Range of acceptable results: Within 45-55% of acres in objective in 5 years.

Reliability: Moderate Precision: Moderate

Collection of Information

Who collects: District Staff, Forest Staff
 (district, research, co-op, etc.)

Method of collection: Annual query of data base, GIS, CISC
 (specific)

Time and frequency of collection: Annually

Source of data (field, research, data base, etc.): CISC

Cost of collections: \$300

Analysis/Evaluation of Findings

Who conducts: Planning Staff and Planning ID Team

Method of analysis: Compare actual with planned progress

Results:

Within range of acceptable results:		Y	N
Monitoring purpose achieved:	Y		N
Further monitoring required:	Y		N
Recommended actions:	Y	N	

Recommended actions implemented: (Date)

Cost of A/E: \$100

Total cost of monitoring: \$400

Report of Findings

Information to be reported: Report findings as available.

Frequency of report: 5 years or as findings are available

Method of reporting: Efforts and any findings in the 5-year review

Target audience for report: General

Monitoring Task Sheet

Goal/DFC: 6 8 An adaptive, ecological approach is used in multiple-
9 use management by blending the needs of people with
environmental values to ensure that forest ecosystems
are diverse, healthy, productive, and sustainable.

Objective: 21

Standard:

Monitoring purpose:
 Question(s): What are the habitat conditions for the major habitat associations?

Monitoring item: Acres of each habitat association by major forest type age class.

Range of acceptable results: Within 45-55% of acres objective in 5 years.

Reliability: Moderate Precision: Moderate

Collection of Information

Who collects: District Staff, Forest Staff
 (district, research, co-op, etc.)

Method of collection: Query GIS, CISC
 (specific)

Time and frequency of collection: Annually

Source of data (field, research, data base, etc.): GIS, CISC

Cost of collections: \$300

Analysis/Evaluation of Findings

Who conducts: Planning Staff, Planning ID Team, Research

Method of analysis: Compare planned with actual progress.

Results:

Within range of acceptable results:		Y	N
Monitoring purpose achieved:	Y		N
Further monitoring required:	Y		N
Recommended actions:	Y	N	

Recommended actions implemented: (Date)

Cost of A/E: \$100

Total cost of monitoring: \$400

Report of Findings

Information to be reported: Report findings as available.

Frequency of report: 5 years or as findings are available

Method of reporting: Efforts and any findings in the 5-year review

Target audience for report: General

Monitoring Task Sheet

Goal/DFC: 6 8 Adequate habitat is provided for threatened, endan-
9 10 gered, and sensitive species so populations are no
longer considered at risk.

Objective: 8

Standard: WL-1

Monitoring purpose:
Question(s): What are the effects of the reduced foraging standards on the
Apalachicola NF.

Monitoring item: Cluster activity status, group size, Groups attempting to nest, nesting
success, eggs laid per active group, chicks reaching banding age,
number fledged per active group

Range of acceptable results: A decline over 3 consecutive years for one variable at 0.05
significance level, comparing before/after in treated/
untreated groups, initiate section 7 consultation

Reliability: Moderate Precision: High

Collection of Information

Who collects: District Biologist
(district, research, co-op, etc.)

Method of collection: Select a random sample of 200 active clusters to use as
(specific) permanent monitoring points

Time and frequency of collection: Annually, April-June

Source of data (field, research, data base, etc.): Field

Cost of collections: \$10,000/year

Analysis/Evaluation of Findings

Who conducts: District Biologist, SO Biologist

Method of analysis: A variety of analysis including paired comparisons, time series,
before and after, ANOVA (analysis of variance)

Results:

Within range of acceptable results:		Y	N
Monitoring purpose achieved:	Y		N
Further monitoring required:	Y		N
Recommended actions:	Y	N	

Recommended actions implemented: (Date)

Cost of A/E: \$2,000/year

Total cost of monitoring: \$12,000/year

Report of Findings

Information to be reported: Area treated under reduced foraging and measured
variables.

Frequency of report: Annually

Method of reporting: Annual M&E Report

Target audience for report: General

Monitoring Task Sheet

Goal/DFC: 1 through 19 An adaptive, ecological approach is used in multiple-use management by blending the needs of people with environmental values to ensure that forest ecosystems are diverse, healthy, productive, and sustainable.

Objective: 1 through 21 _____

Standard: All _____

Monitoring purpose:
Question(s): Did we do what we said we would do?

Monitoring item: Decision documents and field review of implementation.

Range of acceptable results: All projects are documented and implemented in accordance with the Forest Plan direction.
Reliability: High Precision: High

Collection of Information

Who collects: District Staff, Planning Staff
(district, research, co-op, etc.)

Method of collection: Sample of decision documents per administrative unit.
(specific) Sample of decisions field checked per administrative unit.

Time and frequency of collection: Annually

Source of data (field, research, data base, etc.): All resource area project decisions.

Cost of collections: \$5,000

Analysis/Evaluation of Findings

Who conducts: Planning Staff, Ad Hoc Planning ID Team

Method of analysis: Determine if project proposals and decisions move the forests toward Forest Plan DFCs, goals, and objectives and are implemented correctly.

Results:

Within range of acceptable results:	Y	N
Monitoring purpose achieved:	Y	N
Further monitoring required:	Y	N
Recommended actions:	Y	N

Recommended actions implemented: (Date)

Cost of A/E: \$20,000

Total cost of monitoring: \$25,000

Report of Findings

Information to be reported: Results of finding including projects reviewed and relationship to Forest Plan direction.

Frequency of report: Annually

Method of reporting: Annual M&E Report

Target audience for report: General