

CHAPTER V

IMPLEMENTATION OF THE FOREST PLAN

INTRODUCTION

Implementation of the Fremont National Forest Plan requires moving from an existing management program, with a budget and "targets" for accomplishment, to a new management program with a budget, goals, and objectives that provide a different way of addressing the issues and concerns people have voiced about Forest management. This Forest Plan establishes direction for the Fremont National Forest for the next 10 to 15 years, when used in conjunction with Forest Service Manuals, Handbooks, and the Pacific Northwest Regional Guide.

This chapter incorporates direction under the headings of Implementation Direction, Monitoring and Evaluation Program, and Amendment. Collectively, this chapter explains methods of implementing management direction, of monitoring and evaluating implementation activities, and of keeping the plan current in light of changing conditions or other findings.

IMPLEMENTATION DIRECTION

Implementation will occur through identification, selection, scheduling, and execution of management practices to meet management direction provided in this Forest Plan. Implementation will also involve responding to proposals by others for use and/or occupancy of National Forest System lands. Additionally, this section shows consistency of this Plan with other plans or instruments, formulation of budget proposals, and environmental analysis required for implementation of specific management practices.

SCHEDULING

The schedule of activities is contained in Appendices A and B of this document. Scheduling of the activities is in response to, and consistent with, the management direction contained in this Forest Plan. These activity schedules represent a pool of possible projects from which implementation schedules are developed. Listings of possible projects to meet or accelerate the ten-year management practice schedule are maintained by the unit managers. These listings will routinely change as projects are implemented or removed from the listings for other reasons, and as new projects take their place. Projects are scheduled in response to the planned output of goods and services and the annual budgeting process.

For timber-related outputs and activities, the FORPLAN solution by major management areas is interpreted for each Ranger District of the Forest. The schedule for projects associated with wildlife habitat improvements, range improvements, and resource activities will be done in a similar manner to ensure the integration of, and compliance with, standards and guidelines.

Within each District, the approximate location of timber harvests and other treatments is identified for the first five years. In some specific instances the solution from the FORPLAN model may not be feasible since outputs were based on Working Circle averages. Also, the model did not contain complete information regarding past administrative decisions or actions. Such things as sales under contract or sales that have been granted extensions could affect specific implementation of the solution.

CONSISTENCY WITH OTHER INSTRUMENTS

This Forest Land and Resource Management Plan, upon implementation, will supersede all existing functional resource plans for the Fremont National Forest. The current Timber Management Plan (1979) will also be superseded.

Subject to valid existing rights, all outstanding and future permits, contracts, cooperative agreements, or instruments for occupancy and use of lands will be brought into compliance with the Forest Plan. This compliance will occur within three years after the Plan is enacted or as otherwise specified in the Standards and Guidelines (Chapter IV).

A listing of the existing plans superseded by this Forest Plan and those that must be brought into compliance with this Plan is contained in Appendix 9.

BUDGET PROPOSALS

The resource objectives discussed in Chapter IV are translated into multi-year program budget proposals that identify needed expenditures. The objectives are further defined by the schedule of activities and events as presented in Appendices A and B. The schedule is used for requesting and allocating the funds needed to carry out the planned management direction. Upon approval of a final budget for the Forest, the annual program of work is identified and carried out. Accomplishment of the annual program is the incremental implementation of the management direction of the Forest Plan. Outputs and activities for individual years may be different from those shown in Chapter IV. Such differences are the result of final budget constraints.

ENVIRONMENTAL ANALYSIS

Projects and activities directed through this Forest Plan are subject to analysis and compliance under the NEPA process as they are planned for implementation. If the environmental analysis for a project shows that: (1) the management area prescriptions, standards and guidelines can be complied with and (2) little or no environmental effects are expected beyond those identified and documented in the Forest Plan EIS, the analysis will probably result in a finding of no significant impact. An analysis file and/or a project file will be available for public review, but the analysis will not necessarily be documented in the form of an environmental assessment or environmental impact statement. In other instances, the District Ranger, Forest Supervisor, or Regional Forester may decide to document the analysis through an environmental assessment or impact statement.

MONITORING AND EVALUATION PROGRAM

NFMA and CEQ regulations as well as Regional Direction require that each National Forest conduct a program of monitoring and evaluation which is identified in the specifics of the Forest Monitoring Plan.

THE RESOURCES PLANNING ACT AS AMENDED BY THE NATIONAL FOREST MANAGEMENT ACT

This Act contains several report requirements that necessitate information gathering or monitoring. Section 3(d)(1) requires the examination and certification of areas reforested after the first and third

growing seasons, the reporting of areas in need of reforestation, and lands with stands of trees that are not growing at their best potential rate

NATIONAL FOREST MANAGEMENT ACT REGULATIONS (36 CFR 219)

Forest Plan monitoring requirements are described, primarily in 36 CFR 219 12(k) These requirements can be outlined as follows:

1. Specific items to be monitored for compliance (36 CFR 219 12(k)(5))
 - a Lands are adequately restocked as specified in the Forest Plan.
 - b Lands identified as not suited for timber production are to be examined at least every ten years to determine if they have become suited.
 - c Maximum size limits for harvest areas are evaluated (this may need to be monitored at the Regional level).
 - d Destructive insects and disease organisms do not increase to potentially damaging levels following management activities.
2. General items required:
 - a First paragraph, 36 CFR 219.12(k).
 - (1) Periodic determination and evaluation of the effects of management practices
 - (2) How well objectives have been met.
 - (3) How closely management standards and guidelines have been applied
 - b Listing under 36 CFR 219 12(k).
 - (1) Quantitative estimate of performance comparing outputs and services with those projected by the Forest Plan
 - (2) Significant changes in productivity of the land
 - (3) Costs associated with carrying out planned management prescriptions as compared with costs estimated in the Forest Plan.
- 3 Requirements for a monitoring plan (36 CFR 219.12(k)(4)).
 - a Monitoring requirements identified in the Forest Plan shall provide for a description of the following monitoring activities
 - (1) The actions, effects or resources to be measured, and the frequency of measurements;
 - (2) expected precision and reliability of the monitoring process; and
 - (3) the time when evaluations will be reported
- 4 Other sections of the regulations set or indicate additional monitoring requirements:
 - a 36 CFR 219.7(f).

A program of monitoring and evaluation shall be conducted that includes consideration of the effects of National Forest management on land, resources, and communities adjacent to or near the National Forest, as well as, effects upon National Forest management of

activities on nearby lands managed by other Federal or other government agencies, or under the jurisdiction of local governments

b. 36 CFR 219.10(g).

The Forest Supervisor shall review the conditions on the land covered by the Plan at least every five years to determine whether conditions or demands of the public have changed significantly.

c. 36 CFR 219.19(a)(6).

Population trends of the management indicator species will be monitored and relationships to habitat changes determined.

CEQ REGULATIONS, (40 CFR 1500)

1505.2 Record of Decision in cases requiring environmental impact statements.

(c) ... A monitoring and enforcement program shall be adopted and summarized where applicable for any mitigation.

1505.3 Implementing the decision:

Agencies may provide for monitoring to ensure that their decisions are carried out, and should do so in important cases.

FSM 1922.6, 12/84. AMEND 19, MONITORING AND EVALUATION

This refers to 36 CFR 219.12(k) and gives direction that Regional Foresters must develop regional monitoring standards that meet the following criteria:

1. Monitoring focuses on those activities that affect significant management systems, those activities that are responsive to stated issues, concerns, and opportunities, and those activities that affect major components of the environment.
2. Monitoring is coordinated with resource inventory needs to reduce duplication.
3. Implementation of the Forest Plan complies with applicable laws and regulations.

REGIONAL GUIDE

This gives Regional direction for monitoring. Areas to be monitored regionally are shown in Table 3-28 of the Regional Guide for the Pacific Northwest. Specific actions, effects to be monitored, frequency of measurement, reporting periods, and expected precision and reliability of the monitoring process will be identified in the individual Forest Plans.

FSH 1909.15 ENVIRONMENTAL POLICY AND PROCEDURES HANDBOOK

53 - MONITORING. (40 CFR 1505.3). Monitor actions to ensure that:

1. Environmental safeguards are executed according to plan.
2. Necessary adjustments are made to achieve desired results.
3. Anticipated results are achieved.

OTHER FSM AND FSH DIRECTION

The Forest Service Manual and Handbooks give additional direction and guidance on monitoring; however, much of this pertains to routine or ongoing monitoring not necessarily required to validate the Forest Plan.

MONITORING PLAN

The Monitoring Plan, Table 32, identifies the key activities and outputs to be tracked during implementation of this Plan to ensure that activities reasonably conform to the Management Area direction, and that outputs satisfy the objectives of the Plan. The figures following Table 32 present the proposed sequence for implementing the total monitoring program

The following definitions apply to the column headings for the Forest Monitoring Plan presented in Table 32:

Resource Area: responsible resource identified by decision variable.

Action/Effect to be Monitored. specific statement of what will be monitored.

NAS Codes: National Activity Structure (NAS) codes specific to the resource action or effect.

Monitoring Objectives. what the monitoring is intended to accomplish.

Monitoring Method. specific statement of how monitoring will be accomplished.

Unit of Measurement: a qualifiable measure of the action or effect. Where applicable, these should be tied to Management Information Handbook (MIH) code activities, and/or activity types, and/or RPA outputs

Monitoring Frequency. the schedule of sampling for the element to be monitored stated in terms of years or parts of years

Reporting Period: the frequency between reports summarizing results for the element being monitored in terms of years or parts of years.

Precision/Reliability: the level of validity and exactness in which monitoring data is collected

Precision is the exactness or accuracy of measurement. Reliability is the expected probability that information acquired through sampling will reflect actual conditions. Precision and reliability are rated as high, moderate, or low. Example ranges of precision and validity are.

high	maximum variation within +/- 10 percent of sample mean
moderate	maximum variation within +/- 33 percent of sample mean
low	maximum variation within +/- 50 percent of sample mean

Data Storage: where the collected monitoring data, analyses, and evaluation reports for the element monitored are stored for the duration of the Forest Plan.

Monitoring Responsibility. person or persons responsible for monitoring, data collection, analysis, evaluation, and report preparation.

Cost: a column for identifying estimated costs of monitoring tasks by element subheadings.

Threshold of Variability: thresholds which, if exceeded, would trigger the need for reevaluation of the Forest Plan.

Decision Flow Diagram for the Evaluation of the Forest Plan, Fremont National Forest.

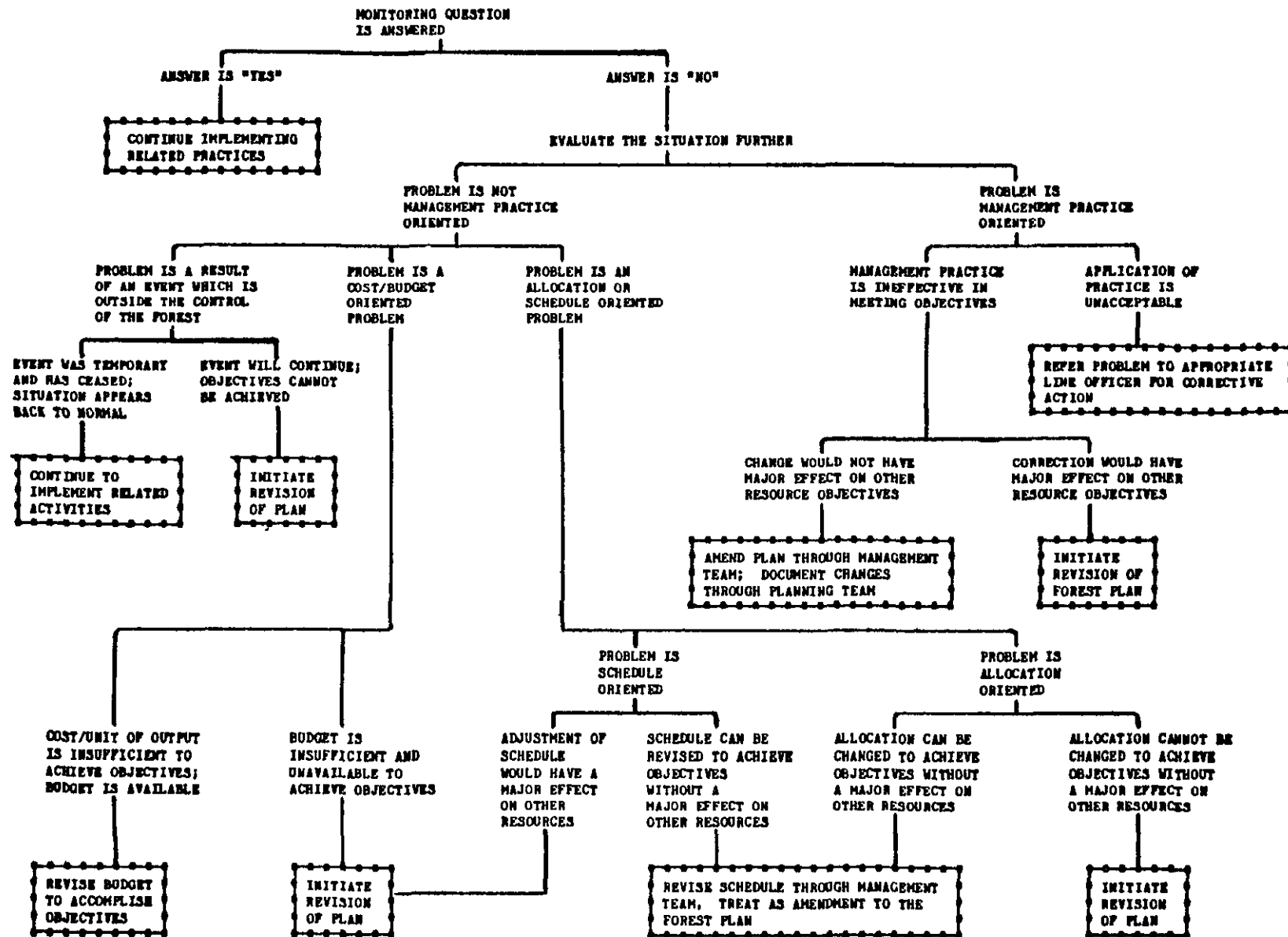


Table 32. Summary of Monitoring and Evaluation Program

RESOURCE AREA	Action or Effect of Monitoring	NAS⁽¹⁾ Code	Objective of Monitoring	Method of Monitoring	Unit of Measure⁽²⁾
Recreation	Off-road vehicles	AN121	Avoid resource damage and/or user conflicts	Field observation, photo points, public comment	PAOT days
	Dispersed sites, effects of management activities and amount of visitor use	AN122	Maintain inventory of dispersed sites, ensure that high use sites are protected	Code-a-site, FSH 2309 RIM	
	Visual quality	AV12	Ensure VQO's are met	Visual impact analysis using the Visual Contrast Rating System of management activities, project and permanent photo monitoring, statistical analysis of impacts to timber yield using standard and modified silvicultural prescriptions	
	Wild and Scenic Rivers	AN1224	Maintenance of current attributes of the classified rivers	Review project plans and activities on adjacent lands	Lands adjacent to the Sycan and North Fork of the Sprague Rivers
	Trails, effects of management activities, and amount of visitor use	AT12	Avoid damage to facility and record use	Visual inspection and use of trailhead registers and counters	Miles
Wilderness	Wilderness resource	AW12	Ensure that limits of acceptable change are met per Gearhart Mountain Wilderness Plan, 1985	Refer to revised Gearhart Mountain Wilderness Plan, 1986	
Cultural	Ground disturbing activity and property preservation	AC12	Preserve and protect cultural resource values	On the ground inspection in accordance with Cultural Resource Monitoring Plan, 1985 See Appendix 9, Forest Plan	Site/property
Fish and Wildlife⁽¹⁾	Old-growth forest	CW1	Amount old growth remaining in roadless, and general forest	Field/office reviews	Acres of old-growth forest
	Threatened, endangered, sensitive species				
	bald eagle	CT1	Nest/roost use and success	Oregon State University ground/aerial	Number of young
		CT1	Habitat Management	Field/office review	Habitat areas

SEE END OF TABLE FOR FOOTNOTES.

Table 32 Continued. Summary of Monitoring and Evaluation Program

Frequency	Report Period	Precision	Reliability	Data Storage ⁽³⁾	Responsibility	Cost ⁽⁴⁾	Threshold Variability
Continuing	Annual	Low	Moderate	2300 Files	Recreation Staff	1 0	NA
Continuing	Annual		High	2350 Files	Recreation Staff	0 8	NA
Continuing	Annual	Moderate	Moderate		Recreation Staff	1 0	VQO not met when potential is documented
Continuing	Five years	Moderate	Moderate	2350 Files	Recreation Staff	1 0	Resource conditions or level of activities would lower the designated intent for the Wild and Scenic Rivers
Continuing	Annual	Moderate	Moderate	RIM Trails	Recreation Staff	1 0	
Continuing	Annual	Low	Moderate		Recreation Staff	4 7	
Continuing	Annual	High	High	Locked storage	Recreation Staff	3 5	65% of cultural values
Continuing	Annual	High	High	GIS	Range, Wildlife, Watershed Staff	1 0	Harvest of old growth higher than expected
Continuing	Annual	High	High	Files	Forest FWL Staff ⁽⁵⁾	2 0	Active nest site unoccupied for two years
Continuing	Two years	High	High	Files	District Rangers	2 0	10% of habitat areas unsuitable as eagle habitat

SEE END OF TABLE FOR FOOTNOTES

Table 32 Continued. Summary of Monitoring and Evaluation Program

RESOURCE AREA	Action or Effect of Monitoring	NAS⁽¹⁾ Code	Objective of Monitoring	Method of Monitoring	Unit of Measure⁽²⁾
Fish and Wildlife, continued	Peregrine falcon	CT1	Reintroduction/nesting success	Field review	Young birds fledged
		CT1	Habitat management	Field/office review	Habitat areas
	Sensitive species (plants mammals, birds, invertebrates, reptiles, amphibians)	CT1	Habitat management/protection	Field/office review	Habitat areas
		CT1	Species density	Field Review	Number of individuals
	Indicator species				
	Mule deer	CW1	Population changes	Field surveys	Number of individuals
		CW1	Habitat management	Field/office reviews	Habitat effectiveness
	Resident trout	CF1	Effectiveness of habitat improvements (structures)	Pre/post electro fishing	Number of individuals
	Pileated woodpecker	CW1	Habitat management	Field/office reviews	Number of habitat areas
		CW1	Population change	Field surveys	Number of pairs
	Pine marten	CW1	Habitat management	Field/office reviews	Number of habitat areas
	Three-toed woodpecker	CW1	Habitat management	Field/office reviews	Number of habitat areas

SEE END OF TABLE FOR FOOTNOTES

Table 32 Continued. Summary of Monitoring and Evaluation Program

Frequency	Report Period	Precision	Reliability	Data Storage ⁽³⁾	Responsibility	Cost ⁽⁴⁾	Threshold Variability
Continuing	Annual	High	High	Files	Forest FWL Staff ⁽⁵⁾	1.0	No young fledged from nests or reintroduction sites
Continuing	Five years	High	High	Files	District Rangers	2.0	Loss of active or potential nest site
Continuing	Annual	High	High	Files	District Rangers	5.0	Disturbance of sites or habitat outside of recommendations
Continuing	Five years	Low	Low	Files	Forest FWL Staff	37.0	Decrease greater than 10% below density
Continuing	Five years	Moderate	Moderate	Files	Forest FWL Staff ⁽⁶⁾	0.5	Significant change in five-year period
Continuing	Five years	Moderate	Moderate	Files	Forest FWL Staff, District	1.8	Habitat effectiveness is more than 20% below management direction
Continuing	Periodic	High	High	Files	Forest FWL Staff ⁽⁶⁾	7.0	Fish population show no improvement after structures are installed
Continuing	Five years	High	High	GIS	District Rangers	2.0	Number of habitat areas below level in Forest Plan
	Five years	Moderate	Moderate	Files	Forest FWL Staff	15.0	Woodpecker use is absent in more than 40% of habitat areas
Continuing	Five years	High	High	GIS	District Rangers	2.0	Number of habitat areas below level in Forest Plan
Continuing	Five years	High	High	GIS	District Rangers	2.0	Number of habitat areas below level in Forest Plan

SEE END OF TABLE FOR FOOTNOTES

Table 32 Continued. Summary of Monitoring and Evaluation Program

RESOURCE AREA	Action or Effect of Monitoring	NAS⁽¹⁾ Code	Objective of Monitoring	Method of Monitoring	Unit of Measure⁽²⁾
Fish and Wildlife, continued	Northern goshawk	CW1	Habitat management	Field/office reviews	Number of habitat areas
	Red-naped sapsucker	CW1	Habitat management	Field/office reviews	Number of habitat areas
	Primary cavity excavators (woodpeckers)	CW1	Habitat management	Field/office reviews	Number of dead trees
Range	Range health	DN111 DN121	Determination of condition and trend, compliance with S & G's on utilization	Condition and trend transects, field observations production/ utilization studies	Plans
	Allotment management plans	DN112	Ensure management plans are developed and problem areas receive treatment	FSH & FSM 2200, inspection	
	Allotment management plans	DN121	Compliance with standards and guidelines	Utilization studies/key areas	
	Riparian habitat improvement	DN112	Assure that riparian objectives are incorporated into allotment management plans	Project EA's and allotment management plans	
Timber	Dispersion of openings--size limitations	ET12	Standards for size, dispersion and state of vegetation are met	Sale reviews, EA reviews by Working Circle	MMCF and MMBF
	Allowable timber sale quantity	ET121	Amount sold consistent with plan by management areas (by management area #5 and the combined other management areas only)	Attainment reports, annual timber cut and sell report, 5-10 year timber sale program by Working Circle	
		ET121	Sawtimber (chargeable)		
	Evaluation of silvicultural model	ET111	Ensure correct managed stand yields from silvicultural model	Compare predicted growth with actual growth on benchmark plantations	

SEE END OF TABLE FOR FOOTNOTES

Table 32 Continued. Summary of Monitoring and Evaluation Program

Frequency	Report Period	Precision	Reliability	Data Storage ⁽³⁾	Responsibility	Cost ⁽⁴⁾	Threshold Variability
Continuing	Five years	High	High	GIS	District Rangers	2 0	Number of habitat areas below level in Forest Plan
Continuing	Five years	High	High	GIS	District Rangers	2 0	Number of habitat areas below level in Forest Plan
Continuing	Annual	High	High	GIS	District Rangers	5 0	More than 10% of area has less than 90% of prescribed trees and snags
Continuing	Five years	Moderate	Moderate	Allotment management records	Range, Wildlife, Watershed Staff	49 0	Continued downward or static trend in problem areas
Continuing	Annual	High	High	Allotment management plans	Range, Wildlife, Watershed Staff	45 5	Six plans per year
				Reports, studies	Range, Wildlife, Watershed Staff	3 0	Six reports meeting utilization guidelines
Continuing	Annual	High	High		Range, Wildlife, Watershed Staff	1 0	Lack of riparian objectives in management plan
Continuing	Three years			FDB 2410 files	Timber Staff, District Ranger	1 0	Size fails objectives of Forest Plan
Continuing	Annual			2410 files STARS data base	Timber Staff	1 0	Approximately 10% of Forest Plan
Once per decade	Five years			2470 files	Timber Staff		

SEE END OF TABLE FOR FOOTNOTES

Table 32 Continued. Summary of Monitoring and Evaluation Program

RESOURCE AREA	Action or Effect of Monitoring	NAS⁽¹⁾ Code	Objective of Monitoring	Method of Monitoring	Unit of Measure⁽²⁾
Timber, continued	Distribution of harvest (sell)	ET121	Ensure that sell volume distribution by commercial thinning and by other harvest volume are as planned	Summary of timber sale reports/ Working Circle, combine pine and pine associated groups	MMCF and MMBF by Working Group
	Timber management suitability	ET121	Ensure correct identification	EA reviews, sale reviews, stand exams	Acres
	Amount of clearcut harvest	ET121	Monitor acreage of clearcut, in proportion to other even and unevenaged treatments	Project EAs, Silvicultural prescriptions	Acres
	Regeneration	ET24	Ensure acceptable stocking	Program review, acres field sampling silvicultural accomplishment reports below prescribed stocking levels	Acres
	Fire, insect and disease damage	ET121	Determine if catastrophic timber loss has occurred	Annual FPM aerial insect survey, surveys as needed following catastrophic events	Acres and severity
	Timber stand improvement	ET25	Projects accomplished	Program review, silvicultural accomplishment reports	Acres
	Seedlings	ET24	Superior progeny are planted	Silvicultural accomplishment reports	Acres
	Uneven-aged allocation	ET121	Verify area estimate	Project EA's silvicultural diagnosis	Acres
	Uneven-aged yields	ET111	Establish yield effects	Co-op study (four forests)	MBF
	Fertilization trials	ET25	Establish viability	Administrative study	Cost and MBF
Air Quality	Visual air quality	FA1	Assess impacts of forest activities on baseline	Field sampling	TSP
Soil	Soil compaction, erosion, displacement, mass movement	FW1	Compliance standards for soil productivity	Field sampling and/or observation	Plans

SEE END OF TABLE FOR FOOTNOTES.

Table 32 Continued. Summary of Monitoring and Evaluation Program

Frequency	Report Period	Precision	Reliability	Data Storage ⁽³⁾	Responsibility	Cost ⁽⁴⁾	Threshold Variability
Annual	Three years			2410 files	Timber Staff and District Rangers	1 0	Approximately 30% of Forest Plan
Continuing	Five years			FDB 2410 files	Timber Staff and District Rangers	2 0	Approximately 5% of suited acres
Annual	Three years			FDB 2410 files	Timber Staff and District Rangers	0 5	Approximately 25% of Forest Plan
Annual	Annual			2470 files FDB	Timber Staff and District Rangers	3 0	
Annual	Five years			2410, 2470, 3400 files, annual pest detection maps	Timber Staff and District Rangers		More than 5% of the available and suitable forested areas
Annual	Three years			2470 FDB	Timber Staff and District Rangers	2 0	
Annual	Three years			2470, 2490	Timber Staff and District Rangers	1 0	
Annual				2410, 2470	Timber Staff and District Rangers	1 0	Approximately 25% of Forest Plan
Annual				FCCC	Timber Staff with PNW Research Station	24 0	
Annual				2470, 2500	Watershed and Timber Staffs		
Continuing	Annual				Range, Wildlife, Watershed Staff	1 2	Noncompliance with applicable standards
Continuing	Two years	Low and high	Low and high		Range, Wildlife, Watershed Staff	6 0	Greater than 20% compacted or puddled

SEE END OF TABLE FOR FOOTNOTES

Table 32 Continued. Summary of Monitoring and Evaluation Program

RESOURCE AREA	Action or Effect of Monitoring	NAS⁽¹⁾ Code	Objective of Monitoring	Method of Monitoring	Unit of Measure⁽²⁾
Soil, continued	Cumulative effects on soil productivity	FO9	Identify and document effects on productivity	Sample representative sites following project completion	Plans
	Soil and water improvement projects	FO9	Accomplished as scheduled	Attainment reports	Acres
Watershed	Water quality	ET113 FW121	Compliance with State and Federal Water Quality Standards	Quantitative measurement of physical and chemical water quality parameters	
	Water quality	ET113 FW121	Document implementation and effectiveness of Best Management Practices	Interdisciplinary EA and project implementation review, quantitative and qualitative measurement of effects	
	Water quality	ET113	Compliance with Forest Plan objective of Improving water quality	Biologic indicators (macro-invertebrates)	
	Watershed Impact Areas (WIA) percentage within each forest watershed	ET113	Cummulative effects of timber harvesting on stream channel stability	Use timber stand data base and GIS to assess percentage of impact relative to standards and guidelines done in conjunction with project planning	
	Stream channel stability	ET113	Validate WIA guidelines	Stream channel surveys will be done in conjunction with the previous monitoring item	
	Implementation of riparian standards and guidelines	DN121 FW121 CW1 CF1	Ensure standards and guidelines	EA and project reviews	
	Riparian, ecological, physical and biological condition	DN121 FW121 CW1 CF1	Meet the Forest goal of improving riparian condition	Monitor plant communities, channel cross-section, macro-invertebrates, establish camera points	
	Effectiveness of riparian standards and guidelines	DN121 FW121 CW1 CF1	Assess effectiveness in contributing to enhancement of dependent resources	Project monitoring field reviews	

SEE END OF TABLE FOR FOOTNOTES

Table 32 Continued. Summary of Monitoring and Evaluation Program

Frequency	Report Period	Precision	Reliability	Data Storage ⁽³⁾	Responsibility	Cost ⁽⁴⁾	Threshold Variability
Continuing	Five years				Range, Wildlife, Watershed Staff	6 6	Significant productivity loss
Annual	Annual				Range, Wildlife, Watershed Staff	0 4	Scheduled attainment not achieved
Continuing	One year	High	High	Storet	Range, Wildlife, Watershed, Fire Staff	6 0	Failure to comply
Continuing	One year	Moderate	High	Files	Range, Wildlife, Watershed, Fire Staff	24 0	Failure to meet planned objectives
Five years	Five years	Moderate	High	Files	Range, Wildlife, Watershed, Fire Staff	2 0	Downward trend
Continuing	Five years	High	High	Files, TDB, GIS	Range, Wildlife, Watershed, Fire Staff	6 0	Exceed Forest Plan guidelines
Continuing	Next planning period	Moderate	High	Files	Range, Wildlife, Watershed, Fire Staff		Approximately 10% variance from WIA guideline with no effect on stream channel condition
Continuing	Two years	High	Moderate to high	Files	Range, Wildlife, Watershed, Fire Staff	2 5	Greater than 10% deviation
Once every five years	Five years	High	Moderate	Permanent files	Range, Wildlife, Watershed, Fire Staff	3 0	Failure to improve within prescribed time frames or downward trend
Continuing	Two years	Moderate	Moderate to high	Files	Range, Wildlife, Watershed, Fire Staff	5 0	Desired end result not occurring

SEE END OF TABLE FOR FOOTNOTES

Table 32 Continued. Summary of Monitoring and Evaluation Program

RESOURCE AREA	Action or Effect of Monitoring	NAS⁽¹⁾ Code	Objective of Monitoring	Method of Monitoring	Unit of Measure⁽²⁾
Facilities	Roads	LT23	Assure that the total miles of road and miles usable by passenger cars are within the Forest Plan projections	Annual review of TIS data base and road maintenance plan to determine total Forest miles, miles open to passenger car use, and miles suitable for high clearance vehicles	Miles
	Roads	LT21	Assure that open road density does not exceed standards and guidelines	Project design and EA review to insure that open road density within a transportation area does not exceed standards and guidelines	Miles per square mile
Protection	Prescribed fire (underburning)	PF1	Ensure the use of prescribed fire is responsible to management area direction	Fire effects evaluation--forest fuels management program plan	
	Fire management program	PF1	Measure efficiency of program	Fire management efficiency index (FMEI) of R6 Fire Management Analysis Process	
	Wilderness fire management program	AW121	Evaluation of program	W-W 5100-29 T post-fire review	
	Fuel treatment	PF1	Ensure methods meet forest plan objectives	Timber Sale Brush Disposal reports and activity reviews	
Planning	Coordination with other agencies and adjacent owners	ML16	To assure compliance with Plan intent	Review project NEPA documents	Effects
	Economics	ML16	Determine accuracy of assumptions and data used in plan	Review of 2400-17 reports, unit summary reports, PNW station publications, forest KV guides, RIM, ODF&W, Census, hydrologic, and attainment reports	
Minerals	Exploration and extraction--locatable minerals compliance with operation plans	GM12	Prevent, minimize and/or mitigate surface resource damage	Observations, field sampling for compliance with plans of operations, etc	Operating plans
	Exploration and extraction--leaseable minerals compliance with operation plans, stipulations	GM12	To prevent, minimize or mitigate damage to surface resources	Observation, field sampling plans of operation, etc	Operating plans

SEE END OF TABLE FOR FOOTNOTES

Table 32 Continued. Summary of Monitoring and Evaluation Program

Frequency	Report Period	Precision	Reliability	Data Storage ⁽³⁾	Responsibility	Cost ⁽⁴⁾	Threshold Variability
Annual	One year	High	Moderate	GIS	Engineering Staff	0.5	20% above projections
Each timber sale or project	One year	High	Moderate		Planning and Engineering Staff	1.0	20% above S&G's
Continuing	Annual	Moderate	Moderate	5100 files	Fire Staff	10.0	Fire prescription not responsive
Annual	Annual	High	Moderate	5100 files	Fire Staff	5.0	
Annual	Three years	Moderate	Moderate		Fire/Recreation Staff	1.0	
Annual	Two years	Moderate	Moderate	5100 TRI	Fire Staff	3.0	Failure to meet objectives
Continuing	Varies	Moderate	Moderate	GIS	Planning Staff	1.0	If effects such that an issue is developing
Various	Annual	Moderate	Moderate	1920	Planning Staff	2.0	
Intermittent to daily during operations	Varies	Moderate to high	Moderate to high	2810 Files	Land and Management Staff/District Ranger	Varies	Approximately 15% of Forest Plan
Intermittent to daily during operations	Varies	Moderate to high	Moderate to high	2820 Files	Land and Management Staff	Varies	Approximately 15% of Forest Plan

SEE END OF TABLE FOR FOOTNOTES.

Table 32 Continued. Summary of Monitoring and Evaluation Program

RESOURCE AREA	Action or Effect of Monitoring	NAS⁽¹⁾ Code	Objective of Monitoring	Method of Monitoring	Unit of Measure⁽²⁾
	Sale and extraction – common varieties	GM12	Compliance with permit	Field observation compliance with pit development plan	Permits
Land Ownership Adjustments	Compatibility with landownership adjustment plan and forest objectives	JL123 JL123	Ensure that project is in public interest	Review by IDT; relation to landownership adjustment plan NEPA, and Forest objectives	Cases
Special Land Uses	Private use of National Forest System Lands	JL122	Compliance with permit and FSM, FSH	Field inspection	Permits
Community Effects	Changes in local income		Measure community cohesion and stability	U.S. Census, State publications County and local agency reports, etc.	Dollars
	Changes in local population		Measure community cohesion and stability	U.S. Census, State publications County and local agency reports, etc	Thousands of persons
	Changes in local employment patterns		Measure community cohesion and stability	U.S. Census, State publication, County and local agency reports, etc	Thousands of persons by industry of occupation
	Changes in payments to counties		Measure community cohesion and stability	Review payments to counties reports	Dollars
	Changes in lifestyles, attitudes, beliefs or values		Measure community cohesion and stability	Interviews with key publics and opinion leaders in communities, observation, etc (See FSH 1909 17)	Various
	Changes in Forest contribution to area forest products industries		Measure community cohesion and stability	Tracking of raw material flow to mills, industry mix	MMCF/year percent industry distribution
Forest Budget	Annual Forest budget	Are the annual programs and budgets projected in the Forest Plan being realized? Are funds available to monitoring activities adequate to perform the needed monitoring tasks within Forest Plan projections?		Review budgets and programs of work in relation to Forest Plan projections	Dollars

(1) NAS = National Activity Structure

(2) PAOT = Persons At One Time, MMCF = Millions of Cubic Feet, MMBF = Millions of Board Feet, MBF = Thousands of Board Feet; TSP = Total Suspended Particulates

(3) RIM = Recreation Information Management, GIS = Geographic Information System; FDB = Forest Data Base, FCC = Fort Collins; TIS = Transportation Inventory System, TRI = Total Resource Inventory

Table 32 Continued. Summary of Monitoring and Evaluation Program

Frequency	Report Period	Precision	Reliability	Data Storage ⁽³⁾	Responsibility	Cost ⁽⁴⁾	Threshold Variability
Start and close of operation	Annual	High	High	2850 files	Land and Management Staff	Varies	Approximately 5% of permit
Upon receipt of proposal	Annual	Moderate	High	5420 5430 files	Land and Management Staff		Approximately 20% of Forest Plan
Annual to three years	Annual	Moderate to high	High	2720 2730 2740 files	Land and Management Staff	Varies	Approximately 5% of permit
Annual	Annual	High	High	Files	Planning Staff	Minimal	Approximately 15% in three years (corrected for inflation)
Annual	Annual	High	High	Files	Planning Staff	Minimal	Approximately 15% in three years
Annual	Annual	High	High	Files	Planning Staff	Minimal	Approximately 15% in three years
Annual	Annual	High	High	Files	Planning Staff	Minimal	Fails to meet Forest Plan objectives
Quarterly monitoring	Biannual reporting	Low	Low	Files, newspapers, anecdotal data	Planning Staff	Minimal	Established trend toward Forest-community conflict or identification of problems
Annual	Annual	Moderate	Moderate	TSA reports	Planning Staff	Minimal	Fails to meet Forest Plan objectives
Annual	3, 6 and 9 years	High	High	Report Files	Forest Supervisor	1 0	Approximately 10% of planned budget

(4) Thousand dollars spent annually for monitoring (estimate)

(5) In cooperation with Oregon Department of Fish and Wildlife and U S Fish and Wildlife Service

(6) In cooperation with Oregon Department of Fish and Wildlife

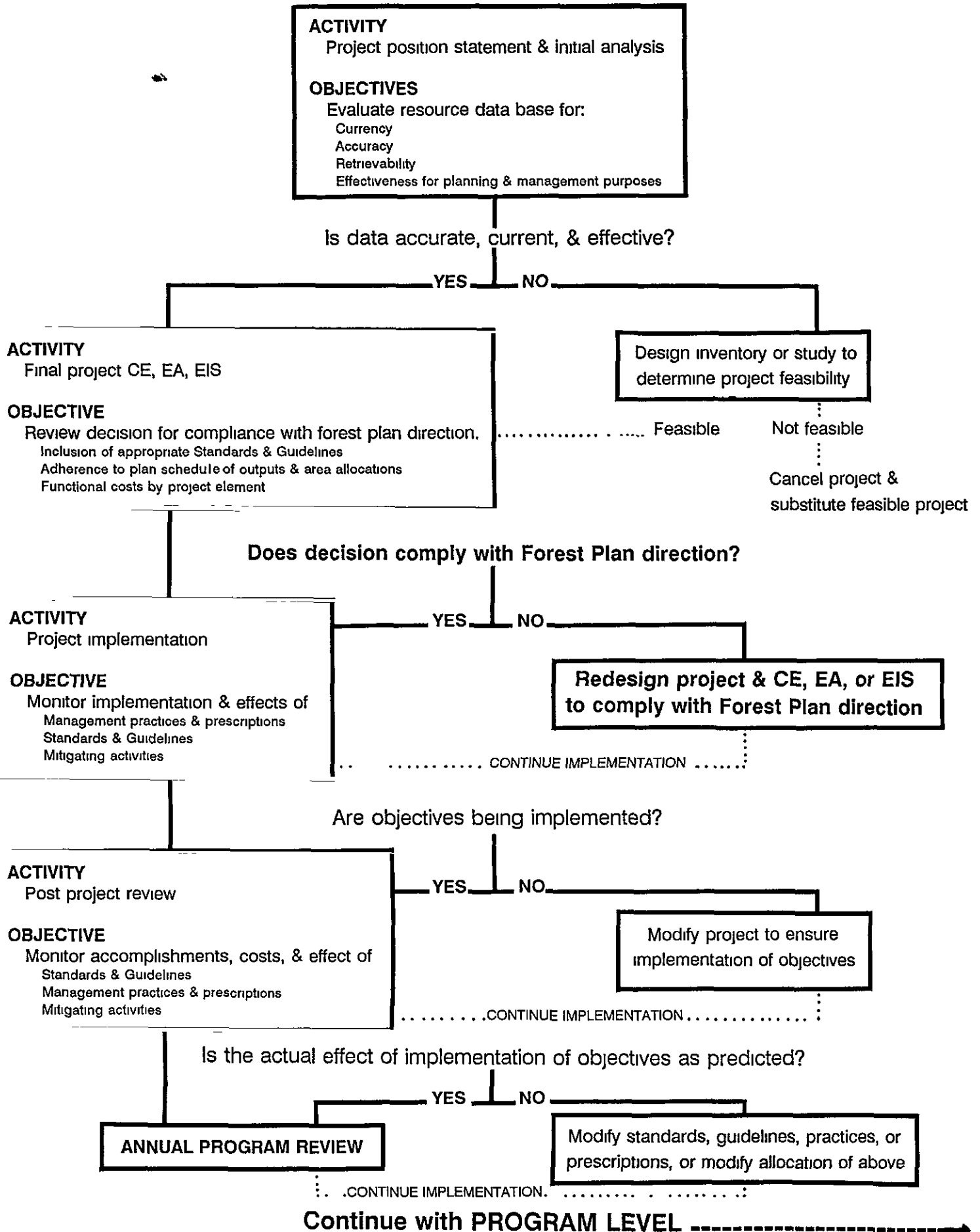
EVALUATION

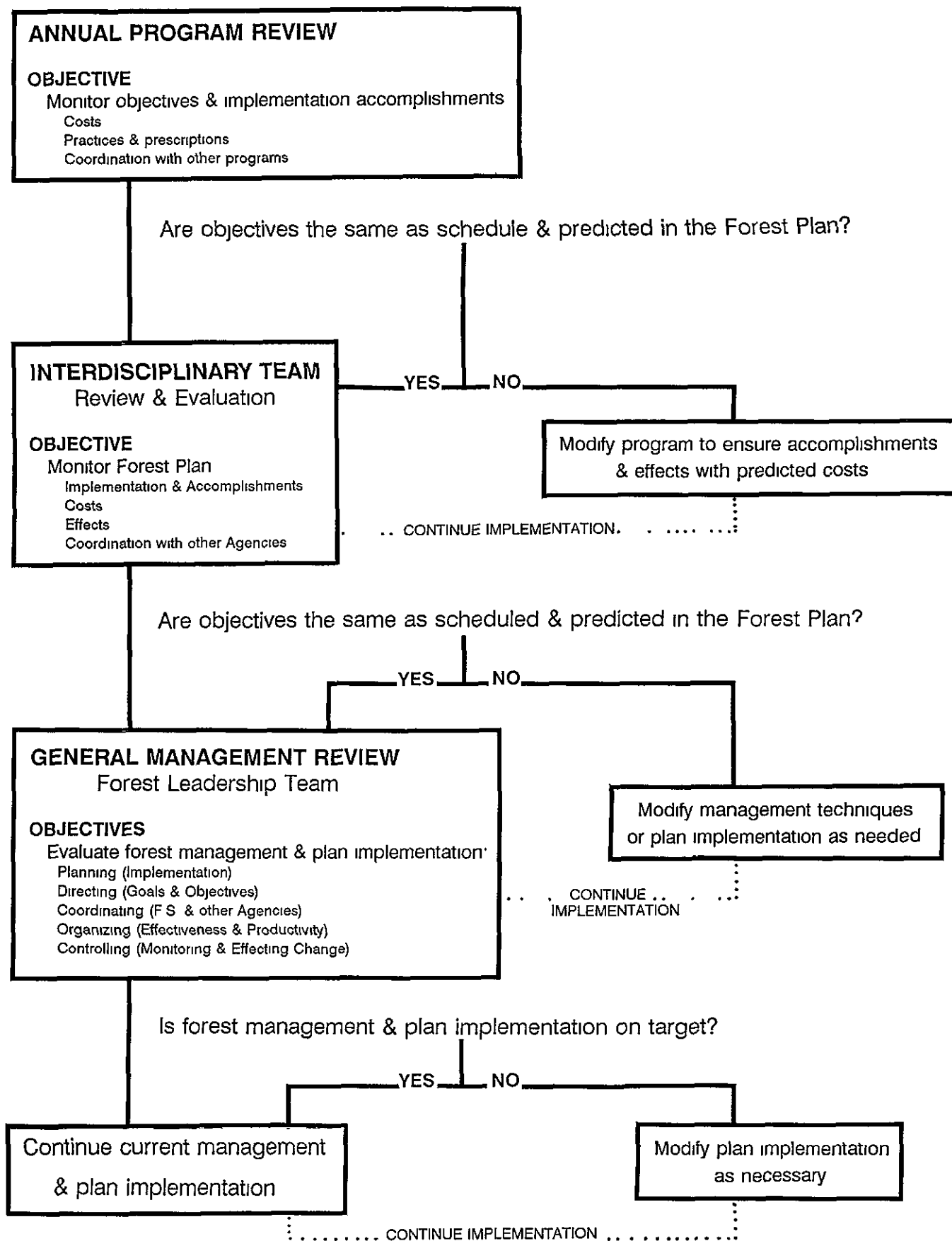
At intervals established in this Plan implementation will be evaluated to determine how well objectives have been met and how closely management standards and guidelines have been applied. Based upon this evaluation, the interdisciplinary team shall recommend to the Forest Supervisor such changes in management direction, revisions, or amendments to the Forest Plan as deemed necessary. The results of this monitoring and evaluation may also be used to analyze the management situation during revision of the Plan.

The Forest Planning Staff Officer has the Forest's overall coordination responsibility for accomplishment of the monitoring program. District Rangers and others will have supporting monitoring responsibilities within Ranger Districts. In most instances it will be necessary to develop resource-specific monitoring plans describing monitoring techniques and locations.



PROJECT LEVEL





AMENDMENT

The Forest Plan incorporates legal mandates, professional judgment, and the public's stated concerns into a future vision of the Forest. It charts a path for getting there by developing management goals and objectives and by translating them into management direction in the form of standards and guidelines for management areas on the Forest. National Forest planning is a dynamic process, and the products -- Forest Plans -- are similarly dynamic. Forest Plans can and should be modified if conditions warrant. As management goals are applied on the ground or as new information is learned about resources, the Plan's goals and objectives or activities the goals generate may no longer be appropriate. In such instances, activities may be tailored to fit the resource or planning objectives, as stated in the Plan, may be amended. Plans do not apply direction in site-specific management activities. It would be unrealistic and wrong to try to identify, analyze, and schedule the myriad projects or activities that occur on a National Forest. Instead, this type of site-specific planning occurs at the project-level planning stage, such as allotment management planning.

The following actions must be taken when a management action or proposal is not consistent with the Forest Plan and the proposal is to be considered further for implementation

- 1 Prepare a proposed amendment to the Forest Plan.
2. Make a determination of the significance of the change to the Forest Plan under 16 U.S.C. 1604(f)(4), 36 CFR 219.10(f), and FSM 1922.5. It is important to distinguish between significance of the change to a Forest Plan and significance of the environmental impacts of the proposed action (as defined by Council on Environmental Quality regulations found under 40 CFR 1500 to 1508).
3. Consider the following factors when determining whether a proposed change to a Forest Plan is significant or not significant, based on NFMA planning requirements. Other factors may also be considered, depending on the circumstances.
 - a. Timing
 - b. Location and size
 - c. Goals, objectives, and outputs
 - d. Management prescription
4. If the amendment is determined not to be a significant change to the Forest Plan, the Forest Supervisor may implement the amendment following appropriate public notification and satisfactory compliance with Forest Service environmental policies and procedures for the project or action.
5. If the change to the Forest Plan is determined to be significant, the required 10 step planning process found at 36 CFR 219.12 will be followed. Preparation of an environmental impact statement (EIS) is mandatory (16 U.S.C. 1604(f)(4), 36 CFR 219.10(f), and 36 CFR 219.12). The Forest Supervisor shall determine the issues, concerns, and opportunities to be addressed in the amendment and will normally concentrate on those issues that have generated the need for change.