NOTE: These pages are intended to as nearly as possible replicate the actual pages from the published 1991 Plan, as amended. Page numbers from the Plan are even shown. Some pages are expanded into two pages by proposed new language and formatting. Black text is unaffected and will remain the same, text indicated with ~~strike through~~ is to be deleted, and, <u>underlined</u> text is to be added under both Alternatives 2 and 3.

Appendix A

CURRENT LANGUAGE OF THE PLAN, AND PROPOSED AMENDED LANGUAGE UNDER ALTERNATIVES. SELECTED PAGES FROM THE FOREST PLAN WITH REFERENCES TO MIS HIGHLIGHTED, AND WITH PROPOSED SPECIFIC LANGUAGE CHANGES ALSO HIGHLIGHTED.

Note to the reader: The added text in Appendix A reflects Alternative 3 language. The Alternative 3 species shown on page A-5 would be replaced with the following species to reflect Alternative 2:

Elk
Abert's Squirrel
Brewers Sparrow
Goshawk
Pine Marten
Common Trout

-

Whooping Crane**	*Grus Americana*
Greater Sandhill Crane**	*Grus canadensis* tabida
Wolverine***	*Gulo Gulo*
Bald *Eagle*	*Haliaeetus leucocephalus alascanus*
Lynx***	*Lynx Canadensis*
Colorado River Cutthroat*	*Oncorhynchus clarki pleuriticus*
Colorado Squawfish***	*Ptychocheilus lucius*
Humpback Chub***	*Gila cypha*
Razorback Sucker***	*Xyrauchen texanus*

* Listed only as Colorado Threatened and Endangered Species
** Migrant occurrence.
***Doubtful existence on the Forest.

Forest Service botanists have diligently attempted to identify species and locations of plants which may have endangered, threatened, or sensitive status. In addition, these botanists have been involved with recommendations and information pertinent to the U.S. Fish and Wildlife Service (US F&WS) listings. On December 15, 1980, the US F&WS published in the Federal Register a list of those plant species native to the United States that were being reviewed as endangered or threatened under the Endangered Species act of 1 973, as amended. Forest personnel have inventoried 1 plant species listed in this publication as Category 1. Five plant species in Category 2 possibly occur although not all have been located on the ground. Plants thus inventoried will be managed to permit the US F&WS to make accurate evaluations as to their status.

The sensitive species, Uncompahgre Fritillary Butterfly *(Boleria acronema)* is under consideration for Federal designation and exists on the Forest. Its habitat is being studied by the Colorado Natural Areas Program. The species *Braya humilus* spp. *Ventosa* (no common name) is in need of special management according to Regional Direction.

Management Indicator Species

During informal consultation, the U.S. Fish and Wildlife Service indicated the Forest Plan analysis should consider three additional threatened and endangered fish species. These species are: Colorado Squawfish, Ptychochellus lucius; Humpback Chub, Gila cypha; and Razorback Sucker, Xyrauchen texanus. None of these fish have been found on the Forest and the identified occupied and historical ranges are far removed from the Forest. (Source: Essential Habitat for Threatened and Endangered; David Langlois, 1978.)

~~Habitat requirements vary according to early and late forest succession stages. Early forest succession refers to plant communities that develop after harvest or removal of vegetation; for example, grass, forbs, or tree seedlings. Late forest succession refers to a stage in which trees are mature or overmature.~~

Certain wildlife species found in specific vegetation types have been selected to represent the habitat needs of a larger group of species requiring similar habitats. These are called management indicator species. The species selected for late forest or vegetation succession represent a smaller number of wildlife species with highly specialized requirements. Early succession species represent a large number of wildlife species which are more adaptable to early secondary vegetation. Table II-15 displays the indicator species and their habitat association.

TABLE II-15

ASSOCIATIONS OF MANAGEMENT INDICATOR SPECIES

	EARLY		LATE	AB*
VEGETATIVE TYPE	SUCCESSION	AB*	SUCCESSION	AB*
Old Growth Spruce-fir	Elk	F	Pine Marten	U
Mature Spruce and Douglas-fir	Elk	F	Red Crossbill	A
Mature Lodgepole Pine	Elk		Hairy Woodpecker	F
Mature Aspen	Elk	C	Goshawk	F
Mature Ponderosa Pine	Mule Deer	C	Abert Squirrel	F
Mature Mountain Shrub	Elk	F	Lewis' Woodpecker	C
Later Succession Sagebrush	Mule Deer	A	Sage Grouse	F
Mature Pinyon-Juniper	MuleDeer	A	Pinyon Jay	C

Abundance Code
A = Abundant: Observation of 25 per day usual in suitable habitat.
C = Common: Observation of 10 per day.
F = Fairly Common: One or more observed per day.
U = Undetermined: Not enough information to classify.

~~The Forest planning process identified management indicator species. They represent the effects and influences of land uses on wildlife and fish. Table II-16 displays the Forest's management indicator species. Criteria used to select these species were:~~
~~--There were issues or concerns about the wildlife/fisheries species and/or their habitat. .~~
~~--The species is endangered or threatened, either nationally or statewide.~~
~~--The species has special habitat needs that may be influenced significantly by management practices resulting from land use allocation.~~
~~--The species are economically important and are commonly hunted, fished, or trapped.~~
~~--The species represents the habitat requirements of other species or groups of species.~~

~~TABLE II-16~~

~~SPECIES AND THEIR SIGNIFICANCE TO MANAGEMENT AS INDICATORS~~

~~Species Habitat Indicator Significance~~

Mule Deer
Elk
Abert's Squirrel
Pine Marten
Goshawk
Brewers Sparrow
Juniper (Plain) Titmouse
Common trout

~~Mule Deer.....Economically important~~
~~Elk.....Economically important~~
~~Bighorn Sheep.....Economically important~~
~~RainbowTrout.....Economically important~~
~~Brown Trout.....Represents Requirements for Other Species~~
~~Black Bear.....Economically important~~
~~Abert Squirrel.....Special Habitat Needs~~
~~Pine Marten.....Special Habitat Needs~~
~~Hairy Woodpecker.....Represents Requirements for Other Species~~
~~Red Crossbill.....Represents Requirements for Other Species~~
~~Goshawk.....Represents Requirements for Other Species~~
~~Lewis' Woodpecker.....Represents Requirements for Other Species~~
~~Sage Grouse.....Represents Requirements for Other Species~~
~~Pinyon Jay.....Represents Requirements for Other Species~~
~~Peregrine Falcon.....Threatened and Endangered~~
~~Bald Eagle.....Threatened and Endangered~~
~~Colorado RiverCutthroat Trout Threatened and Endangered~~

NEW TEXT

Range

Data which portrays allotment acreage, suitability, range condition, and carrying capacity for the grazing allotments on the three National Forests is 15-20 years old and considered useful but outdated. Based upon such data it is estimated that the three combined National Forests contain approximately 1,200,000 acres of suitable and available rangeland. Of the total suitable acres, it is estimated that 115,000 occur within designated wilderness areas.

MANAGEMENT PRESCRIPTION 4B

(Optimize habitat capability for ~~all management indicator species~~ wildlife.)

NOTE TO REVIEWER: BECAUSE THIS AMENDMENT TO THE PLAN IS AN INTERIM MEASURE PENDING THE DEVELOPMENT OF A REVISED LAND AND RESOURCE MANAGEMENT PLAN, THE PROVISIONS OF THIS MANAGEMENT PRESCRIPTION WHICH PROVIDE SPECIAL MANAGEMENT FOR SELECTED SPECIES OF WILDLIFE HAVE BEEN LEFT ESSENTIALLY THE SAME. REFERENCE TO MIS HAS BEEN CHANGED TO"SELECTED WILDLIFE SPECIES", BUT THE POTENTIAL SPECIES FOR MANAGEMENT EMPHASIS ARE STILL LISTED AS THE ORIGINAL MIS, IN ADDITION TO OTHER WILDLIFE SPECIES WHICH MAY BE BETTER FOR SELECTION ON SPECIFIC MANAGEMENT AREAS. THE CONSEQUENCE OF THIS IS THAT THERE WILL BE NO CHANGE IN MANAGEMENT FOR WILDLFE ON THE FOREST DURING THE INTERIM PERIOD THAT THIS AMENDMENT IS IN EFFECT. ONLY THE MONITORING AND ANALYSIS PROTOCOLS, BOTH FOREST WIDE AND FOR PROJECTS, WILL CHANGE AS A RESULT OF MODIFICATION OF THE LIST OF MIS SELECTED IN ACCORDANCE WITH THE 1982 PLANNING RULE.

Management emphasis is on the habitat needs of one or more ~~management indicator~~ species of wildlife. Species with compatible habitat needs are selected for an area. The goal is to optimize habitat capability, and thus numbers of the species. The prescription can be applied to emphasize groups of species, such as early succession dependent or late succession dependent, in order to increase species richness or diversity. Species to be considered/selected from include ~~those species identified in the 1983 Forest Plan as Management Indicator species (~~Mule Deer, Elk, Bighorn Sheep, RainbowTrout, Brown Trout, Black Bear, Abert's Squirrel, Pine Marten, Hairy Woodpecker, Red Crossbill, Goshawk, Lewis' Woodpecker, Sage Grouse, Pinyon-Jay, Peregrine Falcon, Bald Eagle, Colorado River Cutthroat Trout~~)~~. Other species may be selected as well, depending on the specific area, species which inhabit that area, and locally identified issues.

Vegetation characteristics and human activities are managed to provide optimum habitat for the selected species, or to meet population goals jointly agreed to with the State Fish and Wildlife agencies. Tree stands are managed for specific size, shape, interspersion, crown closure, age, structure, and edge contrast. Grass, forb, and browse vegetation characteristics are regulated. Rangeland vegetation is managed to provide needed vegetation species composition' and interspersed grass, forb, and shrub sites or variety in age of browse plants. Fish habitat improvement treatments are applied to lakes and streams to enhance habitats and increase fish populations,

Recreation and other human activities are regulated to favor the needs of the designated species. Roaded-natural recreation opportunities are provided along Forest arterial and collector roads. Local roads and trails are either open or closed to public motorized travel. Semi-primitive motorized recreation opportunities are provided on those local roads and trails that remain open, semi-primitive nonmotorized opportunities are provided on those that are closed. A full range of tree harvest methods and rangeland vegetation treatment methods are available. Investments in other compatible resource uses may occur but will be secondary to habitat requirements. Management activities will meet the adopted VQO.

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF; Dispersed Recreation Management		c. See FSM 2331, FSM 7732, FSH 7709.12 (Trails Handbook), FSH 7109.11a and 11b (Sign Handbook). (6226) (4B)
	03 Permit undesignated sites in Frissell condition class through 3 where unrestricted camping is permitted. (0174) (4B)	
	04 Manage site use and occupancy to maintain sites within Frissell condition class 3 except for designated sites which may be class 4. Close and restore class 5 sites. (0175) (4B)	
	05 Prohibit motorized vehicle use (including snowmobiles) *off* Forest System roads and trails in alpine shrub and Krummholz ecosystems. Prohibit motorized vehicle use *off* Forest System roads and trails (except snowmobiles operating on snow) in other alpine, and other ecosystems, where needed to protect soils, vegetation, or special wildlife habitat. (0154) (4B)	
Wildlife and Fish Resource Management	01 Manage for habitat needs of selected <u>wildlife</u> ~~indicator~~ species. (3070GM)	a. Maintain habitat capability at a level at least 80 percent of potential capability for selected species. (6261) (4B)
	02 Emphasis on species commonly hunted, fished, or trapped will follow species priorities established by States. (0338) (4B)	a. Maintain at least 90 percent of the habitat needed to support the State population goals for <u>selected</u> ~~each~~ species. (6260) (4B)
	03 Maintain hiding cover for elk and deer, where present. (0341) (4B)	a. Where the potential exists, maintain cover along 75% of all arterial and collector roads. Cover should be located and measured perpendicular to the road with gaps between cover kept to a minimum (9085) (4B)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF: Wildlife and Fish Resource Management		b. In diversity unit dominated by forested ecosystems, maintain a minimum of 50 percent of the diversity unit in deer or elk hiding cover. This hiding cover should be well distributed over the unit. Maintain 30 percent of the diversity unit in thermal cover (winter or spring- summer). Hiding cover can be used to meet thermal cover requirements if they indeed coincide biologically. (6334) (4B)
Range Resource Management	01 Apply wildlife and livestock forage allowable use guides specified in Forest Direction. Modify so needs of selected wildlife ~~management indicator~~ species are met. (0415) (4B)	a. Maintain vegetation in fair or better range condition. (6172) (4B)
	02 Structural range improvements should be designed to benefit wildlife and livestock. (0416) (4B)	a. Structural improvements will not adversely affect big game movement (FSH 2209.22). (6247) (4B)
Silvicultural Prescriptions	01 Manage forest cover types to provide variety in stand sizes, shape, crown closure, edge contrast, age contrast, age structure and interspersion. (0345) (4B)	
Transportation System Management	01 Manage road use to provide for habitat needs of selected wildlife ~~management indicator~~ species, including road closures and area closures, and to maintain habitat effectiveness. (0342) (4B)	a.Determine off-road vehicle restrictions based on the needs of wildlife. Follow ORV Management Guidelines Handbook (R2 FSH 2309.26).(6288) (4B)
	*** 02 Manage public motorized use on roads and trails to maintain or enhance effective habitat for elk. (3202 GM)	a. Work toward a minimum level of 80% habitat effectiveness for elk. (9203 GM)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF: Dispersed Recreation Management		c. See FSM 2331, FSM 7732, FSH 7709.12 (Trails Handbook), FSH 7109.11a and 11b (Sign Handbook). (6226) (6A)
	03 Permit undesignated sites in Frissell condition class 1 through 3 where unrestricted camping is permitted. (O174) (6A) 04 Manage site use and occupancy to maintain sites within Frissell condition class 3 except for designated sites which may be class 4. Close and restore class 5 sites. (O175) (6A) 05 Prohibit motorized vehicle use (including snowmobiles) off Forest System roads and trails in alpine shrub and Krummholz ecosystems. Prohibit motorized vehicle use off Forest System roads and trails (except snowmobiles operating on snow) in other alpine, and other ecosystems, where needed to protect soils, vegetation, or special wildlife habitat. (0154) (6A)	
Wildlife and Fish Resource	01 Manage for habitat needs of ~~indicator~~ selected wildlife species. (0408) (6A)	a. Maintain capability at 70 percent or more of potential capability of selected wildlife species. (6183) (6A)
	02 Provide adequate forage to sustain big-game population levels agreed to in the Statewide Comprehensive Wildlife Management Plan on NFS lands. (0330) (6A)	
Range Resource Management	01 Use only intensive grazing systems or remove livestock when recovery of range condition cannot be accomplished by an intensive grazing system. (0325) (6A)	
	02 Improve range conditions to mid-seral or better or forage value rating to moderately high or better. (0326) (6A)	a. Base range condition on the standards in Range Analysis Handbook (FSH 2209.21). (6156) (6A)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF: Dispersed Recreation Management		c. See FSM 2331, FSM 7732, FSH 7709.12 (Trails Handbook), FSH 7109.lla and l1b (Sign Handbook). (6226) (6B)
	03 Permit undesignated sites in Frissell condition class 1 through 3 where unrestricted camping is permitted. (0174) (6B)	
	04 Manage site use and occupancy to maintain sites within Frissell condition class 3 except for designated sites which may be class 4. Close and restore class 5 sites. (0175) (6B)	
	05 Prohibit motorized vehicle use (including snowmobiles) off Forest System roads and trails in alpine shrub and Krummholz ecosystems. Prohibit motorized vehicle use off Forest System roads and trails (except snowmobiles operating on snow) in other alpine, and other ecosystems, where needed to protect soils, vegetation, or special wildlife habitat. (0154) (6B)	
Wildlife and Fish Resource Management	01 Manage for habitat needs of ~~indicator~~ selected wildlife species. (0408) (6B)	a. Maintain capability at 60 percent of potential capability of selected wildlife species. (6186) (6B)
	02 Provide adequate forage to sustain big-game population levels agreed to in the Statewide Comprehensive Wildlife Management Plan on NFS lands. (0330) (6B)	a. Allocate no more than 80 percent of available forage to livestock. (6187) (6B)
Range Resource Management	01 Use only intensive grazing systems or remove livestock when recovery of range condition cannot be accomplished by an intensive grazing system. (0325) (6B)	
	02 Improve range condition to mid-seral or better or forage value rating to moderately high or better. (0326) (6B)	a. Base range condition on the standards in Range Analysis Handbook (FSH 2209.21). (6156) (6B)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
		c. See FSM 2331, FSM 7732, FSH 7709.12 (Traits Handbook), FSH 7109.11a and 11b (Sign Handbook). (6226) (7A)
CONTINUATION OF: Dispersed Recreation Management	03 Permit undesignated sites in Frissell condition class 1 through 3 where unrestricted camping is permitted. (0174) (7A) 04 Manage site use and occupancy to maintain sites within Frissell condition class 3 except for designated sites which may be class 4. Close and restore class 5 sites. (0175) (7A) 05 Prohibit motorized vehicle use (including snowmobiles) off Forest System roads and trails in alpine shrub and Krummholz ecosystems. Prohibit motorized vehicle use off Forest System roads and trails (except snowmobiles operating on snow) in other alpine, and other ecosystems. where needed to protect soils, vegetation, or specific wildlife habitat. (0154) (7A)	
Wildlife and Fish Resource Management	01 Manage for habitat needs of selected wildlife ~~indicator~~ species. (0408) (7A)	
Range, Improvements and Maintenance	01 Utilize transitory forage that is available where demand exists, and where investments in regeneration can be protected. (0132) (7A)	a. Vary utilization standards with grazing system and ecological condition. Specify standards in the allotment management plan. (6071) (7A) b. Maximum grazing use on transitory ranges resulting from clearcuts is: -- Key shrubs 20% of current growth. -- Key grasses 40-50% of current growth. -- Key forbs 20% of total production. (6072) (7A)
MANAGEMENT PRESCRIPTION 7A	Page III-153	*** - Item following *** has been changed from the Original Plan

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
Aquatic and Terrestrial Habitat Management	01 Manage for habitat needs of ~~indicator~~ selected wildlife species for a given area. (0408) (FDR)	a. Deer and Elk. Provide hiding cover within 1000 feet of any known calving areas. Refer to Forest Direction Management Activity "Habitat Improvement and Maintenance", General Direction 01, Standard and Guideline b for further clarification of hiding cover. (90B3GM) (FDR) b. Pine Marten (old growth spruce-fir). Opening created should be less than 300 feet in width. Provide diversity of forest communities. (B062GM) (FDR) c. Red Crossbill (mature spruce fir). Provide at least 20% of the area in trees bearing cones. (B063GM) (FDR) d. Hairy Woodpecker (mature Lodgepole pine) Provide 3-5 snags/acre and meet the adopted VQO for the area. Protect those snags with cavities when they are located within 100 yards of 4-wheel drive access. Leave live broken trees in preference to others in snag selection. (8064GM) (FDR) e. Goshawk (mature aspen) Provide 20% of pole or mature tree stands adjacent to nesting sites with at least 150 square feet of basal area. Provide at least one class 1 log adjacent to nesting sites. (8065GM) (FDR)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF: Aquatic and Terrestrial Habitat Management		*** c. Update data base to insure that inventories are reflective of existing conditions. (9056 GM) ~~***~~ d. Obtain biomass estimates of fish pounds/acre and compare with HQI estimates. (9057 GM) *** e. Initiate macro invertebrate sampling Forest-wide to be used as an indicator ~~species for monitoring~~ of habitat quality. Set up stations on 5-10 streams/district per year, based on funding constraints. (9058 GM) ~~***~~ f. Maintain fisheries habitat at a level which reflects an improving trend. (9059 GM)
	~~_~~*** 04 Manage habitat for needs of macro invertebrates and fish ~~indicator species~~ on all perennial streams which provide potential fisheries. Manage waters capable of supporting self-sustaining trout populations to provide for these populations. (3061 GM)	*** a. Work toward obtaining optimal values for: Pool :Riffle Ratios, pool measure and pool structure, % bank cover, % bank stability, % bank vegetation stability, and % stream bottom composition. Values should approach current habitat condition indices and priorities for more intensive management should be based on these values. (9060 GM)

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
CONTINUATION OF: Aquatic and Terrestrial Habitat Management		*** b. Improve aquatic habitat on streams where inventories indicate a need based on current methodologies such as Pfankuch and Cowfish. (9068 GM). *** c. Prepare activity plans for streams based on priorities and considering the basin-wide approach to management. (9069 GM)
Cooperation with other Agencies	*** 01 Conduct habitat improvement projects jointly or cooperatively funded with the state of Colorado or other partnerships. (3064 GM) *** 02 Manage animal damage in cooperation with the State Wildlife Agencies, Fish and Wildlife Service, USDA-APHIS-Animal Damage Control, other appropriate agencies, and cooperators to prevent or reduce damage to other resources and direct control toward removing only the offending animal. Preventative damage hunts will only be allowed on a case by case basis. (3065 GM) 03 Allow denning or aerial hunting for coyotes only and solely for the purpose of animal damage control and under the following conditions: a. Methods are specified in the Forest Animal Control Plan: b. Denning and aerial hunting is done by an Authorized individual and c. Denning will be allowed on a case by case basis only when other measures of control have not been successful. d. The permit is issued by the State for aerial hunting. (0098) (FOR)	a. Insure that improvement projects submitted in the Forest Action Plans have had the necessary pre-project evaluations conducted on them which includes some level of monitoring. (9070)

CHAPTER IV

MONITORING AND EVALUATION

Introduction

The Monitoring and Evaluation Program is the management control system for the Forest Plan. It will be used to provide information on the progress and results of implementation. One of the results of monitoring will be an assessment of the need for amending or revising the Plan.

Monitoring in intended to help keep the Amended Forest Plan current and responsive to changes. Monitoring and evaluation each have a distinctly different purpose and scope. Monitoring consists of gathering data. observations, and information. During evaluation. the data and information are analyzed and interpreted. This process provides the information necessary to determine if conditions are within the bounds and intent of the Plan direction. Forest Plan monitoring does not replace or substitute for other Forest monitoring activities. Many activities are currently being monitored on the Forest to comply with administrative and legal responsibilities.

Monitoring and evaluation will provide information to:

1. Compare planned versus applied management standards and guidelines to determine if objectives are achieved (36 CFR 219.12 (k)).
2. Quantitatively compare planned versus actual outputs and services (36 CFR 219.12 (k)(l).
3. Measure effects of prescriptions. including significant changes in land productivity (36 CFR 219.12 (k)(2)).
4. Determine planned cost versus actual costs associated with carrying out prescriptions (36 CFR 219.12 (k)(3)).
~~5. Determine population trends of the management indicator species and relationship to habitat changes.(36 CFR 219.19 (a)(6) 1982 Rule).~~
5. Use best available science, data and analysis to estimate the effects of habitat changes and other management activities on MIS. Incorporate species population data from various sources, if available. In accordance with the 2004 Planning Rule, 36 CFR 219.14(f), obligations relating to management indicator species [may be met] by considering data and analysis relating to habitat; and site-specific monitoring or surveying of a proposed project or activity area is not required, but may be conducted at the discretion of the Responsible Official for specific projects.
6. Evaluate effects of National Forest management on adjacent land, resources and communities (36 CFR 219.7 (f)).
7. Identify research needs to support or improve National Forest management (36 CFR 219.28).
8. Determine if lands are adequately restocked (36 CFR 219.12 (k)(5)(i)).
9. Determine at least every ten years, if lands identified as unsuitable for timber production have become suitable (36 CFR 219.12 (k)(5)(ii)).
1O. Determine whether maximum size limits for harvest areas should be continued (36 CFR 219.12 (k)(5)(iii)).

TABLE IV-1 IMPLEMENTATION MONITORING

Activity	Implementation Monitoring Objective	Method(s)	Unit of Measure	Monitoring Magnitude and Frequency	Reporting Period	Monitoring Responsibility	Annual Costs M $'s	Action Indicated
WILDERNESS								
Wilderness use effect on wilderness setting	Are the S&G's being achieved?	Field inspections	As needed	Annually as needed	Annually	Recreation Staff Officer	3.0	Document areas where the S&G's are being violated & prescribe corrective action or manage for the inconsistincy.
WILDLIFE								
~~Habitat capability for MIS & population trends~~	~~Are capability levels being achieved to sustain desired populations for verebrate wildlife species?~~	~~Project plans, population estimates by CDOW & FS, RIS, and HABCAP~~	~~% of habitat capability provided; population #'s as available~~	~~On going on 5 projects selected annually. Forestwide analysis every 5 years~~	~~5 years for habitat capability; annually for population trends~~	~~Wildlife Staff Officer~~	~~4.0 annually,7.0 every 5 years~~	~~Document results in annual report and prescribe corrective action as needed through Plan Amendments or on-the-ground corrective action as needed.~~
Diversity, capability, and trends for MIS and other desired species' habitats	Are the desired quantity, distribution and capability of habitats being provided?	Habitat conditions and trends to be assessed through use of existing analyses associated with ongoing landscape assessments, project planning and/or analysis, other analysis tools or field observations. Incorporate population information based on following sources, as available: Population estimates by CDOW, U.S.Fish and Wildlife Service, RMBO; field observations by Forest Service personnel; and/or other sources. Forest-wide, or local scale, population survey and monitoring is not required.	Acres summary of habitat effects from project decisions in terms of habitat/cover type/ structural change, plus discussion of other habitat effects.	Annually. Forest-wide summary every 5 years.	Annual. Baseline update every 5 years.	Wildlife Staff	$25.0 annually/ $50.0 every 5 years.	
Vegetative diversity	Meet applicable S&G's. Are the minimum habitat needs for vertebrate wildlife species being met? Are seral stages, edge index, & spatial habitat	RIS/GIS, post project inspection, review project planning records	Acres of structural stages per diversity unit	On going on 5 projects selected annually. Forest-wide analysis ever 5 years	5 years	Wildlife Staff Officer	5.0 annually; 9.0 every 5 years	Same as above.

	requirements being achieved?							
Old growth habitat/ cavity dependent species habitat	Is the integrity of biological old growth vegetation being provided at proper levels & spatial require-ments ~~to meet the desired population levels of dependent species~~	RIS/GIS, Old growth scorecard	Acres per di-versity unit, Minimum old growth scorecard rating	Inventory 3 diversity units per year where significant activities are proposed.	5 years	Wildlife Staff Officer	4.0	Same as above.
Habitat Effectiveness	Meet minimum S&G's. Assure habitat created or existing provides the most total effective use by big game within desired objectives.	RIS, analysis of forage/cover ratios & open road miles per section by diversity unit	Habitat Effec-tiveness Index (HEI)	On going on 5 projects selected annually. Forestwide analysis every 5 years	5 years	Wildlife Staff Officer	3.0 annual-ly,9.0 every 5 years	Same as above.

TABLE IV-1 IMPLEMENTATION MONITORING

Activity	Implementation Monitoring Objective	Method(s)	Unit of Measure	Monitoring Magnitude and Frequency	Reporting Period	Monitoring Responsibility	Annual Costs M $'s	Action Indicated
AQUATIC HABITAT (FISHERIES)								
Manage aquatic habitat for needs of <u>macro invertebrate and fish</u> ~~indicator~~ species	Are we managing habitat for the needs of trout & macro-invertebrate species? Are we meeting the S&G's under Forest Direction?	Evaluate data collection & projects proposed &/or complet.ed, Literature search (HSI)	Miles and # of streams	Annually on em-phasized water-sheds	Annually	Fisheries Staff Officer	20.0	Determine limiting factors and needs for <u>fish</u> ~~indicator~~ species to include common trout species (Brown & Brook) & Colo River Cutthroat Trout.
Minimum Flows	Are we meeting Forest S&G's?	Coordinate with CDOW	# of streams	Annual 2% per year	Annual report if warranted	Fisheries Staff Officer	2.0	Submit needs to CDOW to be filed for these flows under Senate Bill 97.
THREATENED ENDANGERED & SENSITIVE PLANT AND ANIMAL SPECIES	Determine the status of T&E plant and animal species	Inventory and monitoring as required in coordination with oth er Federal and State agencies	Populations , acres of habitat	Annual, as needed	Annual	Range, Wildlife, and Fisheries Staff Officer	13.0	Any change in species condition, trend, or habitat will require immediate action to protect.
RIPARIAN	Are we managing riparian habitat to meet the S&G's in the 9A Rx?	Field reviews by ID Team	# Projects & activities affecting riparian areas	Annually on em-. phasized water-sheds	Annual	Range, Wildlife, and Fisheries Staff Officer	10.0	Prescribe corrective action as necessary.

	Are we managing riparian areas to reach the lates seral stage possible within the stated objectives?	Field reviews with riparian scorecards	# of acres and miles	Annually on emphasized watersheds	Annual	Range, Wildlife, and Fisheries Staff Officer	10.0	Recommend corrective action as needed. Document successes.
RANGE								
Forage Utilization	Are we meeting the utilization standards in the S&G's?	Clip/weigh & ocular estimates	% utilization	28 Allotments annually	Annually	Range Staff Officer	45.0	Modify livestock use where standards are routinely exceeded.
Condition & Trend	Determine habitat condition (seral stage) &/or direction of trend	Transects, score-cards, photo points, and/or historical stud. ies (Parker 3-Step, etc.)	Seral stage by acres	28 Allotments annually	Annually	Range Staff Officer	30.0	Adjust grazing system and/or stocking rates where trend is down or not moving toward dessired.future condition
Noxious Weeds	Determine level of infestation & treatment needs by species	Field observations	Acres	Annually as needed	Annually	Range Staff Officer	7.0	Update inventory of infestation and treated acres

Activity	**Effectiveness Monitoring Objective**	Vegetative inspections & analysis of pre & post treatment activities	**Unit of Measure**	**Monitoring Magnitude and Frequency**
Wildlife **Wildlife Habitat Modifications**	Are the habitat modifications producing the desired objectives?		Pounds per acre; habitat capability~~, #'s of animals~~	Annual by project