RESOURCE	ACTIVITY	STANDARDS AND GUIDELINES
	A09	Manage the following areas to maintain these existing Semi-Primitive recreation opportunities. The areas are identified by the following geographic features or known landmarks:

Nolan	10,830
Mother Hubbard	6,090
Hells Hole	18,860
Lower San Francisco	25,560
The Hub	7,770
Brushy Springs	5,790
Frisco Box	38,100
Brushy Mountain	7,890
Aspen Mountain	17,603
Wagon Tongue	7,560
Eagle Peak	20,075
Devil's Creek	87,095
Gila Box	24,350
Elk Mountain	4,475
T Bar	6,980
Canyon Creek	7,285
Contiguous to Gila Wilderness	72,465
Taylor Creek	6,130
Stone Canyon	7,340
Wahoo Mountain	22,080
Poverty Creek	**7,850**
Dry Creek	29,560
Contiguous to Aldo Leopold	96,055
Largo	13,110
Sawyer's Peak	64,200
Meadows Creek	34,000
Contiguous to Blue Range	10,795

	A09	A forest recreation opportunity guide (ROG) will be prepared during the first decade.
	A13	Within the Gila National Forest and that portion of the Apache National Forest administered by the Gila National Forest, maintain a recreation stay limit of no longer than 30 days in a consecutive 45 day period for general dispersed recreation, and 14 days for developed sites.
	A15	Manage for dispersed recreation at less than standard service level.
	A15	Maintain existing dispersed recreation facilities (fencing, gates, signs, etc.) to Condition Class 2 as minimum.
	A15	Replace or remove improvements where they no longer serve intended purpose and/or when they present a public health or safety hazard.
	A15	Clean and maintain throughout normal use season 100 percent of all known intensive use areas. Annual clean up of commonly used sites will follow the last deer hunting season. Garbage removal will be via pack-in/pack-out policy.
	A16	No new summer home sites will be established.
WILDLIFE MANAGEMENT	C01	Manage for indigenous species. Exotic species capable of reproducing in native habitats will not be introduced or allowed to invade National Forest System lands.
	C01	Establish current baseline for indicator species habitats and monitor trends at ten year intervals. Cooperate with New Mexico Department of Game and Fish in monitoring indicator species populations.

RESOURCE	ACTIVITY	STANDARDS AND GUIDELINES
	C12	Cooperate with state and other agencies to maintain wildlife populations within the habitat capability objectives stated in management area emphasis description.
THREATENED & ENDANGERED WILDLIFE - GENERAL	C01, C11	Manage threatened and endangered animal, fish and plant habitat to achieve delisting in a manner consistent with the goals established with the U.S. Fish and Wildlife Service and the New Mexico Department of Game and Fish in compliance with approved recovery plans. Habitat management for Federally listed species will take precedence over unlisted species. Habitat management for endangered species will take precedence over threatened species. Habitat management for sensitive species will take precedence over non-sensitive species.
	C01, C12	Consult and cooperate with the New Mexico Natural Heritage Program (plants) to achieve management objectives for threatened, endangered, and sensitive flora. On an opportunity basis, and when funds become available, inventory plants identified on the New Mexico Endangered Plant Species lst which may occur on the Forest.
	C01, C12	Studies will be conducted to ascertain suitability of reintroduction of endangered, threatened, proposed, and state listed native species into suitable habitats. This will be accomplished in conjunction with development and approval of recovery plans.
	C02	Threatened, endangered and sensitive species habitats found during project or management planning phases will be evaluated on the basis of best information available. Management requirements needed to maintain or enhance habitats for these species will be incorporated into implementation plans for individual areas. Habitat requirements for threatened, endangered, and sensitive species will take precedence over requirements for other species.
	C02	Habitat locations for threatened, endangered, and sensitive plant and animal species remain confidential to prevent unnecessary disturbance, theft, or mortality.
	C02	Establish current baseline for T&E and sensitive indicator species habitats and monitor trends at ten-year intervals. Cooperate with the New Mexico Department of Game and Fish and U.S. Fish and Wildlife Service in monitoring indicator species populations.
	C02	Accomplish recovery projects included in approved recovery plans. Projects will be coordinated through integrated resource management process.
	C01, C02, C12	When management practices are proposed in or likely to affect listed species habitat, a Biological Assessment and Evaluation will be conducted to assess impacts and determine needs for consultation or conference with the Fish and Wildlife Service or the New Mexico Department of Game and Fish. Consultation will be initiated for situations where listed or proposed listed species may or is likely to be affected.
FEDERAL ENDANGERED SPECIES		
PEREGRINE FALCON	C01, C02	Continue to identify existing and potential habitat for peregrine falcons as outlined in the Species Recovery Plan, with long-term goal of providing habit for approximately 40 breeding pair. Complete inventories and habitat managen plans for breeding habitats as identified in approved recovery plans. Monitc management practices within designated peregrine falcon habitat and evaluate impacts. Avoid disturbance activities in peregrine nesting habitats between March 15 and August 15.
BALD EAGLE	C01, C02, C05, C06, C11	Provide habitats to support a long-term goal o 120 and 175 wintering bald eagles. Complete inventories and habitat management plans for wintering bal eagle habitats as specified in approved recovery plans. Maintain eagle roos densities of two to six groves per section in concentration areas. Accompli wetland and fisheries improvements to maintain and enhance prey base for wintering bald eagles.

RESOURCE	ACTIVITY	STANDARDS AND GUIDELINES
GILA TROUT	C01,C02, C05,C08, C11	Continue ongoing recovery efforts with the objectives of delisting the species. Develop species into a native game fisheries within selected areas identified in conjunction with the New Mexico Department of Game and Fish.
MEXICAN SPOTTED OWL		Provide three levels of habitat management-protected, restricted, and other forest and woodland types to achieve a diversity of habitat conditions across the landscape. Protected areas include delineated protected activity centers; mixed conifer and pine-oak forests with slopes greater than 40% where timber harvest has not occurred in the last 20 years; and reserved lands which include wilderness, research natural areas, wild and scenic rivers, and congressionally recognized wilderness study areas. Restricted areas include all mixed-conifer, pine-oak, and riparian forests outside of protected areas. Other forest and woodland types include all ponderosa pine, spruce-fir, woodland, and aspen forests outside protected and restricted areas. Survey all potential spotted owl areas including protected, restricted, and other forest and woodland types within an analysis area plus the area ½ mile beyond the perimeter of the proposed treatment area. Establish a protected activity center at all Mexican spotted owl sites located during surveys and all management territories established since 1989. Allow no timber harvest except for fuelwood and fire risk abatement in established protected activity centers. For protected activity centers destroyed by fire, windstorm, or other natural disaster, salvage timber harvest or declassification may be allowed after evaluation on a case- by-case basis in consultation with the US Fish and Wildlife Service. Allow no timber harvest except for fire risk abatement in mixed conifer and pine-oak forests on slopes greater than 40% where timber harvest has not occurred in the last 20 years. Limit human activity in protected activity centers during the breeding season. In protected and restricted areas, when activities conducted in conformance with these standards and guidelines may adversely affect other threatened, endangered, or sensitive species or may conflict with other established recovery plans or conservation agreements; consult with the US Fish and Wildlife Service to resolve the conflict. Monitor changes in owl populations and habitat needed for delisting. Conduct surveys following Region 3 survey protocol. Breeding season is March 1 to August 31.
Protected Areas		*Protected Activity Centers:* Delineate an area of not less than 600 acres around the activity center using boundaries of known habitat polygons and/or topographic features. Written justification for boundary delineation should be provided. The Protected Activity Center boundary should enclose the best possible owl habitat configured in as compact a unit as possible, with the nest or activity center located near the center. The activity center is defined as the nest site. In the absence of a known nest, the activity center should be defined as a,roost grove commonly used during breeding. In the absence of a known nest/roost, the activity center should be defined as the best nest/roost habitat. Protected Activity Center boundaries should not overlap.

RESOURCE	ACTIVITY	STANDARDS AND GUIDELINES

Road or trail building in protected activity centers should be avoided but may be permitted on a case-by-case basis for pressing management reasons.

Generally allow continuation of the level of recreation activities that was occurring prior to listing. Require bird guides to apply for and obtain a special use permit. A condition of the permit shall be that they obtain a sub-permit under the U.S. Fish and Wildlife Service Master endangered species permit. The permit should stipulate the sites, dates, number of visits and maximum group size permissible.

Harvest fuelwood when it can be done in such a way that effects on the owl are minimized. Manage within the following limitations to minimize effects on the owl:

- Retain key forest species such as oak.
- Retain key habitat components such as snags and large downed logs.
- Harvest conifers less than 9 inches in diameter only within those protected activity centers treated to abate fire risk as described below.

Treat fuel accumulations to abate fire risk:

- Select for treatment 10% of the protected activity centers where nest sites are known in each recovery unit having high fire risk conditions. Also select another 10% of the protected activity centers where nest sites are known as a paired sample to serve as control areas.

- Designate a 100-acre "no treatment" area around the known nest site of each selected protected activity center. Habitat in the no treatment area should be as similar as possible in structure and composition as that found in the activity center.

- Use combinations of thinning trees less than 9 inches in diameter, mechanical fuel treatment and prescribed fire to abate fire risk in the remainder of the selected protected activity center outside the acre "no treatment" area.

- Retain woody debris larger than 12 inches in diameter, snags, clumps of broad-leafed woody vegetation, and hardwood trees larger than 10 inches in diameter at the root collar.

- Select and treat additional protected activity centers in 10% increments if monitoring of the initial sample shows there were no negative impacts or there were negative impacts which can be mitigated by modifying treatment methods.

- Use light prescribed burns in nonselected protected activity centers on a case-by-case basis. Burning should avoid a 100-acre "no treatment" area around the activity center. Large woody debris, snags, clumps of broad-leafed woody vegetation should be retained and hardwood trees larger than 10 inches diameter at the root collar.

- Pre- and post-treatment monitoring should be conducted in all protected activity centers treated for fire risk abatement (See monitoring guidelines).

Steep Slopes (Mixed conifer and pine-oak forests outside protected activity centers with slopes greater than 40% that have not been logged within the past 20 years): No seasonal restrictions apply.

Treat fuel accumulations to abate fire risk:
- Use combinations of thinning trees less than 9 inches in diameter, mechanical fuel removal, and prescribed fire.
- Retain woody debris larger than 12 inches in diameter, snags, clumps of broad-leafed woody vegetation, and hardwood trees larger than 10 inches in diameter at the root collar.
- Pre-and post-treatment monitoring should occur within all steep slopes treated for fire risk abatement (see monitoring guidelines).

Reserved Lands (*Wilderness, Research Natural Areas, Wild and Scenic Rivers, and Congressional Recognized Wilderness Study Areas):* Allow prescribed fire where appropriate.

RESOURCE	ACTIVITY	STANDARDS AND GUIDELINES

Restricted Areas

(Mixed conifer, pine-oak, and riparian forests) *Mixed Conifer and Pine-oak Forests (See glossary definition):* Manage to ensure a sustained level of owl nest/roost habitat well distributed across the landscape. Create replacement owl nest/roost habitat where appropriate while providing a diversity of stand conditions across the landscape to ensure habitat for a diversity of prey species. The following table displays the minimum percentage of restricted area which should be managed to have nest/roost characteristics.

VARIABLE	MC ALL RU	MC BR-E RU	MC OTHER RU	PINE-OAK
Restricted Area Percent	10%	+10%	+15%	10%
Stand Averages for:				
Basal Area	170	150	150	150
18 inch + trees/ac	20	20	20	20
Oak basal area	NA	NA	NA	20
Percent total existing stand density index by size class:				
12-18"	10	10	10	15
18-24"	10	10	10	15
24+"	10	10	10	15

The minimum mixed conifer restricted area includes 10% at 170 basal area and an additional amount of area at 150 basal area. The additional area of 150 basal area is +10% in BR-E and +15% in all other recovery units. The variables are for stand averages and are minimum threshold values and must be met simultaneously. In project design, no stands simultaneously meeting or exceeding the minimum threshold values should be reduced below the threshold values unless a district-wide or larger landscape analysis of restricted areas shows that there is a surplus of restricted area acres simultaneously meeting the threshold values. Management should be designed to create minimum threshold conditions on project areas where there is a deficit of stands simultaneously meeting minimum threshold conditions unless the district-wide or larger landscape analysis shows there is a surplus.

Attempt to mimic natural disturbance patterns by incorporating natural variation, such as irregular tree spacing and various patch sizes, into management prescriptions.

Maintain all species of native trees in the landscape including early seral species.

Allow natural canopy gap processes to occur,thus producing horizontal variation in stand structure. Emphasize uneven-aged management systems. However, both even-aged and uneven-aged systems may be used where appropriate to provide variation in existing stand structure and species diversity. Existing stand conditions will determine which system is appropriate.

Extend rotation ages for even-aged stands to greater than 200 years. Silvicultural prescriptions should explicitly state when vegetative manipulation will cease until rotation age is reached.

Save all trees greater than 24 inches dbh.

In pine-oak forests, retain existing large oaks and promote growth of additional large oaks. Encourage prescribed and prescribed natural fire to reduce hazardous fuel accumulation. Thinning from below may be desirable or necessary before burning to reduce ladder fuels and the risk of crown fire.

Retain substantive amounts of key habitat components: Snags 18 inches in diameter and larger; Down logs over 12 inches midpoint diameter;Hardwoods for retention, recruitment, and replacement of large hardwoods.

Riparian Areas: Emphasize maintenance and restoration of healthy riparian ecosystems through conformance with forest plan riparian standards and guidelines. Management strategies should move degraded riparian vegetation toward good condition as soon as possible. Damage to riparian vegetation, stream banks, and channels should be prevented.

RESOURCE	ACTIVITY	STANDARDS AND GUIDELINES
		Domestic Livestock Grazing: Implement forest plan forage utilization standards and guidelines to maintain owl prey availability, maintain potential for beneficial fire while inhibiting potential destructive fire, maintain and restore riparian ecosystems, and promote development of owl habitat. Strive to attain good to excellent range conditions. *Old Growth:* Except where otherwise noted, implement forest plan old growth standards and guidelines to maintain and promote development of owl habitat.
Other Forest And Woodland Types		Apply ecosystem approaches to manage for landscape diversity mimicking natural disturbance patterns, incorporating natural variation in stand conditions and retaining special features such as snags and large trees, utilizing appropriate fires, and retention of existing old growth in accordance with forest plan old growth standards and guidelines.
Monitoring Guidelines		Monitoring and evaluation should be collaboratively planned and coordinated with involvement from each national forest, USFWS Ecological Services Field Office, USFWS Regional Office, USDA Forest Service Region Office, Rocky Mountain Research Station, recovery team and recovery unit working groups. Population monitoring should be a collaborative effort with participation of all appropriate resource agencies. Habitat monitoring of gross habitat changes should be a collaborative effort of all appropriate resource agencies. Habitat monitoring of treatment effects (pre- and post- treatment) should be done by the agency conducting the treatment. Prepare an annual monitoring and evaluation report covering all levels of monitoring done in the previous year. The annual report should be forwarded to the Regional Forester with copies provided to the recovery unit working groups, USFWS Ecological Services field offices, and the USFWS Regional Office. *Rangewide:* Track gross changes in acres of owl habitat resulting from natural and human caused disturbances. Acreage changes in vegetation composition, structure, and density should be tracked, evaluated, and reported. Remote sensing techniques should provide an adequate level of accuracy. In protected and restricted areas where silvicultural or fire abatement treatments are planned, monitor treated stands pre- and post-treatment to determine changes and trajectories in fuel levels; snag basal areas; live tree basal areas; volume of down logs over 12 inches in diameter; and basal area of hardwood trees over 10 inches in diameter at the root crown.
Monitoring Guidelines For Specific Recovery Units		*Upper Gila Mountain, Basin and Range East, and Basin and Range West Recovery Units:* Assist the recovery team and recovery unit working groups to establish sampling units consisting of 19 to 39 square mile quadrats randomly allocated to habitat strata. Quadrats should be defined based on ecological boundaries such as ridge lines and watersheds. Quadrat boundaries should not traverse owl territories. Twenty percent of the quadrats will be replaced each year at random. No special additional guidelines apply for the Upper Gila Mountains. Using the sample quadrats, monitor the number of territorial individuals and pairs per quadrat; reproduction; apparent survival; recruitment; and age structure. Track population density both per quadrat and habitat stratum.
STATE ENDANGERED SPECIES	C01	Identify forest portions of recovery objectives in conjunction with the New Mexico Department of Game and Fish. Refine habitat requirements and identify specific habitat projects needed to achieve recovery objectives for individual species habitats. Accomplish recovery projects included in approved recovery plans. Projects will be coordinated through integrated forest management practices.
	C12	Consult with the New Mexico Department of Game and Fish on forest projects which may affect state endangered wildlife species.
PLANTS	C01	Monitor management practices within occupied and potential habitat of plants listed as threatened, endangered or on the Regional Forester's Sensitive Plant List. Manage sensitive species to sustain viability and prevent the needed for listing as threatened or endangered. On an opportunity basis or if funds become available, inventory plants on the New Mexico endangered species list known to occur on the forest.

RESOURCE	ACTIVITY	STANDARDS AND GUIDELINES
		If proposed for listing, monitor actions to determine affect of management practices on habitat and the need for conference with U.S. Fish and Wildlife Service. Monitor status of federal listings. If elevated to threatened or endangered status, complete consultations with U.S. Fish and wildlife Service as required.
Ecosystem Management In Northern Goshawk Habitats		The northern goshawk standards and guidelines apply to the forest and woodland communities described below that are outside of Mexican spotted owl protected and restricted areas. Within Mexican spotted owl protected and restricted areas, the Mexican spotted owl standards and guidelines take precedence over the northern goshawk standards and guidelines. One or the other set of standards and guidelines apply to all forest and woodland communities but the Mexican spotted owl standards always take precedence in areas of overlap.
Standards		Survey the management analysis area prior to habitat modifying activities including a 1/2 mile beyond the boundary. Establish, and delineate on a map, a post-fledgling family area that includes 6 nesting areas per pair of nesting goshawks for known nest sites, old nest sites, areas where historical data indicates goshawks have nested there in the past, and where goshawks have been repeatedly sighted over a 2 year or greater time period but no nest sites have been located. Manage for uneven-age stand conditions for live trees and retain live reserve trees, snags, downed logs, and woody debris levels through out woodland, ponderosa pine, mixed conifer and spruce-fir forest cover types. Manage for old age trees such that as much old forest structure as possible is sustained over time across the landscape. Sustain a mosaic of vegetation densities (overstory and understory), age classes and species composition across the landscape. Provide foods and cover for goshawk prey. Limit human activity in nesting areas during the breeding season. Manage the ground surface layer to maintain satisfactory soil conditions i.e., to minimize soil compaction; and to maintain hydrologic and nutrient cycles. When activities conducted in conformance with these standards and guidelines may adversely affect other threatened, endangered, or sensitive species or may conflict with other established recovery plans or conservation agreements; consult with US Fish and Wildlife Service to resolve the conflict. Within the ranges of the Kaibab pincushion cactus, *Pediocactus paradinei*, and the Arizona leatherflower, *Clematis hirsutissima arizonica*, management activities needed for the conservation of these two species that may conflict with northern goshawk standards and guidelines will be exempt from the conflicting northern goshawk standards and guidelines until conservation strategies or recovery plans (if listed) are developed for the two species.
Guidelines		Emphasize maintenance and restoration of healthy riparian ecosystems through conformance with forest plan riparian standards and guidelines. Management strategies should restore degraded riparian areas to good condition as soon as possible. Damage to riparian vegetation, stream banks, and channels should be prevented. Refer to USDA Forest Service General Technical Report RM-217 entitled "Management Recommendations for the Northern Goshawk in the Southwestern United States" for scientific information on goshawk ecology and management which provide the basis for the management guidelines. Supplemental information on goshawk ecology and management may be found in "The Northern Goshawk: Ecology and Management" published by the Cooper Ornithological Society as Studies in Avian Biology No. 16. In woodland forest cover types, use empirical data to determine desired habitat conditions.
Inventory		Use the R3 survey protocol to get complete coverage of the management analysis area (Kennedy and Stahlecker 1993, as modified by Joy, Reynolds, and Leslie 1994). Management analysis areas should be entire ecosystem management areas if possible.

RESOURCE	ACTIVITY	STANDARDS AND GUIDELINES
		For areas where complete inventories cannot be done, use aerial photographs to locate vegetative structural stages (VSS) 4-6 within the project area and inventory just those sites for goshawk nest areas using R3 inventory protocol. All uninventoried areas (VSS 1-3) will be managed to Post-fledgling family area (PFA) specifications while in that stage. If while using this inventory option evidence suggests goshawks are present (such as finding plucking perches or molted goshawk feathers), conduct a complete inventory as outlined above. Forests have goshawks commonly nesting in stands classified as VSS 1-3, use the complete inventory methods for those areas. There may be situations where an area is classified as a VSS 3, based on the predominant VSS class, but in actuality a combination of VSS 4 & 5 predominate the area. For those situations, use the complete inventory methods.
	Home Range . Establishment	Post-fledgling family areas (PFA) will be approximately 600 acres in size. Post-fledgling family areas will include the nest sites and consist of the habitat most likely to be used by the fledglings during their early development. Establish a minimum of 3 nest areas and 3 replacement nest areas per post-fledgling family area. The nest areas and replacement nest areas should be approximately 30 acres in size. A minimum total of 180 acres of nest areas should be identified within each post-fledgling family area. Nest site selection will be based first on using active nest sites followed by the most recently used historical nest areas. When possible, all historical nest areas should be maintained. Manage for nest replacement sites to attain sufficient quality and size to replace the three suitable nest sites.
	anagement Scale	Distribution of habitat structures (tree size and age classes, tree groups of different densities, snags, dead and down woody material, etc.) should be evaluated at the ecosystem management area level, at the mid-scale such as drainage, and at the small scale of site.
	Vegetation Management *Landscapes Outside Goshawk Post-fledgling Family Areas*	The distribution of vegetation structural stages for ponderosa pine, mixed conifer and spruce-fir forests is 10% grass/forb/shrub (VSS 1), 10% seedling-sapling (VSS 2), 20% young forest (VSS 3), 20% mid-aged forest (VSS 4), 20% mature forest (VSS 5), 20% old forest (VSS 6). NOTE: The specified percentages are a guide and actual percentages are expected to vary + or -up to 3%. The distribution of VSS, tree density, and tree age are a product of site quality in the ecosystem management area. Use site quality to guide in the distribution of VSS, tree density and tree ages. Use site quality to identify and manage dispersal PFA and nest habitat at 2 to 2.5 mile spacing across the landscape. Snags are 18" or larger dbh and 30 feet or larger in height, downed logs are 12 inches in diameter and at least 8 feet long, woody debris is 3 inches or larger on the forest floor, canopy cover is measured with vertical crown projection on average across the landscape. The order of preferred treatment for woody debris is: 1) prescribed burning, 2) lopping & scattering, 3) hand piling or machine grapple piling, and 4) dozer piling. Canopy Cover: Canopy cover guidelines apply only to mid-aged to old forest structural stages (VSS 4, VSS 5, and VSS 6) and not to grass/forb/shrub to young forest structural stages (VSS 1, VSS 2, and VSS 3). Spruce-Fir: Canopy cover for mid-aged forest (VSS 4) should average 1/3 60% and 2/3 40%, mature forest (VSS 5) should average 50+%, and old forest (VSS 6) should average 60+%. Maximum opening size is 1 acre with a maximum width of 125 feet. Provide two groups of reserve trees per acre with 6 trees per group when opening size exceeds 0.5. Leave at least 3 snags, 5 downed logs, and 10-15 tons of woody debris per acre.

RESOURCE	ACTIVITY	STANDARDS AND GUIDELINES
		Mixed Conifer: Canopy cover for mid-aged forest (VSS 4) should average 1/3 60+% and 2/3 40+%, mature forest (VSS 5) should average 50+%, and old forest (VSS 6) should average 60+%, Maximum opening size is up to 4 acres with a maximum width of up to 200-feet. Retain one group of reserve trees per acre of 3-5 trees per group for openings greater than 1 acre in size. Leave at least 3 snags, 5 downed logs, and 10-15 tons of woody debris per acre. Ponderosa Pine: Canopy cover for mid-aged forest (VSS 4) should average 40+%, mature forest (VSS 5) should average 40+%, and old forest (VSS 6) should average 40+%. Opening size is up to 4 acres with a maximum width of up to 200 feet. One group of reserve trees, 3-5 trees per group, will be left if the opening is greater than an acre in size. Leave at least 2 snags per acre, 3 downed logs per acre, and 5- 7 tons of woody debris per acre. Woodland: Manage for uneven age conditions to sustain a mosaic of vegetation densities (overstory and understory), age classes, and species composition well distributed across the landscape. Provide for reserve trees, snags, and down woody debris.
	Within Post-fledgling Family Areas	Provide for a healthy sustainable forest environment for the post-fledgling family needs of goshawks. The principle difference between "within the post-fledgling family area" and "outside the post-fledgling family area" is the higher canopy cover within the post- fledgling family area and smaller opening size within the post-fledgling family area. Vegetative structural stage distribution and structural conditions are the same within and outside the post-fledgling family area. Spruce-Fir: Canopy cover for mid-aged forest (VSS 4) should average 60+% and for mature (VSS 5) and old forest (VSS 6) should average 70+%. Mixed Conifer: Canopy cover for mid-aged (VSS 4) to old forest (VSS 6) should average 60+%. Ponderosa Pine: Canopy cover for mid-aged forest (VSS 4) should average 1/3 60+% and 2/3 50+%. Mature (VSS 5) and old forest (VSS 6) should average 50+%. Woodland: Maintain existing canopy cover levels.
	Within Nesting Areas	Provide unique nesting habitat conditions for goshawks. Important features include trees of mature to old age with high canopy cover. The structure of the vegetation within nest areas is associated with the forest type, and tree age, size, and density, and the developmental history of the stand. Table 5 of RM-217 presents attributes required for goshawks on locations with "low" and "high" site productivity. Preferred treatments to maintain the desired structure are to thin from below with non-uniform spacing and use of hand tools and fire to reduce fuel loads. Lopping and scattering of thinning debris is preferred if prescribed fire cannot be used. Piling of debris should be limited. When necessary, hand piling should be used to minimize compaction within piles and to minimize displacement and destruction of the forest floor and the herbaceous layer. Do not grapple or Dozer pile debris. Manage road densities at the lowest level possible to minimize disturbance in the nest area. Use small, permanent skid trails in lieu of roads for timber harvesting. Spruce-fir, Mixed Conifer and Ponderosa Pine Cover Types: The nesting area contains only mature to old forest (VSS 5 & 6) having a canopy cover (measured vertically) between 50- 70% with mid-aged VSS 6 trees 200-300 years old. Non-uniform spacing of trees and clumpiness is desirable. Woodland: Maintain existing canopy cover levels.

RESOURCE	ACTIVITY	STANDARDS AND GUIDELINES
Human Disturbance		Limit human activities in or near nest sites and post- fledgling family areas during the breeding season so that goshawk reproductive success is not affected by human activities. The breeding season extends from March 1 through September 30. Low intensity ground fires are allowed at any time in all forested cover types, but high intensity crown fires are not acceptable in the post-fledgling family area or nest areas. Avoid burning the entire home range of a goshawk pair in a single year. For fires planned in the occupied nest area, a fire management plan should be prepared. The fire management plan should minimize the risk of goshawk abandonment while low intensity ground fire burns in the nesting area. Prescribed fire within nesting areas should be planned to move with prevailing winds away from the nest tree to minimize smoke and risk of crown fire developing 'and driving the adults off or consuming the nest tree. Ground Surface Layer (All forested cover types): Manage road densities at the lowest level possible. Where timber harvesting has been prescribed to achieve desired forest condition, use small skid trails in lieu of roads. Piling of debris should be limited. When necessary, hand or grapple piling should be used to minimize soil impaction within piles and to minimize forest floor and herbaceous layer displacement and destruction. Limit dozer use for piling or scattering of logging debris so that the forest floor and herbaceous layer is not displaced or destroyed.
HABITAT MANAGEMENT	C02	Within turkey habitat management areas: Manage for two suitable turkey roost groves per section with the following characteristics: Six to fifteen trees at a density of 90-150 square foot of basal area per acre and a individual tree size of 22 inch or greater DBH. • Provide one dependable water source per section with suitable turkey poult access. • Manage open road densities to maintain and restore habitat islands without vehicle intrusion. • Coordinate livestock grazing to promote turkey brood rearing habitats.
	C02	Integrate specific wildlife habitat needs with Timber/Fuelwood harvest, livestock grazing plans and other management activities with habitat interactions.
	C02, C06	New and reconstructed livestock water developments will include wildlife access and escape considerations.
	C02	Plan and administer disturbance activities in know elk calving, turkey nesting, and raptor nesting areas so as not to disrupt calving and nesting success.

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RESOURCE	ACTIVITY	STANDARDS AND GUIDELINES
	C02,C06	Retain three slash piles per acre in designated areas adjacent to waters for small game and/or turkey nesting cover.
	C02	Maintain a rotation of mature and over mature mast producing stands in accessible and potentially accessible P-J zones. Maintain escape cover and mast production regimes at no greater than one-half mile intervals.
	C02	Wildlife coordination and improvement efforts will include emphasis on riparian and aquatic area management.
	C02	Manage riparian areas in accordance with legal requirements egarding floodplains, wetlands, wild and scenic rivers, and cultural and other resources.
	C02	Manage riparian areas to protect the productivity and diversity of riparian-dependent resources by requiring actions within or affecting riparian areas to protect and where applicable, improve dependent resources. Emphasize protection of soil, water, vegetation, and wildlife and fish resources prior to implementing projects.
	C02	Give preferential consideration to resources dependent on riparian areas over other resources. Other resource uses and activities may occur to the extent that they support or do not adversely affect riparian-dependent resources.
	C02	Within the first decade, complete classification and inventories of all riparian areas, and complete action plans to improve all unsatisfactory riparian areas. Improve all riparian areas to satisfactory or better condition by 2030. Such satisfactory conditions are specified below, expressed as a percentage of "natural" conditions. Twenty-five percent of all riparian areas must be in satisfactory condition by 2000. a) Aquatic resource: [1] Maintain at least 80 percent of natural shade over water surfaces. [2] Maintain at least 80 percent of natural bank protection. [3] Maintain the composition of sand, silt, and clay within 20 percent of natural levels. b) Vegetation resource : [1] Maintain at least 60 percent of the woody plant composition in three or more riparian species. [2] Maintain at least three age classes of riparian woody plants, with at least 10 percent of the woody plant cover in sprouts, seedlings, and saplings of riparian species. [3] Maintain at least 60 percent of natural shrub and tree crown cover. c) Wildlife resources: Maintain at least 60 percent of natural shade over land surfaces.
	C02	On a site-specific basis, identify riparian-dependent resources and develop action plans and programs to bring about conditions essential to supporting those dependent resources.

RESOURCE	ACTIVITY	STANDARDS AND GUIDELINES
	C02	Provide snag recruitment for cavity nesting species. Maintain three snags per acre adjacent to waters and openings within woodland and coniferous forest habitat areas. Maintain at least 180 snags pre 100 acres distributed over the remaining coniferous forest and woodland areas.
	CO2	Within the level of forage projected for wildlife use, the allocation to different species groups may vary through coordination with the New Mexico Department of Game and Fish and the U.S. Fish and Wildlife Service. If forage allocated to wildlife is not the limiting factor in meeting the level of wildlife emphasis, that temporary forage can be used by livestock. If wildlife numbers increase and forage becomes a limiting factor in meeting the level of wildlife emphasis, the temporary livestock use will be cancelled. Any additional forage that becomes available for allocation after projected levels of forest outputs for wildlife and livestock are attained will generally be allocated according to the long term forage objective, unless other resource needs are identified. Additional wildlife habitat capacity that becomes available through this process will be utilized in further meeting objectives for the New Mexico Department of Game and Fish Strategy Plan and Sensitive species Recovery Plans.
	C02	Work with the New Mexico Game and Fish Department to identify and minimize conflicts, with may result if wildlife move off public lands.
	C02	Animal damage control activities will be accomplished in the Gila National Forest in accordance with the Interagency Animal Damage Control Guidelines.
OLD GROWTH		Until the forest plan is revised, allocated no less than 20 percent of each forested ecosystem management area to old growth as depicted in the table on page 31a. In the long term, manage old growth in patterns that provide for a flow of functions and interactions at multiple scales across the landscape through time. Allocations will consist of landscape percentages meeting old growth conditions and not specific acres. All analyses should be at multiple scales-one scale above and one scale below the ecosystem management areas. The amount of old growth that can be provided and maintained will be evaluated at the ecosystem management area level and be based on forest type, site capability, and disturbance regimes. Strive to create or sustain as much old growth compositional, structural, and functional flow as possible over time at multiple area scales. Seek to develop or retain old growth function on at least 20 percent of the naturally forested area by forest type in any landscape. Use information about pre-European settlement conditions at the appropriate scales when considering the importance of various factors. Consider the effects of spatial arrangement on old growth function, from groups to landscapes, including de facto allocations to old growth such as goshawk nest sites, Mexican spotted owl protected activity centers, sites protected for species behavior associated with old growth, wilderness, research natural areas, and other forest structures managed for old growth function. In allocating old growth and making decisions about old growth management, use appropriate information about the relative risks to sustaining old growth function at the appropriate scales, due to natural and human-caused events. Use quantitative models at the appropriate scales when considering the importance of various factors. These models may include, but are not limited to: Forest Vegetation Simulator, BEHAVE, and FARSITE. Forested sites should meet or exceed the structural attributes to be considered old growth in the five primary forest cover types in the southwest as depicted in the table on page 31a.

RESOURCE	ACTIVITY	STANDARDS AND GUIDELINES

The Minimum Criteria for the Structural Attributes Used to Determine Old-Growth

Forest Cover Type, Name	Pinon-Juniper		Interior Ponderosa Pine		Aspen	Mixed-Species Group		Engelmann Spruce Subalpine Fir	
Forest Cover Type SAF Code	239		237		217	210,211,216,219		206,209	
Site Capability Potential Break Between low and High Site			55 minor			50 Douglas-fir Edminster & Jump		50 Engelmann Spruce Alexander	
Site	Low	High	Low	High	All	Low	High	Low	High
1. Live Trees in Main Canopy									
Trees/Acre	12	30	20	20	20	12	16	20	30
DBH/DRC	9"	12"	14"	18"	14"	18"	20"	10"	14"
Age (Years)	150	200	180	180	100	150	150	140*/170**	140*/170**
2. Variation in Tree Diameters									
(Yes or No)	ND	ND	ND	ND	No	ND	ND	ND	ND
3. Dead Trees									
Standing									
Trees/Acre	0.5*	1	1	1	ND	2.5	2.5	3	4
Size, DBH/DRC	9"	10"	14"	14"	10"	14"	16"	12"	16"
Height (Feet)	8'	10'	15'	25'	ND	20'	25'	20'	30'
Down									
Pieces/Acre	2	2**	2	2	ND	4	4	5	5
Size (Diameter)	9"	10"	12"	12"	ND	12"	12"	12"	12"
Length (Feet)	8'	10'	15'	15'	ND	16'	16'	16'	16'
4. Tree Decadence									
Trees/Acre	ND	ND	ND	ND	ND	ND	ND	ND	ND
5. Number of Tree Canopies	SS/MS	SS/MS	SS/MS	SS/MS	SS	SS/MS	SS/MS	SS/MS	SS/MS
6. Total BA, Square Feet/Acre	6	24	70	90	ND	80	100	120	140
7. Total Canopy Cover, Percent	20	35	40	50	50	50	60	60	70

Pinon-Pine

Spruce-Fir

**Dead limbs help make up dead material deficit.*
*** Unless removed for firewood or fire burning activities.*
** In mixed corkbark fir and Engelmann spruce stands where Englemann spruce is less than 50 percent composition in the stand*
***In mixed corkbark fir and Engelmann spruce stands where Engelmann spruce is 50 or more percent composition in the stand*
ND is not determined; SS is single-storied; and MS is multi-storied.

RANGE MANAGEMENT D01,D02 Update range analysis and development of management plans to Region 3 Range Allotment Analysis Handbook Standards on all allotments. Updating intervals are dependent, on management intensity identified within each management area. The following guidelines will be used after capacity and permitted use are equal.

	MANAGEMENT INTENSITY LEVEL		
	B	C	D
Allotment Analysis	Category I at least a 25 yr. Cycle	Maintain at least a 20 yr. Cycle	Maintain at least a 15 yr. cycle
Production Utilization Studies	As needed, but not less than a 20 yr. Cycle	Average 15 yr. cycle	Average 10 yr. cycle
Allotment Inspections	Every 3-4 yrs.	Every 2 yrs.	Every yr.
Management Plans & Updates	Average every 15 yrs.	10 yrs.	5 yrs.
Permit Administration To Include Operating Plans	Annually	Annually	Annually

Grazing Management

Forage use by grazing ungulates will be maintained at or above a condition which assures recovery and continued existence of threatened and endangered species.

Allowable Use Guide (Percent) By Range Condition And Management Strategy*

Range Condition**	Continuous Season-long Use	Defer 1 Year in 2	Defer 1 Year in 3	Defer 2 Years in 2	Rest 1 Year in 2	Rest 1 Year in 3	Rest 2 Years in 3	Rest Over 2 Years in 3
Very Poor	0	10	5	15	15	10	20	25
Poor		10	20	15	20	20	15	30 35
Fair	20	25	20	30	30	25	40	45
Good	30	35	35	35	35	35	45	50
Excellent	30	35	35	35	35	35	45	50

** Site-specific data may show that the numbers in this table are substantially high or low. These numbers are purposefully conservative to assure protection in the event that site-specific data is not available.*

*** Range Condition as evaluated and ranked by the Forest Service is a subjective expression of the status or health of the vegetation and soil relative to their combined potential to produce a sound and stable biotic community. Soundness and stability are evaluated relative to a standard that encompasses the composition, density, and vigor of the vegetation and physical characteristics of the soil.*

Identify key ungulate forage monitoring areas. These key areas will normally be 1/4 to 1 mile from water, located on productive soils on level to intermediate slopes, and be readily accessible for grazing. Size of the key forage monitoring areas could be 20 to 500 acres. In some situations such as high mountain meadows with perennial streams, key areas may be closer than 1/4 mile from water and less than 20 acres. Within key forage monitoring areas, select appropriate key species to monitor average allowable use.

In consultation with the US Fish and Wildlife Service, develop site-specific forage use levels. In the event that site-specific information is not available, average key species forage utilization in key forage monitoring areas by domestic livestock and wildlife should not exceed levels in the above table during the forage growing season.

The above table is based on composition and climatic conditions typical of sites below the Mogollon Rim. On sites with higher precipitation and vegetation similar to sites above the Mogollon Rim, allowable use for ranges in poor to excellent condition under deferment or rest strategies may be increased by 5%. The guidelines established in the above table are applicable only during the growing season for the identified key species within the key areas. Allowable use for key forage species during the dormant season is not covered in the above table. These guidelines are to be applied in the absence of more specific guidelines currently established through site specific NEPA analysis for individual allotments.

Guidelines for allowable use for specific allotment(s) management or for grazing strategies not covered in the above table will vary on a site-specific basis when determined through the Integrated Resource Management (IRM) process.

Allowable use guidelines may be adjusted through the land management planning revision or amendment process. Guidelines established through this process to meet specific ecosystem objectives, will also employ the key species
and key area concept and will be monitored in this manner.

RESOURCE	ACTIVITY	STANDARDS AND GUIDELINES
	D02	If forage allocated to wildlife is not the limiting factor in meeting the level of wildlife emphasis, this temporary forage can be used by livestock. If wildlife numbers increase and forage becomes a limiting factor in meeting the level of wildlife emphasis, the temporary livestock use will be canceled.
	D01, D02	Permitted numbers will be balanced with grazing capacity by the end of the second decade.
	D02	Manage to bring all grazing allotments to satisfactory management by the mid-point of the third decade. Satisfactory management occurs on allotments where management actions proceed according to a schedule (Allotment Management Plan) that will not permit regression in range condition or trend. Acres of satisfactory management are total full capacity acres, for a complete allotment, within a management area being operated satisfactorily. Acres of unsatisfactory managed range are the total full capacity acres for complete allotments within a management area being operated unsatisfactorily.
	D02	The development and revision of allotment management plans will follow the consultation provision Section 8 (PRIA). Section 8 directs the Secretary to review in careful and considered consultation, cooperation, and coordination with the parties involved when revising, terminating or developing an allotment management plan.
	D02	The following criteria will be used to allocate capacity in those management areas where eventual capacity will exceed current permitted numbers: 1) If the capacity created is accomplished through appropriated range funds, with lack of cooperation from the permittees, the additional capacity will be offered to cooperating permittees on allotments where capacity is being reduced. 2) Where capacity is created with either undeposited cooperative funds or a mixture of appropriated range and undeposited cooperative funds, the additional capacity will be allocated to the cooperating permittee.
	D02	Grazing in riparian zones will be managed to provide for the maintenance and improvement of riparian areas.
	D03	Outside Designated Wilderness - Pinyon-juniper overstory removal will be accomplished primarily through fuelwood harvest. Other methods will be used where public demand for fuelwood is not sufficient to meet the desired schedule, fuelwood harvest does not achieve the desired management objectives, the stand does not provide suitable fuelwood, or factors which are necessary to accomplish harvest are not available. These methods may involve mechanical, chemical, hand or prescribed fire treatments. Method utilized will be determined through the NEPA process and cost analysis.
	D03	There are approximately 60,000 acres of pinyon-juniper on the Gila National Forest that were treated in the late 1950's through the 1970's to improve forage production. The project areas were mechanically treated by chaining or pushing which was not effective in controlling small trees. These residual, as well as new trees, have regrown in size and retreatment is needed to maintain forage production. Retreatement of these existing pinyon-juniper projects and initial treatment through other than fuelwood harvest will be guided by the following criteria: a) Site potential has soil production potential rating of moderate or high.

RESOURCE	ACTIVITY	STANDARDS AND GUIDELINES
		b) Slopes generally less than 15 percent. c) Limit treatment to soil with low or moderate erodibility index. d) Treatment results are cost effective.
	D03	Methods of treatments will be determined for each individual project by economic and environmental analysis. Guides for methods of treatment are: Mechanical = Density 75-150 trees per acre and 50 percent greater than 6 feet in height. Herbicide = Stands where 80 percent of the trees are less than six feet in height with 200 or more trees per acre. Fire = Adequate fire fuels to carry fire through the stand and where 50 percent of the trees are less than four feet in height. Density is generally more than 50 trees per acre. Hand = Stands where 80 percent of the trees are six feet high with less than 125 trees per acre.
	D03	Control insect or disease outbreaks when they become epidemic by mechanical, biological, or chemical methods. Method utilized will be determined through the NEPA process and cost analysis.
	D04	There are approximately 50,000 acres of grassland sites that are being encroached by ponderosa pine, pinyon and juniper, rabbitbrush, snakeweed. Grassland sites will be maintained as grassland using mechanical, chemical, and prescribed fire treatment methods. Treatment selection criteria for encroaching ponderosa pine, pinyon and juniper will be the same as described in D03 above. Snakeweed can be treated using prescribed fire or herbicide methods. Rabbitbrush may be treated using prescribed fire only during the period of rapid *growth, mechanical or herbicide method, whichever is the most* cost-efficient. In rabbitbrush stands with less than 10 percent canopy, use grazing management systems to encourage perennial grass that better compete with rabbitbrush. The grassland sites will be assessed for treatment during the first decade and treated on a priority basis as prescribed in each management area.
	D05	Permittee investment will be encouraged by giving priority to projects that contain at least equal value contributions by the grazing permittee.
	D05	When replacing allotment boundary fences, Forest boundary fences will be given priority.
TIMBER MANAGEMENT	E00	Inventory timber lands every ten years. Maintain a continuous ten year timber harvest schedule. Review the classification of unsuitable timber lands every ten years.
	E03	Continue to complete compartment examination to regional standards to provide data for the detailed stand prescriptions and to monitor plan results. Compartment examination should be completed on the Forest by the end of the first decade.
	E04	Assure regeneration by natural or artificial means to meet regional standards. [FSM 2409.26b R-3]

RESOURCE	ACTIVITY	STANDARDS AND GUIDELINES
	E04	All regeneration harvests will have an objective of creating a new stand. Final removal cuts will not be scheduled until adequate regeneration is established. In mixed conifer stands that contain aspen, encourage aspen regeneration as a minor stand component (less than 50% of total stocking) at the time of regeneration, through location of skid trails, landings, and temporary roads.
	E04	Restrict regeneration cuts to areas where soils have a reforestation potential of moderate or higher. Natural regeneration will be the preferred stand regeneration procedure. Plantations will not be established in natural openings or meadows. ALL reforestation projects will include rodent control where needed. Regeneration areas will be adequately protected from domestic livestock grazing to insure establishment of the trees, in accordance with FSM 2470. Site preparation by mechanical, prescribed fire, or chemical means will be done as needed following the regeneration cut (see cut or clearcut). The method to be used will be selected based on situation and economics. Satisfactory stocking will be in accordance with standards established and published in FSM 2472.03, R-3 Supplement.
	E04	Site preparation can be accomplished by chemical, mechanical, or prescribed fire methods as best suits the site to be treated. Site preparation method will be determined through he NEPA process and cost analysis.
	E05	Use one precommercial thinning in sapling stands up to 5.9 inches DBH. Thin coniferous stands to reduce stocking to levels recommended in FSH 2409.17. Silvicultural Practices Handbook, and 2409.26a Cutting Method Handbook. Stands previously thinned and still stagnated may receive one more precommercial thinning. Stands with mistletoe or other health problems may be thinned to less than recommended stocking levels, ad up to 8.9 inches if until such time as a pulpwood market develops. Thinning and weeding may be accomplished with mechanical, chemical or fire treatments. Created slash ma be treated with mechanical or fire treatments. Stands will generally be managed under the uneven-aged silvicultural system. Cutting methods will be prescribed for specific stands in the silvicultural exams and evaluated during the Integrated Resource Management (IRM) process. Use the shelterwood cutting method for regenerating stands with exceptions as provided for in the Regional Guide.

RESOURCE	ACTIVITY	STANDARDS AND GUIDELINES
	E06	Construct necessary roads to harvest fuelwood. Minimum sawtimber size will be 9.0 inches DBH. Use intermediate cuts in immature stands to maintain the following growing stock levels (GSL) unless other stocking is prescribed to met management objectives in detailed stand prescriptions: Ponderosa pine: Site index of 66 or greater 50 to 70 GSL Site index of 65 or greater 40 to 60 GSL Mixed conifer: Site index of 66 or greater 70 to 90 GSL Site index of 65 or greater 50 to 70 GSL Provide an average of 2 down logs per acre (12" diameter or larger) or untreated slash piles 10 feet in diameter or a combination of down logs and slash piles over 55 percent of the forested area. Distribution of downed woody material necessary to meet wildlife habitat requirements will be coordinated through integrated management. Once wildlife habitat and other requirements for down and woody material are met, cull material and slash over three inches in diameter will be made available for fuelwood for two years after timber harvest. Use sanitation and salvage cutting practices in the unsuitable timber when this does not conflict with wildlife objectives. Forest cutting blocks will be designed, here possible, with irregular meandering borders to optimize edge benefits for wildlife. Limit tractor/crawler logging equipment in most areas to slopes less than 40 percent.

RESOURCE	ACTIVITY	STANDARDS AND GUIDELINES
	E06	Openings created through harvest of timber or fuelwood will not exceed 40 acres.
	E06	Timber harvest adjacent to riparian areas will be conducted to provide for the protection of these key areas.
	E06	The Integrated Resource Management process will be used to integrate multiple resource goals when timber activities are planned.
	E06, E07	Forest products such as Christmas Trees, Posts, Poles, and Vigas, will be available from suitable and unsuitable lands if removal does not conflict with other resource objectives for any of the management areas.
	E07	Close all local roads not essential for management needs upon completion of sale and fuelwood activities.
	E07	The Forest will continue to present fuelwood season as established in 1983. (May 1 through December 24)
	E08	Maintain cone collection programs to meet artificial reforestation needs by seed zones.
	E09	Continue selection of superior tree and seed areas as needed for testing of genetic improvement.
WATER	F01	Plan fire rehabilitation where necessary to protect water resources from intolerable losses or to prevent unacceptable downstream damage.
	F02	Inventory and analyze watersheds by priority for watershed condition improvements projects by the end of the fifth decade.
	F04	Provide for the management of sensitive soils in all surface disturbing activities to minimize or control erosion. Recognizing increased cost associated with the management of sensitive soils.
	F04	Maintain or improve watershed conditions to a satisfactory condition on 70-90 percent of the unsatisfactory watersheds by the end of the fifth decade. This should be accomplished through a combination of resource management and watershed structures.
	F04	Update water rights inventory maintain and protect existing water rights. Acquire additional water rights when the opportunity exists, or before new appropriate waters are developed.
	F05	Implement watershed restoration projects where emergency fire rehabilitation and watershed condition analyses have identified needs.
	F06	Inventory and monitor watershed improvements for maintenance needs. Maintenance of improvements should continue throughout the planning horizon.
MINERALS	G01	Undertake mineral examination and contest actions on claims where development is not in keeping with the mining laws.
	G01	Cooperate with the state to inventory and mitigate hazardous abandoned mine workings.