

Appendix A

Forest Plan Amendment UTMLEA2003-01 for the Manti – La Sal National Forest Land Management Resource Plan

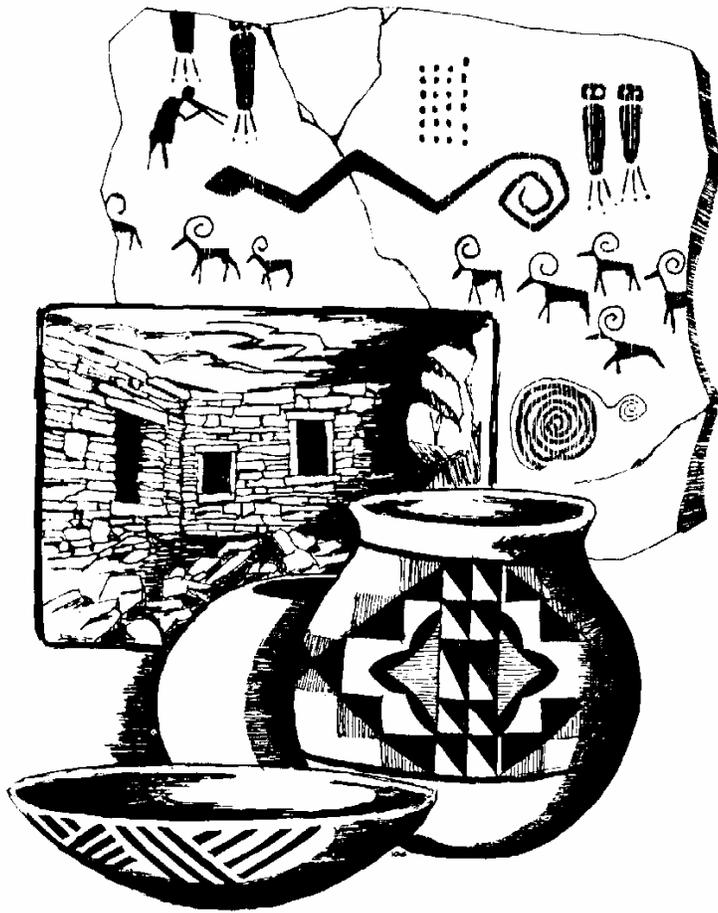
Enclosed are the forest plan amendment page changes associated with the Northern Goshawk Project forest plan amendment and the Management Indicator Species change amendment.

The pages are intended to replace existing pages or provide page inserts where pages have been added to the Manti – La Sal National Forest Land Management Resource Plan.

- Page inserts have a lower case letter after the page number (III-3a).
- Replacement pages are noted with the standard page number.
- Changes are annotated in two different ways. Pages where deletions only have taken place – the language removed is indicated by a strike through (~~withholding~~).
- New additions are in bold print.
- When an entire page is new bolding has not been added, however, the page number will be modified.
- Some pages have been included to facilitate complete page replacement in the hopes of making your task of updating your copy of the forest plan easier.

Revised June 2003

CHAPTER II MANAGEMENT SITUATION



Revised June 2003

ABERT SQUIRREL

The Abert squirrel is a Utah State high interest species found only on the Monticello District in Utah. Optimum Abert squirrel habitat is characterized by ponderosa pine stands with even-aged clumps of 12-19 inches D.B.H. and 45-75 foot height, with interlocking crowns and a ground cover of forbs, grasses, and shrubs. Several studies have shown Abert squirrels to have summer territories averaging 18-24 acres and winter territories averaging five acres.

By selecting Abert squirrel as a MIS, the species will be monitored to determine how timber management activities manipulate its habitat (mature ponderosa pine) and population. The basic habitat area of the squirrel will remain constant although population densities may change in the various areas with time or as a result of timber management.

Existing, potential, and UDWR desired population estimates are not available for Abert squirrels. Its present habitat of 79,925 acres of ponderosa pine is believed to be needed to support a minimum viable population. Currently, 2,200 acres of the total ponderosa pine acreage is unavailable for timber management activities due to steep slopes and rough terrain. These acres are generally mature ponderosa pine types and constitute poor to optimum Abert squirrel habitat. The remaining 77,725 acres of ponderosa pine available for timber management activities constitute from poor to optimum Abert squirrel habitat. Maintenance of healthy ponderosa pine timber stands should sustain the Abert squirrel within its present range. Abert squirrel population trend is stable.

NORTHERN GOSHAWK

In North America, goshawks occur in conifer, deciduous and mixed forest types. These forests contain a wide variety of forest ages and successional stages. Food and nesting habitat, as with many raptors, are frequently the principal factors limiting goshawk densities (USDA 1992). These factors are directly and indirectly influenced by changes in habitat composition, structure, or function due to ecological processes and or management activities.

Because the goshawk is large in size and wing span, it seldom uses young, dense forests. These birds depend on large trees to place their nest having sufficient space below the canopy to fly and capture prey yet dense canopy above to avoid predators (USDA 1992).

Goshawks are partly migratory, they will migrate south if northern forest foods are scarce and they will migrate from high to lower elevations in pinyon-juniper forests during the winter. Some goshawks in the southwest winter on or near their nesting home range (USDA 1992, USDA 1999).

Goshawk diets consist of small to medium birds and mammals from robins and chipmunks to grouse and hares, which it captures on the ground or in the air. A single goshawk requires about 4.2 to 5.3 ounces of food per day or the equivalent of about 1-2 birds (USDA 1992).

Goshawks appear to be monogamous. Nesting females lay and then incubate a single clutch of two to four eggs for 32-34 days (UDWR 1996). Young are able to fly at about five to six weeks of age but remain dependent on their parents for food until they reach 10 weeks of age (UDWR).

According to Hargis et al. 1994, goshawk home ranges are influenced by the location of permanent springs and small streams. In areas where these types of water are uncommon, it may be difficult for all nesting goshawks to establish territories in proximity to water. This increases the importance of the next nearest available well-canopied water source. The study by Hargis showed a greater association of nest sites to permanent water than post-fledging home ranges. One telemetry bird developed an elongated home range to include the closest spring. Her movements showed 50% of the locations were divided between the nest stand and this spring.

USDA (1999) quotes Squires and Reynolds, (1997) that “Nests are often located near the bottom of moderately steep slopes, close to water and often adjacent to a canopy break”.

Most goshawks nest in mid-high elevation ranges in Utah (6,000-10,000 feet). In general, goshawks nest in mature to old forests with relatively large trees, high canopy closure, sparse groundcover and open understories (USDA 1999). Goshawks in the southwest commonly use 2-4 alternate nests distributed within 30 acre nest stands. Female home ranges are significantly smaller than male home ranges (Kennedy et al. 1994). Nest areas are occupied by both the male and female goshawk from early March through late September. Breeding territories have been estimated to be around 420 acres in size, not including nesting territories. Foraging areas are larger (5,000-6,000 acres).

NORTHERN GOSHAWK - Management Effects

Livestock grazing - Although forage for livestock is not abundant in mixed spruce/fir forests, there can be an impact when aspen is a component of the forest. Livestock can remove young aspen stems and reduce their ability to regenerate. Aspen is a key nesting factor for northern goshawks. Often, goshawk nests are located in aspen stringers within riparian areas where livestock tend to congregate. Small forest openings are important since goshawks feed on birds and mammals. Standards for forage utilization should be maintained to provide for habitat for goshawk prey in both riparian, aspen, and small open meadow habitats.

Timber harvest - Although goshawks can breed successfully in forests where timber harvesting has occurred (USDA 1999) they prefer stands of mature and over-mature trees for nesting and foraging. Large-scale fire suppression activities have resulted in dense small-size forest thickets and caused the aspen component in our western forests to diminish. Thinning forests from below can help improve habitat for goshawks by opening up lower canopy levels and providing for large mature trees. Harvest methods used to regenerate aspen forests also provide for long-term benefits to goshawks.

Fire - Burning to achieve many of the same objectives listed above under timber harvest can benefit northern goshawk habitat. Historic fires in goshawk habitat were typically low-intensity ground surface fires maintaining large trees, open forest floors and aspen. Conditions today include dense small tree thickets and encroaching conifer trees into aspen patches resulting in catastrophic fire conditions which could cause extensive damage to goshawk habitat over large areas.

II-33a

GOLDEN EAGLE

The golden eagle is a State and Federal high interest species found on all Districts. They use most vegetative types found throughout the Forest. Their nest sites are generally localized in escarpment areas, and are usually found in undisturbed areas. During nesting and brooding seasons (mid-February to mid-July) activities in active nest site areas may impact golden eagle populations. Monitoring this MIS should determine how these activities affect golden eagles.

Existing, potential, and UDWR desired population estimates of golden eagles are not available. The optimum number of golden eagles on the Manti-LaSal National Forest was estimated using the fact that a breeding pair requires a territory up to 30 square miles in size. Dividing the total Forest area (1,334,491 acres) into 30 square mile units would provide habitat for a maximum of 69 breeding pairs.

MACROINVERTEBRATES (Aquatic Insects)

Macroinvertebrates are ecological indicator species in aquatic habitats and the ability of that habitat to support fisheries. Habitat requirements for aquatic macroinvertebrates vary with species. Habitat requirements for any one species are very specific.

Aquatic habitat on the Forest consists of 680 miles of stream fisheries and 1,765 acres of lakes and reservoirs. Macroinvertebrates are found in these areas. Tunnels and canals, which carry water, may also provide habitat for macroinvertebrates. These habitats can be monitored for macroinvertebrates on a priority basis as needed to determine the specific effects of any one project or activity, as well as the effects of general Forest land management, on the aquatic resources. The number and variety of macroinvertebrates found express the quality and quantity of the aquatic habitat. Changes in aquatic habitats, resulting from activities in the terrestrial habitat, are rapidly seen through changes in the species composition and biomass of macroinvertebrates.

Any serious concerns about habitat conditions beyond MVP levels should be addressed under well defined procedures outlined in the R-4 General Aquatic Wildlife System (GAWS) and the publication "Aquatic Ecosystem Inventory - Macroinvertebrate Analysis" published by USFS, Intermountain Region, October, 1979. The following list of macroinvertebrate species is considered minimal to accomplish any meaningful assessment of the aquatic ecosystem, and may be utilized essentially as one MIS:

Epeorus Species - Mayfly - Requires good water quality and good instream habitat. Must have a resident population.

Zapada Species - Stonefly - Depends upon allochthonous leaf litter for nutrients. Relative numbers generally indicate riparian habitat quality and quantity. Best when sampled in fall.

Ephemerella doddsi - Mayfly - Requires good water quality and good instream habitat. Relative numbers can indicate habitat quality.

Ephemerella inermis - Mayfly - Moderately tolerant to sedimentation. Good red-flag species when their numbers increase.

Chironomidae species - Dipteran - Highly tolerant to multiple forms of pollution. Particular tolerant to sedimentation. Often dominate the community when pollution is severe.

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CHAPTER III MANAGEMENT DIRECTION



Revised June 2003

Protect from theft and/or vandalism cultural, historical, and paleontological resources.

Wilderness

Manage to protect the wilderness character.

Rehabilitate areas showing evidence of unacceptable physical and biological impacts of past use.

Increase visitor awareness and appreciation of wilderness values.

Wildlife and Fish

Maintain or improve habitat carrying capacity for elk or deer.

Maintain or improve wildlife habitat diversity.

Maintain or improve fisheries habitat.

Protect, maintain, and/or improve habitat for threatened or endangered and sensitive plants and animals.

Restore or maintain forested landscapes in a properly functioning condition (PFC). Functioning forested landscapes provide habitat for the northern goshawk and its prey to support a viable population of goshawks in Utah.

Objective: For the remainder of the current planning period, prioritize treatment on at least 1000 acres where goshawk habitat areas are rated as high or optimum quality (per the process in Graham et al. 1999), and that are functioning-at-risk. Implement treatments that will provide reasonable assurance that areas will not drop to low to moderate value.

Additional forest-wide direction follows that has been added to the Standards and Guidelines for the Wildlife, with cross-references to this amended direction other resource areas.

Provide habitat for viable populations of the existing vertebrate and invertebrate species found on the Forest

Cooperate with the State in keeping wildlife populations within the habitat capacity.

Range

Bring livestock obligation in line with rangeland carrying capacity.

Maintain upward or stable trends in vegetation and soil condition.

Invest in range improvements where they will provide the greatest benefit.

Control noxious weeds and poisonous plants in cooperation with Forest users and State and local agencies.

Timber

Provide commercial timber sales of sufficient quantity and quality to maintain local timber industry and accomplish desired vegetation treatment goals.

Meet as much of the demand for wood fiber and Forest products as possible, consistent with multiple-use objectives.

Provide a stable supply of fuelwood opportunities.

Ensure that programmed reforestation is kept current.

Maintain a healthy Forest by applying appropriate silvicultural treatments.

Manage aspen stand for forage as well as wood fiber

Provide wood products usage in the management of pinyon-juniper and oak stands.

Use timber management to meet other management or resource needs.

Soil and Water

Maintain satisfactory watershed conditions.

Provide favorable conditions of water flow (quality, quantity, and timing).

Protect National Forest System lands or resources from unacceptable damage caused by the development of water uses.

Improve deteriorated watershed conditions where feasible.

Provide sufficient water for multiple-use management by securing favorable flows of water, which is interpreted to include those flows necessary to maintain stable and efficient stream channels as required by the Organic Act of 1897, and provide for fish and wildlife habitat, recreation, and livestock use as required by the Multiple Use Act of 1960.

Protect soil and water productivity so that neither will be significantly or permanently impaired.

Protect and enhance riparian areas including dependent resources.

Minerals and Geology

Provide for the interpretation of surface and subsurface geologic conditions and processes such as landsliding.

Manage geologic resources, common variety minerals, ground water, and underground spaces (superficial deposits, bedrocks, structures, and processes) to meet resource needs and minimize adverse effects.

Provide appropriate opportunities for and manage activities related to locating, leasing, exploration, development, and production of mineral and energy resources.

Ensure that adequate reclamation of disturbed areas is accomplished.

Lands

Exchange lands and consolidate ownership when in the public interest.

Acquire necessary rights-of-way to facilitate public access to National Forest System lands and to meet resource management objectives.

Acquire scenic or partial easements whenever Federal ownership is not required to meet management objectives.

Locate, identify, and mark National Forest property lines and protect land survey monuments.

FOREST-WIDE DIRECTION
MANAGEMENT
ACTIVITIES

GENERAL
DIRECTION

STANDARDS &
GUIDELINES

CONTINUATION
OF:
DISPERSED
RECREATION
MANAGEMENT
(A14 AND 15)

Adjust the above use level coefficient as needed to reflect useable acres, patterns of use, and general attractiveness of the specific management unit type as described in the ROS User's Guide. Reduce the above use levels where unacceptable changes to the biophysical resources will occur.

RECREATION
MANAGEMENT
(PRIVATE AND
OTHER PUBLIC
SECTOR)
(A16)

- 01 Ensure that permitted private and public sector sites on National Forest System lands which are adjacent to, or provide an access point into The Dark Canyon Wilderness, complement wilderness management objectives.
- 02 Act on special-use applications according to the following priorities:
 - A. Public Service operations catering to the general public.
 - B. Group type operations
 - C. Private type operations.

- a. FSM 2340 and FSM 2720.
- b. An application for permit may be denied if the authorizing officer determines that:
 - (1) The proposed use would be inconsistent or incompatible with the purpose(s) for which the lands are managed, or with other uses, or
 - (2) The proposed use would not be in the public interest, or
 - (3) The applicant is not qualified, or
 - (4) The use would be inconsistent with applicable Federal and/or State laws, or
 - (5) The applicant does not or cannot demonstrate technical or financial capability.
- c. **Refer to the new guideline q for issuing permits in goshawk habitat**

III
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19

WILDERNESS
AREA
MANAGEMENT
(B02)

- 01 Mange Dark Canyon Wilderness Area under the management unit prescription for wilderness (DCW).

WILDLIFE AND
FISH RESOURCE
MANAGEMENT
(C01)

- 01 Provide habitat needs, as appropriate, for management indicator species.
 - A. Deer and Elk

- (1) Maintain adequate hiding cover around calving areas.
- (2) Optimum habitat mix for the daily normal range is 25 percent hiding cover, 15 percent thermal cover, 10 percent hiding or thermal cover and 50 percent foraging area.

FOREST-WIDE DIRECTION
MANAGEMENT
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GENERAL
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CONTINUATION OF:
WILDLIFE AND
FISH RESOURCE
MANAGEMENT
(C01)

- B. Golden Eagle (3) In areas of historic water shortage during the dry season of the year develop water as appropriate.
- (4) Manage key deer and elk habitat so as to minimize disturbance during the period of use.
- (1) Avoid activities that could cause abandonment of actives nests.
- ~~C. Blue Grouse (1) Maintain and/or improve lands suitable for Blue Grouse to provide a mix of 10 percent breeding, 20 percent brood rearing, 40 percent feeding and 30 percent wintering.~~
- D Macroinvertebrates (1) Improve to and maintain a good or above Density Index (DAT) of 11-17, a standing crop of 1.6 - 4.0, and a Biotic Condition Index (BCI) of 75 or above, based on analysis from R-4'S Causative Ecosystem Analysis Laboratory.
- E. Abert Squirrel (1) *Habitat in ponderosa pine; Silvicultural prescriptions for ponderosa pine on the Monticello Ranger District should consider management that:
 - (a) Protects habitat by maintaining occupied sites to produce good to very good habitat condition. This should include; 2 nest or feed trees 9-19" DBH, 1 feed tree 16" DBH, and 10 feed trees 9"+ DBH within 50 foot radius and 30 additional trees 9"+ DBH outside the 50 foot radius but within a 100 foot radius.

FOREST-WIDE DIRECTION
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ACTIVITIES

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FISH RESOURCE
MANAGEMENT
(C01)

(b) Maintain and/or improve good (1 squirrel/10 additional feed trees 9"+ DBH outside 50 foot but within 100 foot radius.

(c) Stands heavily diseased or insect infested

(2) Use slash and silvicultural practices that deter shrub growth, provide ponderosa pine reproduction, but do not encourage habitat for rodents that compete for Abert squirrel habitat components.

(3) Leave Gambel oak 6"+ DBH in association with ponderosa pine.

*Based on Wildlife Society Bulletin 12:408-44, 1984.

02 Manage habitat for recover of endangered and threatened species.

a. Where activities or uses may impact T&E species or their habitats, initiate consultation procedures. Include the results of consultation in determining the viability of the activity or use.

03 Implement activities to meet the Forests's share of approved recovery plans.

05 Maintain and/or improve habitat and habitat diversity for minimum viable populations of existing vertebrate wildlife species.

a. Manage at least 5 percent of forested areas in mature timber stands.

Refer to the new Guideline e. for management of mature and oldgrowth stands in goshawk habitat.

06 Provide for habitat needs of cavity nesting birds, raptors, and small animals by:

- A. Through coordination with project work or resource uses,
- B. Selecting and utilizing live trees to create snags.

a. A snag is defined as a completely or partially dead standing tree that is appropriate density of snags are available a height.

Pg. III-21(A) (new pages between III-21 and III-22)

MANAGEMENT ACTIVITY		GENERAL DIRECTION	STANDARDS & GUIDELINES
<i>(C01)</i>	<i>04</i>	<i>Manage habitat of Sensitive species to keep them from becoming threatened or endangered.</i>	<p>a. (Guideline) Management actions should be designed to encourage conditions that are within the historic range of variation (HRV) as defined by Regional or local properly functioning condition (PFC) assessments. PFC operates within the range of HRV where extreme events are not desired. Actions should remain within the variability of size, intensity, and frequency of native disturbance regimes characteristic of the subject landscape and ecological processes.</p> <p>b. (Guideline) Within disturbed ecosystems, management actions should be designed to be consistent with restoration objectives.</p> <p>c. (Guideline) Utilize native plant species from locally adapted seed sources in management activities when and where practical. Non-native plant species have the potential to cause systems to move outside of historic range of variation (HRV), therefore the use of non-native species should be justified to indicate how their use is important to maintain or restore a cover type to functioning conditions.</p> <p>d. (Guideline) When initiating vegetative management treatments in forested cover types, provide for a full range of seral stages, by forested cover type, that achieve a mosaic of habitat conditions and diversity. Each seral stage should contain a strong representation of early seral tree species. Recruitment and sustainability of early seral tree species in the landscape is needed to maintain ecosystem resilience to perturbations.</p> <p>e. (Guideline) Planned vegetative management treatments (excluding unplanned and unwanted wildland fire) in the mature and/or old structural groups in a landscape that is at or below the desired percentage of land area in mature and old structural stages (40% conifer, 30% aspen), should be designed to maintain or enhance the characteristics of these structural stages. Within these landscapes the percentage of land area in mature and old structural stages treated should not move out of the mature and old structural stage. Planned treatments may vary from this guideline if the action was assessed through the biological evaluation (BE) process, and the BE concluded that the action is consistent with the intent of the Conservation Strategy and Agreement for Management of the Northern Goshawk in Utah.</p>

f. (Guideline) When initiating vegetative management treatments in forested cover types, leave the following minimum number and size of snags. If the minimum number of snags is unavailable, green trees should be substituted. If the minimum size is unavailable, then use largest trees available on site. It is desirable to have snags represented in all size classes above the minimum available on the site. The number of snags should be present at the stand level on average and, where they are available, distributed over each treated 100 acres. This distribution is needed to meet the needs of prey species that utilize this habitat.

COVER TYPE	MINIMUM SNAGS (PER 100 ACRES)	MINIMUM PREFERRED SIZE
Ponderosa Pine	200	18 Inch DBH <--> 30 Feet Tall
Mixed Conifer And Spruce/Fir	300	18 Inch DBH <--> 30 Feet Tall
Aspen	200	8 Inch DBH <--> 15 Feet Tall
Lodgepole And Aspen/Lodgepole	300	8 Inch DBH <--> 15 Feet Tall

g. (Guideline) When initiating vegetative management treatments, prescriptions should be designed to retain the following minimum amount and size of down logs and woody debris. These habitat components should be present at the stand level on average and, where they are available, distributed over each treated 10 acres. This distribution is needed to meet the needs of prey species that utilize this habitat.

COVER TYPE	Minimum Down Logs	Minimum Log Size	Minimum Coarse Woody Debris >= 3 inch diameter
	(per 10 acres) Down logs take precedence over tons of coarse woody debris	(Diameter <---> Length) (Mid- point diameter; or if minimum size not available, largest available on the site)	(Tons per 10 acres, inclusive of down logs)
Ponderosa Pine	30	12 inch <--> 8 feet	50
Mixed Conifer and Spruce/fir	50	12 inch <--> 8 feet	100
Aspen	50	6 inch <--> 8 feet	30
Lodgepole and Aspen/Lodgepole	50	8 inch <--> 8 feet	50

- h. (Guideline)* - Vegetative treatments designed to maintain or promote a VSS 4, 5 and/or 6 group, the percent of the group acreage covered by clumps of trees with interlocking crowns should typically range from 40-70% in post-fledgling and foraging areas, and 50- 70% in nest areas. To manage outside this range, it should either be shown that the range is not within PFC for the site and the biological evaluation process determines that managing outside the range will be consistent with landscape needs of the goshawk and its prey. Use the best information available and deemed most reliable to make determinations. Groups are made up of multiple clumps of trees. Groups should be of a size and distribution in a landscape that is consistent with disturbance patterns defined in Regional or local proper functioning condition assessments (PFC). Clumps typically have 2 to 9 trees in the VSS 4, 5 or 6 size class with interlocking crowns.
- i. (STANDARD)* Use the latest Regionally accepted Biological Prefield Research form (USFS Region 4) to determine the level of goshawk field survey(s) needed to complete the Biological Evaluation. Completion of this form is required to document where surveys are not required.
- j. (STANDARD)* Where goshawk field surveys are required, complete surveys for territory occupancy within suitable habitat. Surveys will be completed during the nesting and/or post-fledgling period, and must be conducted prior to implementation of management actions.
- k. (Guideline)* Where goshawk field surveys are required and when project planning permits, two consecutive years of surveys for territory occupancy prior to implementation of management actions is preferred.
- l. (Guideline)* If a historic nest is not associated with an active nest area, management direction for home range habitat should be applied.
- m. (STANDARD)* When an active nest area has been identified, identify 2 alternate nest areas and 3 replacement nest areas. The next two guidelines provide recommended direction for implementation of this standard.
- n. (Guideline)* Each nest area (active, alternate and replacement) should be approximately 30 acres (total of approximately 180 acres) in size when sufficient suitable habitat exists. If sufficient amounts of suitable habitat are not present, use existing suitable habitat that is available.
- o. (Guideline)* Alternate nest areas should be identified in suitable habitat with similar vegetative structures as the active nest areas. Replacement nest areas should be identified in habitat which will develop similar vegetative structures as the active nest area at the time the active and alternate nest areas are projected to no longer provide adequate nesting habitat.

p. (**STANDARD**) Prohibit forest vegetative manipulation (timber harvest, prescribed burning, fuelwood, thinnings, weedings, etc.) within active nest areas (approximately 30 acres; i.e. **Guideline n.**) during the active nesting period. The active nesting period will normally occur between March 1st and September 30th. For non-vegetative manipulation activities (such as road maintenance, oil and gas exploration, recreation sites, etc.), adjacent to a new nest site, or a new activity adjacent to an established nest, **Guideline q.** applies.

q. (**Guideline**) In active nest areas (approximately 30 acres; i.e. **Guideline n.**), restrict Forest Service management activities and human uses for which Forests issue permits during the active nesting period (does not include livestock permits) unless it is determined that the disturbance is not likely to result in nest abandonment. If the disturbance is likely to result in abandonment, a biological evaluation (BE) must be completed. To implement the action the BE must conclude that the action is consistent with the intent of the Conservation Strategy and Agreement for Management of the Northern Goshawk in Utah.

r. (**Guideline**) Forest vegetative manipulation within active, alternate and replacement nest areas should be designed to maintain or improve desired nest area habitat. Use the active nest area habitat characteristics as an indicator of the desired nest area habitat, and as the best available information for nest area habitat for that cover type.

s. (**Guideline**) Identify a Post-Fledgling Area (PFA) which encompasses the active, alternate and replacement nest areas and additional habitat needed to raise fledglings. A PFA should be approximately 420 acres in size (exclusive of nest area acres) when sufficient suitable habitat exists. If sufficient amounts of suitable habitat are not present, use existing suitable habitat that is available.

t. (**Guideline**) Forest vegetative manipulation within the PFAs should be designed to maintain or improve the same habitat features as discussed for the goshawk home range (i.e., stand structure, snags, down logs, nest trees important in the life histories of the goshawk and its prey species common to the geographic location), except:

- a) Openings, as defined in glossary and Reynolds et al., created as a result of mechanical vegetative treatments (**does not include wildland fire**) should not exceed the following by cover type:

Cover Type	Maximum Created Opening Size
Ponderosa Pine and Mixed Conifer	2 acres
Spruce/fir	1 acre
Aspen and Lodgepole pine	Follow current management direction

- b) Management activities should be restricted during the active nesting period. The active nesting period will normally occur between March 1st and September 30th.

- c) Where timber harvest is prescribed to achieve desired forest conditions, **plan the transportation system to minimize disturbance to the PFAs.** For example, small, permanent skid trails should be used in lieu of roads to minimize disturbance in goshawk PFAs. Variance may occur if it is determined that a combination of new permanent or temporary roads and permanent skid trails would result in less overall disturbance to PFA habitat.

u. (*Guideline*) Through the landscape assessment process identify plant communities important to goshawk prey species that contain seed, mast, and foliage components that are important to these prey species.

v. (*Guideline*) Where it is determined through the landscape assessment process that ungulate grazing is contributing to an identified functioning-at-risk condition relative to habitat needed to support goshawk and its prey, modify grazing practices to maintain or restore the desired seed, mast, and foliage production defined in the landscape assessment process. Review success of modifications annually. If modifications are not providing for the desired progression toward production objectives defined in the landscape assessment, modify practices through the next annual operating plan. This guideline does not apply to non-forest patches.

w. (*Guideline*) To help determine opportunities for habitat maintenance or enhancement for goshawk and its prey, conduct landscape analyses at the 5th to 6th order HUC or equivalent ecological scale (10's to 100's of thousands of acres). These assessments provide information concerning resource conditions, risks, and opportunities in a systematic way, thereby enhancing the agency's ability to estimate direct, indirect, and cumulative effects of management actions that may affect habitat for the goshawk and its prey. With this information in hand, managers have a better opportunity to balance the needs of resources and humans and are less likely to negatively impact far-ranging species such as the northern goshawk or other species of concern. Essentially, actions are proposed within the context provided by the landscape assessment. As a minimum, landscape assessments should describe current status of resources, risks and opportunities (as discussed below) using the best information available locally at the time of the assessment.

- *Status* is the condition of the resources relative to the historical condition. The historical condition should be depicted through the identification of the historic range of variation (HRV) for the resource attribute of interest (i.e., forest structure, composition, canopy closure), as defined in Regional or local properly functioning condition (PFC) assessments.
- *Risk* should include both short- and long-term risks of adversely affecting the current condition of these resources (i.e., insect, disease, wildfire, human related development).
- *Opportunities* are situations where either improvements in resource condition or a reduction in risk can be achieved in a landscape through some form of subsequent management decisions. These decisions will be made either through site-specific project decisions or future adjustments in land use plans, both of which include additional analysis and public involvement.

Landscape assessments are not necessary where the Forest or project interdisciplinary team determine that the intent of the assessment has been met through other analytical processes. Meeting the intent means that sufficient information exists concerning resource conditions and risks to understand the effects (direct, indirect, and cumulative) of a proposed site-specific project on goshawk habitat relative to the broader landscape context.

x. (**STANDARD**) When non-vegetative management activities (for example: mineral & energy development, land exchanges, recreation facility development, ski resort construction, utility corridors, etc.) are proposed that would result in loss of suitable goshawk habitat, sufficient mitigation measures will be employed to insure an offset of the loss. The biological evaluation (BE) process will be used to document findings, recommend mitigation measures, and evaluate consistency with the intent of the Conservation Strategy and Agreement for Management of the Northern Goshawk in Utah

y. (**Guideline**) To provide the greatest reduction in risk to loss of habitat needed to support goshawk populations across Utah, treat those acres rated as high or optimum value to goshawks and its prey that are at risk to dropping into the low or moderate value. Variance in this prioritization may occur when management objectives for goshawk habitat in concert with other resource needs, necessitate. In these cases, changes to the quality of goshawk habitat across a landscape should not impact meeting landscape habitat objectives for goshawk habitat quality, quantity and connectivity identified in the landscape assessment Clarification of Desired Habitat Conditions for Prey Species Especially related to ungulate grazing Guideline g-28 gives direction to use the landscape assessment process to identify plant communities important to prey species that contain **seed, mast and foliage components** needed. Overall, the greatest variety of species that can produce seed and mast are associated with mid-seral stages. Guideline g-29, then, directs that these components be maintained or restored. *The intent is to have utilization levels of grasses and forbs that maintain native foods and cover for prey species.*

Further components of desired habitat conditions for prey species from Reynolds' work, and the guidelines that address these components, include:

1. **Snags** for woodpecker feeding and nesting, mammal nests, & bird perches (g-9)
2. **Downed logs** for cover, feeding and nesting for a variety of prey (g-11)
3. **Woody debris** to provide cover and feeding for a variety of vertebrates (g-11)
4. **Openings** for food and cover (g-25 for PFAs)
5. **Large trees** for nesting, denning, feeding, roosting, cone production and hunting perches (g-15)
6. **Interspersion** (intermixing) of vegetative structures (g-7 & g-15)
7. Promotion of **aspen regeneration** (g-5) and growth of **native grasses** (g-4).

Herbaceous shrubs and intact forest soils, with emphasis on organic surface layers with natural turnover rates, are other identified components of desired habitat conditions for prey species that are not specifically included in the guidelines.

The direction in g-28 and g-29 is that, as part of the landscape assessment process and as grazing allotments are updated, all of these components be evaluated toward achievement of desired habitat conditions for prey species. Appropriate courses of action, such as a change in pasture rotation, shorter seasons of use, or reductions in numbers of livestock, would then be determined at the site-specific level. Additionally, if wild ungulate grazing is determined to be part of the problem, immediate contact with UDWR would be made for resolution

Monitoring Requirements

ID	Goals & Obj.	Standards & Guidelines	Question	Item to Measure	Acceptable Range	Measurement Frequency	Report Frequency
m- 1	G-10	all under the alternative goal	Are known goshawk territories on national forests remaining occupied?	Goshawk territory occupancy at the forest	Less than 20% decline in territory occupancy over a 3 year period.	Annually	Every 3 Years
m- 2	G-10	s-9 G-21	Are mitigation measures (standards and guidelines) employed during vegetative management project implementation sufficient to prevent territory abandonment?	Goshawk territory occupancy following vegetative management treatments.	No territory abandonment on projects where mitigation measures are used.	The first full breeding period following activity in all projects where pre-project surveys determined territory occupancy.	annually
m- 3	G-10	g-7	Is habitat connectivity, as represented by structural and species diversity and dispersion thereof, within and among 5th to 6th order watersheds (or equivalent ecological scale) being maintained?	Spatial dispersion and patch size of mature and old forest groups within a 5th to 6th order watershed. Tree species composition mix within mature and old groups within a landscape.	Approximately 40% of the coniferous and/or 30% of the aspen forested acres within a landscape are in VSS 5 and 6 classes. Seral species characteristic of the cover type are well represented in VSS 5 and 6 classes.	Completion of each landscape assessment	Every 5 years
m- 4	G-10	g-9	Is snag habitat (i.e., number and size of snags) being maintained in desired spatial arrangement?	Snag densities and sizes within a 100 acre block treated by mechanical or wildland fire use.	75% or more of the blocks measured meet guideline requirements.	10% or more of the acres treated within a project area, within 2 years following completion of the vegetative	Every 5 years
m- 5	G-10	g-11	Are down woody material and logs being maintained in sufficient amounts, sizes and spatial locations?	Down log and woody debris amounts and sizes within a 10 acre block treated by mechanical or wildland fire use.	75% or more of the blocks measured meet guideline requirements.	5% or more of the acres treated within a project area, within 2 years following completion of the vegetative	Every 5 years
m- 7	G-10	g-28 g-29	Are appropriate adjustments made to grazing practices in identified "at-risk" locations where grazing is contributing to the "at-risk" condition?	Ungulate grazing practices (i.e.- utilization, season of use, grazing system) in identified "at- risk" locations.	Grass, forb, and shrub production objectives are within the range identified in landscape assessments.	Grazing practices reviewed annually on at least 2 allotments where "at-risk" conditions have been identified.	Every 5 years

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FOREST-WIDE DIRECTION
MANAGEMENT
ACTIVITIES

GENERAL
DIRECTION

STANDARDS &
GUIDELINES

CONTINUATION OF:
WILDLIFE AND
FISH RESOURCE
MANAGEMENT
(C01)

b. Maintain various size classes of standing snags with the approximate density per 100 acres based on broad vegetative types.

	<u>No./100 Acres</u>
(1) Ponderosa pine	110
(2) Mixed Conifer (Spruce/Fir/Douglas)	90
(3) Aspen	120
(4) Pinyon-Juniper	15
(5) Riparian	120

c. R-4 Supplement 26 to FSM 2631.

Refer to the new Guideline f. for snag direction in goshawk habitat

a. Retain slash on at least 10 percent of timber stand areas and pinyon-juniper control projects.

b. Manage to provide at least two logs per acre in timber habitat types.

Refer to the new Guideline g. for direction for down logs in goshawk habitat.

a. Manage stream habitat to at least 50 percent of potential where existing self-sustaining fisheries occur.

b. Proposed management activities which may cause unfavorable conditions in existing fisheries will include mitigation measures.

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07 Manage down timber to provide habitat for wildlife.

08 Manage waters capable of supporting self-sustaining fish populations to provide for those populations.

MANAGEMENT
ACTIVITIES

GENERAL
DIRECTION

GUIDELINES

STANDARDS &

WILDLIFE
HABITAT
IMPROVEMENT AND
MAINTENANCE
(C02, 04, 05,
AND 06)

- 01 Maintain or improve habitat capability through direct treatment of vegetation, soil, and/or water.
- 02 Manage non-commercial aspen stands in mixed age groups to provide a source of forage.
- 03 Give wildlife funding priority to habitat improvement projects which are jointly or cooperatively funded with the states.
- 04 Use both commercial and non-commercial silvicultural practices to accomplish wildlife habitat objectives.
- 05 Maintain a medium to high edge contrast between tree stands created by even-aged management.

a. Contrast by age class, measured by H high, M medium, and L low, is:

	Age Class						
	O			S		S	G
Age Class	O			S	G	H	R
	G	M	P	S	F	R	S
Old Growth.(OG)	-	L	M	H	H	M	H
Mature. (M)	L	-	M	M	H	M	H
Poles.(P)	M	M	-	M	H	M	H
Shrub, Seedlings and Saplings (SSS)	H	M	M	-	L	L	L
Grass-Forb.(GF)	H	H	H	L	-	M	L
Shrubland.(SHR)	M	M	M	L	M	-	M
Grassland.(GRS)	H	H	H	L	L	M	-

- 06 Provide for conservation pools and, as appropriate, recreation facilities to meet resource protection needs in projects for new reservoir construction or reconstruction of existing reservoirs.

a. Conservation pools will be required where a potential exists for carry over fisheries and recreation use is appropriate.

WILDLIFE AND
FISH COOPERATION
WITH OTHER
AGENCIES
(C12)

- 01 Coordinate the animal damage control program with the State Wildlife Agencies, APHIS, other appropriate agencies, and cooperators to prevent or reduce other resource damage. Direct control toward preventing damage or removing the offending animal(s).

MANAGEMENT ACTIVITIES	DIRECTION	GENERAL	GUIDELINES	STANDARDS &
CONTINUATION OF: WILDLIFE AND FISH COOPERATION WITH OTHER AGENCIES (C12)	02 Consider wildlife transplants to suitable habitat when it is compatible with the management prescription for the unit(s) concerned.			
	03 Obtain a Memorandum of Understanding with the State(s) involved prior to allowing wildlife transplants.		a. R-4 Supplement to FSM 2611.	
RANGE RESOURCE MANAGEMENT (D02)	01 Within the rangeland capability, provide forage to sustain the dependent livestock industry.			a. FSM 2203.1 Item 1.
	02 Manage the range resource within its productive capabilities for grazing and browsing animals in harmony with other resources and activities to provide sustained yield and improvement of the forage resource. Encourage and coordinate other resource activities so as to maintain or enhance forage production.			a. Place allotments under an approved management plan. b. Use Interdisciplinary teams to establish proper use criteria (R-4 Supplement No. 59 to FSM 2214.11).
	03 Manage livestock and wild herbivores forage use by implementing proper use criteria as established in the Allotment Management Plan.			a. Refer to the new Guideline v. for grazing management analysis in goshawk habitat.
RANGE IMPROVEMENT AND MAINTENANCE (D03, 03, 05 AND 06)	01 Provide structural and non-structural range improvements needed to maintain or improve range conditions as specified in allotment management plans.			a. Complete project effectiveness analysis to determine investment priorities (FSH 2209.11). b. Construct and maintain structural improvements in accordance with Forest Service standards (FSH 2209.23).
	02 Perpetuate non-commercial aspen communities as a forage source.			c. Where site-specific developments adversely affect long-term production or management, those authorized to conduct activities will be required to replace losses through appropriate mitigations.

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MANAGEMENT ACTIVITIES	DIRECTION	GENERAL	GUIDELINES	STANDARDS &
CONTINUATION OF: RANGE IMPROVEMENT AND MAINTENANCE (D03, 04, 05 AND 06)	03 Control and reduce noxious weeds and poisonous plants, using integrated pest management techniques and strategies; including the use of herbicides, biological control agents, and/or mechanical or hand treatments.		<ul style="list-style-type: none"> a. Control spread fires, and then work on established populations. b. Apply herbicide treatments under the direction of certified applicators and following label instructions. c. Those authorized to conduct soil disturbing activities will be required to control noxious weeds on the area disturbed during the life of the project 	
TIMBER RESOURCE MANAGEMENT (E00)	01 Manage timberlands suitable for commercial harvest for timber or wood fiber productions.		<ul style="list-style-type: none"> a. Timber stands suitable for harvest; <ul style="list-style-type: none"> (1) Produce 20 cu.ft. or more per acre per year. (2) Are capable of being restocked within five years. (3) Can be harvested within the General Direction, Standards & Guidelines for the site of the stand. (4) Generally include ponderosa pine, mixed conifer, aspen, and spruce fir types, and rarely oak or pinyon-juniper 	
	02 Provide for timber stand improvement, reforestation in sale area improvement plans, and wildlife habitat improvement.			
	03 Manage timberlands not suitable for commercial harvest to maintain forest cover species, but emphasis should be on production of other forest resources and uses.			
	04 Require those authorized to conduct activities to replace losses through appropriate mitigations where a site-specific development adversely affects long-term production or management.			
	05 Use clearcuts as appropriate on any forest cover type with potential for impact, or impacted by insects or disease.			
	06 Coordinate timber and fuelwood programs to take advantage of roads constructed for other resource development or use.		<ul style="list-style-type: none"> b. Refer to the new STANDARD p. for seasonal restrictions during goshawk active nesting periods. 	

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FOREST-WIDE DIRECTION

MANAGEMENT ACTIVITIES	DIRECTION	GENERAL	GUIDELINES	STANDARDS &
CONTINUATION OF: TIMBER RESOURCE MANAGEMENT (E00)		07 Assure that even-aged conifer stands scheduled to be harvested during the planning period will generally have reached the culmination of mean annual increment of growth.		
SILVICULTURAL PRESCRIPTIONS (E03, 06, AND 07)		08 Make Christmas trees available in areas where Christmas tree culture or other resource objectives can be accomplished through commercial or personal use Christmas tree sales.		
		01 Combine appropriate management activities for the timber type to provide the acceptable range of management intensity for timber production.		a. Refer to the new GUIDELINE h. for vegetative treatments in goshawk post-fledgling and foraging areas.
		TIMBER TYPE		

MANAGEMENT ACTIVITY	SPRUCE- FIR	PONDEROSA PINE	DOUGLAS FIR	ASPEN	OTHER PINES	HARD- WOODS
TREE IMPROVEMENT	X	X	N	N	O	X
SITE PREPARATION	X	X	X	N	N	X
REFORESTATION; PLANTING	X	X	X	O	O	X
SEEDING	N	N	N	O	N	N
NATURAL REGENERATION	X	X	X	X	X	X
PROTECTION	X	X	X	N	N	X
STOCKING CONTROL (THINNING):						
PRECOMMERCIAL	X	X	X	N	N	X
COMMERCIAL	X	X	X	N	N	X
SALVAGE OF DEAD MATERIAL	X	X	X	X	N	X
CUTTING METHODS:						
CLEARCUT	N	N	N	X	N	X
SHELTERWOOD	X	X	X	O	N	X
SELECTION	X	X	X	X	X	X

X = appropriate practice, O = not an appropriate practice, N = not a standard practice but may be acceptable where justified by other Management Unit requirements.

FOREST-WIDE DIRECTION

MANAGEMENT
ACTIVITIES

DIRECTION

GENERAL

STANDARDS &
GUIDELINES

SILVICULTURAL
PRESCRIPTIONS
(E03, 06,
AND 07)

02 Silvicultural treatments will normally begin after the stand density index (SDI) reaches the lower management level and will be completed prior to reaching the upper management level.

a. Lower management level SDI is start of root or crown competition. Upper management level SDI is start of imminent mortality zone.

Refer to the new Guideline e. for management of mature and oldgrowth stands in goshawk habitat.

A. SDI for stands above 5 inches DBH:

B. Rotation age:

C. Appropriate harvest method: (SW = Shelterwood, PC = Patch cut 1 to 10 acres, CC = Clear cut 10 or more acres, S = Seed tree, GS = Group selection, ST = Single tree selection.)

D. 5th year stocking standards by site class (SC) (Primary species must be at least 60% of total stand composition.)

E. SDI for residual stands below 5 inch average stand DBH should equal Forest reforestation standards.

F. Height of preferred species at final harvest under a shelterwood harvest system is based on multiple use management needs but must exceed 4 feet.

G. Limit the maximum size opening created by timber sales to 40 acres unless; (1) Approved by the Regional Forester after a 60 day public review period, or (2) Salvaging openings created by natural events such as fire, insect or disease attack, and windthrow.

H. Maximum size opening created by silvicultural treatment other than timber sales can exceed 40 acres provided it meets multiple use management requirements for the concerned Management Unit.

Forest Cover Type

	ES/AF	DF	WF	PP	AS
a. Maximum	670	600	830	830	---
b. Upper Level	302	240	374	291	---
c. Lower Level	134	149	205	127	---
a. Maximum	140	140	140	140	120
b. Minimum	80	80	80	80	80
a. Evenaged	SW	SW	SW	SW&S	cc
b. Unevenaged	GS&ST	GS	GS	GS&ST	PC&ST
a. SC 20 to 40	150	175	175	175	---
b. SC 50 to 84	195	180	180	180	---
c. SC 84 plus	195	180	180	180	---

a. Refer to the new GUIDELINE t. for maximum size of openings in goshawk habitat.

II
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MANAGEMENT
ACTIVITIES

GENERAL
DIRECTION

STANDARDS &
GUIDELINES

I. Cutting cycle is determined by silvicultural prescription and economic analysis.

03. management timber product removal and utilization to meet Forest multiple use requirements.

A. Sawlog Utilization Standards;

	Species	
	Conifer	Aspen
Minimum DBH (inches)	8.0	7.0
Minimum Top Diameter (inches)	6.0	6.0
Minimum Sawlog length (feet)	8.5	8.5
Maximum Log Cull Value (as % of gross volume.)	33.3	50.0

B. Other wood product minimum specifications for all species.

a. Product	Unit of Measure	Length	DIE**
Props	ea/lin.ft.	6ft.	6in.
PWR Poles	ea/lin.ft.	16ft.	5in.
Corral Poles	ea/lin.ft.	10ft.	4in.
Posts	ea/lin.ft.	6.5ft.	4in.
Pulpwood	cords	8.3ft.	4in.
Fuelwood	cords	----	----

**DIB is diameter inside bark.

C. Logging or wood product removal requirements to assure controlling soil erosion within acceptable levels.

- a. On slopes less than 20 percent allow conventional logging systems and equipment where soil surveys or soil data are unavailable.
- b. On slopes less than 40 percent allow conventional logging systems and equipment where soil surveys or soil data are available to design erosion mitigation needs.
- c. Utilize high floatation equipment on slopes up to 60 percent or cable or aerial systems on any slope.

FOREST-WIDE DIRECTION

MANAGEMENT
ACTIVITIES

GENERAL
DIRECTION

STANDARDS &
GUIDELINES

ARTERIAL AND
COLLECTOR ROAD
CONSTRUCTION AND
RECONSTRUCTION
(L02 TO 09
L16 TO 18)

01 Construct and reconstruct arterial and collector roads to meet multiple resource needs and the following standards:

- A. Average Travel Speed
- B. Number of Lanes
- C. Surfacing
- D. Width
- E. Drainage

LOCAL ROAD
CONSTRUCTION AND
RECONSTRUCTION
(L11, 12,
AND 13)

01 Construct and reconstruct local roads to provide access for specific resource activities such as campgrounds, trailheads, timber sales, range allotments, leases, etc., with the minimum amount surface disturbance and fitting the road to the topography.

02 Construct temporary roads for specific resource activities such as timber sales, emergencies, (e.g., fire suppression), or mineral exploration.

a. Construction and reconstruction standards

Arterial 30-35 mph	Collector 10-30 mph
Generally two lanes	Generally one lane
All weather, with asphalt or gravel generally	Generally gravel, sometimes asphalt
Typically 20 to 24 feet, but some single lane with intervisible 10-foot turnouts.	Typically 12 to 16 feet, with 10-foot turnouts.
Permanent, but not to impede traffic	Permanent but may impede traffic.

a. Construction and reconstruction standards for local roads are (FSH 7709.56):

- (1) Travel Speed-Average less than 20 mph.
- (2) Lanes-Usually single lane except for developed recreation sites.
- (3) Surface-Varies from asphalt to native surface; majority native surface.
- (4) Width-Typically 10 thru 14 feet. Turnouts optional depending upon traffic management and usually not intervisible.
- (5) Drainage-Dips and culverts.

a. Temporary roads shall not be designated as Forest development transportation facilities.

a. Forest Development Road and Trail funds shall not be used for temporary road construction and/or rehabilitation.

b. Temporary roads shall be returned to resource production and use compatible with the management unit emphasis, and within one season after termination of the activity for which the road was constructed.

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MANAGEMENT
ACTIVITIES

GENERAL
DIRECTION

STANDARDS &
GUIDELINES

ROAD
MAINTENANCE
(L19)

- 01. Maintain roads to minimum requirements as follows:
 - A. All arterials - Level 3;
 - B. All open collectors - Level 2/3;
 - C. All open local roads - Level 2; and
 - D. All closed roads - Level 1.

- a. FSM 7730.
- b. Level 1 maintenance include upkeep of drainage structures and vegetation cover necessary to prevent erosion.

02 Maintain structures, bridges, cattleguards, etc., to be structurally sound and safe for use.

TRAIL
SYSTEM
MANAGEMENT
(L23)

- 01 Maintain trails for designated uses and close trails to inappropriate uses.
- 02 Provide a range of trail opportunities in coordination with other Federal, State, or local agencies, and private industry both on an off NFS lands.

a. FSM 2350, FSM 7703, FSH 2309.18, and 36 CFR 261.12.

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42 TRAIL
CONSTRUCTION AND
RECONSTRUCTION
(L22)

01 Construct or reconstruct trails when needed as part of the transportation system.

a. Cross drains and conveyance structures are planned to acceptable work standards (FSM 1310).

FA&O CONSTRUCTION
RECONSTRUCTION
AND MAINTENANCE
(L24 AND 25)

01 Existing or proposed facility sites will be identified and managed under the Management Prescription for Special Land Designation (SLD).

FIRE PLANNING
AND
PRESUPPRESSION
(P01)

- 01 Provide a level of protection from wild fire that is cost efficient and that should meet objectives of the management unit considering the following:
 - A. The values of the resources that are threatened by fire.
 - B. The probability of fire occurrence,
 - C. The fuelbed that fires will probably occur in,
 - D. The weather conditions that will probably influence fires that occur.
 - E. The costs of fire protection programs (FFP AND FFF).
 - F. The environmental, social, economic, political, public safety, cultural, and property concerns; and
 - G. Management objectives for the areas.

a. Use the predictive model in FSH 5109.19 for this analysis.

FOREST-WIDE DIRECTION

MANAGEMENT
ACTIVITIESGENERAL
DIRECTIONSTANDARDS
GUIDELINESINITIAL ATTACK
AND FIRE
SUPPRESSION
(P08)

- 01 Take appropriate suppression action that meets the management objectives for the unit, using confinement, containment, and control as suppression strategies, considering the following factors:
- A. Values of the resources threatened by the fire (both positive and negative),
 - B. Management objectives for the unit(s) threatened,
 - C. Fuelbeds the fire may burn in,
 - D. current and projected weather conditions that will influence fire behavior,
 - E. Natural barriers and fuel breaks,
 - F. Social, economic, political, cultural, and environmental concerns,
 - G. Public safety,
 - H. Firefighter safety; and
 - I. Cost of alternative suppression strategies.

- a. Use the Escaped Fired Situation Analysis to make this determination, if the proposed suppression strategy is confinement or containment (FSM 5130.31).

III
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FUEL TREATMENT
(P11 TO 14)VEGETATION
TREATED BY
BURNING
(P15)

01. Maintain fuel conditions which permit fire suppression forces to meet protection objectives for the management Unit

- a. Reduce or otherwise treat fuels, or break up continuous fuel concentrations, or provide added protection for areas.
Refer to the new Guideline g. for down logs and coarse woody debris requirements in goshawk habitat.

AIR RESOURCE
MANAGEMENT
(P16)

01. Meet State and federal air quality objectives.

- a. FSM 2121.

INSECT AND
DISEASE
MANAGEMENT
OR SUPPRESSION
(P35)

- 01 Prevent or suppress epidemic insect and disease populations that threaten forest and/or range land with an Integrated Pest Management (IPM) approach consistent with resource management objectives.

Management Unit Requirements

The management unit requirements included in this section represent the direction applicable to reach specific objectives for specific areas of land. They supplement and may amend the Forest-wide Direction contained in the previous section of this document. These requirements in various combinations were used as the basis for developing the alternative analyzed in the accompanying Environmental Impact Statement.

A code was assigned to each management unit requirement in order to link the prescription to the land area. The location of management units is illustrated on the Forest Plan Map inserted inside the back cover of this document.

The requirements for each management unit consists of a prescription summary and a set of management requirements. The prescription summary identifies the primary emphasis of the prescription. All prescriptions are multiple-use prescriptions, but each has a primary emphasis.

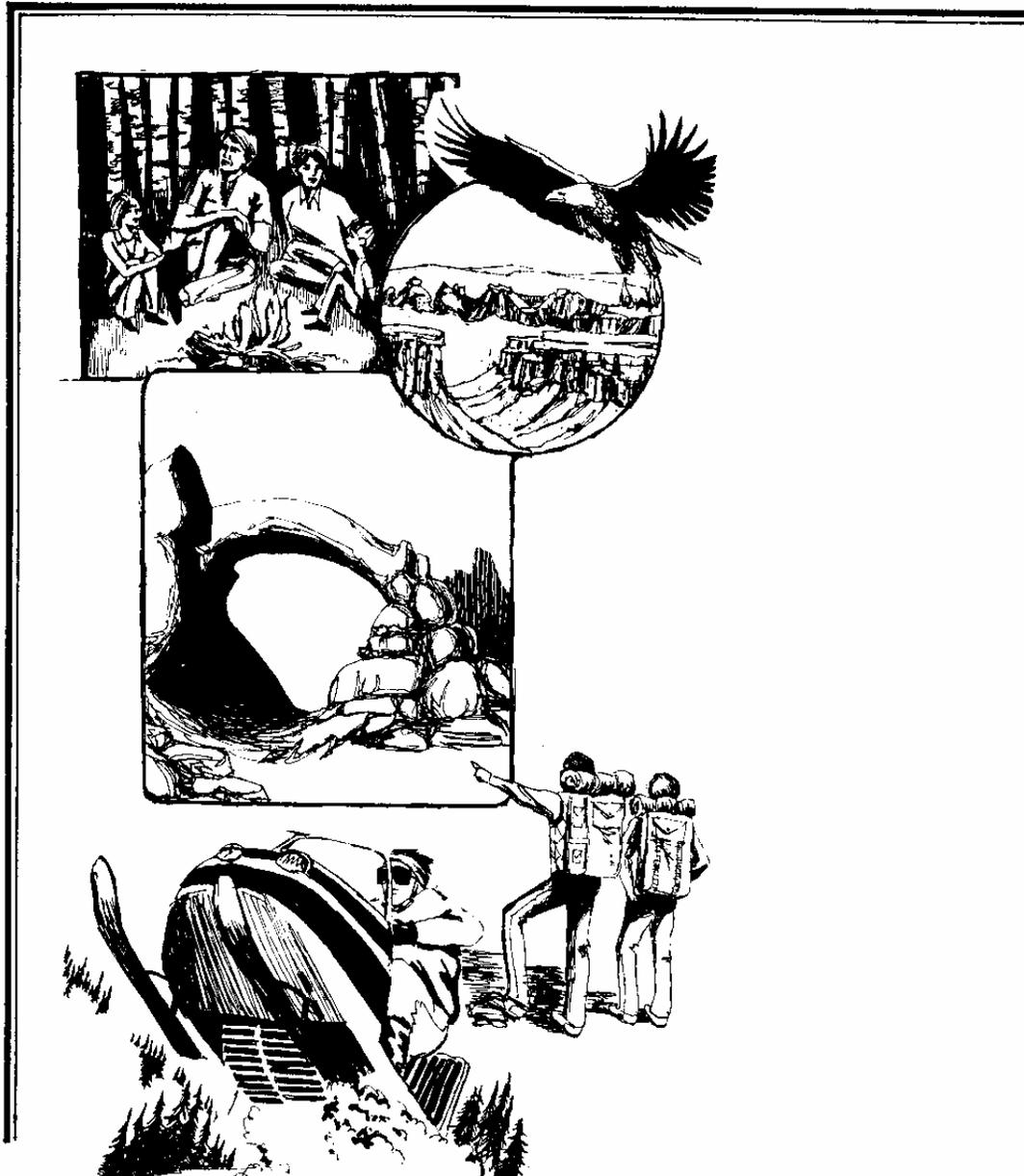
Management Requirements are presented in three columns: Management Activities, General Direction statements, and Standards and Guidelines.

Management activities are work processes that are conducted to produce, enhance, or maintain levels of outputs, or to achieve administrative and environmental quality objectives. Management activities are identified by a code number and title defined in the Management Information Handbook (FSH 1309.11) dated July 1980. In some cases, management activities were grouped under one activity when it was not appropriate to develop separate requirements. Not all management activities need management requirements. When there are no management requirements listed for an activity, the activity is adequately covered by Forest-wide Direction or direction in laws, regulations, Executive Orders, or Forest Service directives.

General Direction statements specify the actions, measures, or treatments (management practices) to be done when implementing the management activity, or the condition expected to exist after the General Direction is implemented.

Standards and Guidelines are quantifications of the acceptable limits within which the General Direction is implemented. Table III-3 lists each management unit prescription and briefly states its emphasis. Table III-4 lists the management units, their total acreage, and the acres treated by resource activity area by planning period.

CHAPTER IV IMPLEMENTATION OF THE FOREST PLAN



Revised June 2003

TABLE IV-1 (Continued)

MIH Reference Code	Activity, Practice and/or Effect to be Measured	Data Source and/or Monitoring Technique	Expected Precision/Reliability	Measurement Frequency	Reporting Period	Variation Which Would Cause Further Evaluation and/or Change in Management Direction
Visual Resource (Continued)						
		Evaluation of a minimum of 10 percent of the previous year's land, water, and/or vegetation disturbing projects.	tain sufficient accuracy and confidence from which to make reliable comparisons.	Annual	2 Year	Failure to meet intended Visual Quality Objective of the management unit.
Wilderness Resource						
B03	Wilderness Campsite Condition	Code-A-Site inspection/analysis.	Data sources and monitoring techniques for all activities are expected to contain sufficient accuracy and confidence from which to make reliable comparisons.	Annual	3 Year	When sites cannot be maintained in Code-A-Site category moderate impact.
B03	Amount and Distribution of Use.	Analysis of trail registration, trail counts and trailhead counts with periodic intensive sample verification.		Annual	3 Year	Use exceeds more than ± 10 percent of the ROS evidence of human criteria for the Primitive ROS Class as described in the Standards and Guidelines, Chapter III, LMP.
Wildlife and Fish						
C01	MIS Population Trends	Interagency field reviews and/or obtain State record or survey as follows:				
	a. Mule Deer and Elk	Aerial reconnaissance on winter ranges.	M	Annual	5 Year	Twenty percent.
		Browse and pellet transects.	M	Annual	5 Year	Twenty percent change in winter rangeland carrying capacity.
		Trend studies.	H	5 Year	5 Year	Ten percent.
		Herd composition.	M	Annual	5 Year	Ten percent.

TABLE IV-1 (Continued)

MIH Reference Code	Activity, Practice and/or Effect to be Measured	Data Source and/or Monitoring Technique	Expected Precision/ Reliability	Frequency	Measurement Period	Reporting Period	Variation Which Would Cause Further Evaluation and/or Change in Management Direction
Wildlife and Fish (Continued)							
V - 6	b. Macroinvertebrates (For baseline stations or as needed for select project activities.)	R-4 GAWS Analysis (BCI) Biotic Condition Index. (BCI) Habitat Condition Index.	H M/H H		5 Year 5 Year	5 Year 5 Year	Twenty percent. Twenty percent.
	c. Golden Eagle	Active nest site survey.	M		5 Year	5 Year	Twenty percent.
	d. Blue Grouse	Harvest record.	M		Annual	5 Year	Twenty percent.
		Spring territory survey.	M		Annual	5 Year	Twenty five percent.
		Summer brood counts.	H		Annual	5 Year	Twenty five percent.
	e. Abert Squirrel	Survey percent ponderosa pine in mature class.	H		10 Year	10 Year	Ten percent.
C01	Habitat Improvement Accomplishment Range	Attainment and wildlife report.			Annual	Annual	Twenty percent.
	D07 Allotment Carrying Capacity	Grazing impact and use studies.	H/M		According to approved AMP normally 3 years of data per allotment.	As specified in AMP at the end of evaluation period.	Obligation \pm 10 percent of carrying capacity.
	D07 Long-term Range Trend	Long-term permanently located range trend studies for collection of plant composition, ground cover, and soil stability.	H/M		According to approved AMP.	When Completed	If significant differences in trend occurs.

