WASATCH-CACHE FOREST PLAN AMENDMENT
Utah Northern Goshawk Project EA
March 2000

Page IV-8: Add a new goal and objective for goshawks:

WILDLIFE AND FISHERIES

Goal 17a: 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:

a. 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 management direction follows on page IV-50 that has been added as a new Goshawk Management Direction Standards and Guidelines.

Page IV-50: Add a new category as follows:

14. Goshawk Management Direction:

ID from the EA	**GOSHAWK EA MANAGEMENT DIRECTION**
	CATEGORY 1: Native Processes
g- 2	***(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 extrme 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.
g- 3	***(Guideline)*** Within disturbed ecosystems, management actions should be designed to be consistent with restoration objectives.
	CATEGORY 2: Forest Composition
g- 5	***(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.
	CATEGORY 3: Forest Structure
g-7	***(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

ID from the EA	GOSHAWK EA MANAGEMENT DIRECTION
g-7	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.
g-9	***(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-11	***(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 (per 10 acres) (Down logs take precedence over tons of coarse woody debris	Minimum Log Size (Diameter <--> Lengt h (Mid-point diameter;or if minimum size not available, largest available on site	Minimum Coarse Woody Debris ≥3 inch diameter (Tons per 10 acres, inclusive of down logs)
Ponderosa Pine	30	12 inch <--> 8 feet	50
Mixed Conifer &Spruce/fir	50	12 inch <--> 8 feet	100
Aspen	50	6 inch <--> 8 feet	30
Lodgepole & Aspen/Lodgepole	50	8 inch <--> 8 feet	50

g- 15	***(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-flegling 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 2-9 trees in the VSS 4,5 or 6 size class with interlocking crowns.
	CATEGORY 4: Goshawk Nest and Post-Fledging Areas (PFAs) Only
s- 5	***(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.
s-6	***(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 at least one year prior to implementation of management actions.
g- 17	***(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.
g- 18	***(Guideline)*** If a historic nest is not associated with an active nest area, management direction for home range habitat should be applied.

ID from the EA	GOSHAWK EA MANAGEMENT DIRECTION
s- 8	***(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.
g- 19	***(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.
g- 20	***(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.
s- 9	***(STANDARD)*** Prohibit forest vegetative manipulation (timber harvest, prescribed burning, fuelwood, thinnings, weedings, etc.) within active nest areas (approximately 30 acres; i.e. g-19) 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 g-21 applies.
g-21	***(Guideline)*** In active nest areas (approximately 30 acres; i.e. g-19), 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.
g- 22	***(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.
g- 24	***(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.
g-25	***(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.
	CATEGORY 5: Other Miscellaneous Areas of Concern
g- 29	***(Guideline)*** Where it is determined through the landscape assessment process that ungulate grazingis 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.

ID from the EA	GOSHAWK EA MANAGEMENT DIRECTION
g-33	***(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 habtiat 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.
	CATEGORY 6: Treatment Prioritization
s-11	***(STANDARD)*** - When non-vegetative management activities (for example: 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.
g-34	***(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 assocated 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	Measurment 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 level.	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 treatment.	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 treatment.	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"	Ungulate grazing practices (i.e.- utlization, season of use, grazing system) in identified "at-	Grass, forb, and shrub production objectives are within the range identifed in landscape assessments.	Grazing practices reviewed annually on at least 2 allotments where "at-risk" conditions have been	Every 5 years

ID	Goals & Obj.	Standards & Guidelines	Question	Item to Measure	Acceptable Range	Measurment Frequency	Report Frequency
			condition?	risk" locations.		identified.	

Monitoring Exhibits

The following task sheets are Exhibits to help during implementation for each monitoring requirement. Changes to these task sheets will not require a Forest Plan Amendment.

Task Sheet m-6 is intentionally missing because it does not apply to the selected alternative.

Task Sheet for Monitoring Requirement "m-1"

Goal/DFC: 10 — Restore or maintain forested landscapes in a properly functioning condition (PFC).

Objective:

Standard:

Monitoring purpose: Track trends in goshawk territory occupancy across the state.

Question(s): Are known goshawk territories on the NFS lands remaining occupied?

Monitoring item: Territory Occupancy- a territory is occupied if evidence of use is present; nesting does not need to be documented.

Range of acceptable results: Less than 20% decline in territory occupancy over a 3 year period on a National Forest.

Reliability: moderate Precision: high

Collection of Information

Who collects: Forest or District Biologist; or Utah Division of Wildlife Resources (partners) (district, research, co-op, etc.)

Method of collection: Most current Regional Protocol for field and data collection. (specific)

Time and frequency of collection: Annual. 50% of known territories or all if less than 20

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

Cost of collections: $300/nest

Analysis/Evaluation of Findings

Who conducts: Forest Biologist and UDWR

Method of analysis: Statistical analysis by UDWR of trends in occupancy across Utah. Forest tabulation of findings annually.

Results:

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

Recommended actions implemented: (Date)

Cost of A/E: $300

Total cost of monitoring: $300/nest plus $300 for analysis

Report of Findings

Information to be reported: Trend in occupancy by forest and all forests in Utah

Frequency of report: every 3 years

Method of reporting: Written summary of results for Forest Monitoring Report, forest and state database.

Target audience for report: Agency biologists and leadership teams

Task Sheet for Monitoring Requirement "m-2"

Goal/DFC: 10 — Restore or maintain forested landscapes in a properly functioning condition (PFC).

Objective:

Standard:

Guideline g-21 — Restrict management activities within PFA during active nesting period.

Monitoring purpose: To determine if guidelines are being implemented and are effective.

Question(s): Are mitigation measures employed during vegetative management projects sufficient to prevent territory abandonment?

Monitoring item: Territory Occupancy surveys of active territories, after activity.

Range of acceptable results: No territory abandonment.

Reliability: moderate Precision: High

Collection of Information

Who collects: District or Forest Biologist or Utah Division of WIldlife Resources (partners)
(district, research, co-op, etc.)

Method of collection: Most current regional protocol for territory surveys for field survey
(specific) and data collecion. All active territories where treatments occur.

Time and frequency of collection: First full season after treatment

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

Cost of collections: $300/nest

Analysis/Evaluation of Findings

Who conducts: Forest Biologist

Method of analysis: Presence or absence

Results:

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

Recommended actions implemented: (Date)

Cost of A/E: N/A

Total cost of monitoring: $300/nest

Report of Findings

Information to be reported: Were measures sufficient to maintain occupancy of territory.

Frequency of report: Annual

Method of reporting: Written summary and nest database

Target audience for report: Forest and Distict leadership teams

Task Sheet for Monitoring Requirement "m-3"

Goal/DFC: 10 — Restore or maintain forested landscapes in a properly functioning condition (PFC).

Standard:

Guideline: g-5 — ...provide for a full range of seral species...

g-7 — ...treatments in mature/old VSS in landscapes that are at or below desired amount should be designed to maintain or enhance these VSS...

Monitoring purpose:

Question(s): Is habitat connectivity, as represented by structural and species diversity and dispersion thereof, within 5th and 6th order watersheds (or equivalent ecological scale) being maintained?

Monitoring item: Percent of coniferous forest and aspen forest in mature and old stages, distribution of mature and old, and representation of early seral species.

Range of acceptable results: At least 40% of the coniferous and/or 30% of the aspen forested acres within a landscape are mature and old classes. Mature and old structures are distributed across the landscape in patterns that are representative of HRV (as defined by PFC alt. C,D and F). In Alternative E, no reduction in mature and old forests. Seral species characteristic of the landscape are well represented.

Reliability: Moderate Precision: Moderate

Collection of Information

Who collects: Interdisciplinary Team (district, research, co-op etc.)

Method of collection: GIS, aerial photography, forest inventory data, surveys

Time and frequency of collection: Whenever landscape assessments are implemented

Source of data (field, research, data base, etc.): Data base, local knowledge

Cost of collections: Highly variable depending on current data base and size of landscape, costs would be part of the landscape assessment process.

Analysis/Evaluation of Findings

Who conducts: Interdisciplinary Team

Method of analysis: Comparison of data to desired conditions.

Results:

Within range of acceptable results: Y N

Monitoring purpose achieved: Y N

Further monitoring required: Y N

Recommended actions: Y N

Recommended actions implemented: (Date)

Cost of A/E: Highly variable depending on current data base and size of landscape, costs would be part of the Landscape assessment process.

Total cost of monitoring: Highly variable depending on current data base and size of landscape, costs would be part of the Landscape assessment process.

Report of Findings

Information to be reported: Degree of successful attainment of objective.

Frequency of report: Every 5 years

Method of reporting: Landscape Assessment Document

Target audience for report: Forest & Regional Office

Task Sheet for Monitoring Requirement "m-4"

Goal/DFC: 10 — Restore or maintain forested landscapes in a properly functioning condition (PFC).

Objective:

Standard:

Guideline: g-9 — When initiating vegetative treatments in forested cover types, leave the following minimum number and size of snags.

Monitoring purpose:

Question(s): Is snag habitat (number and size of snags) being maintained in desired spatial arrangement?

Monitoring item: Number and size of snags per 100 acres within vegetation treatment areas.

Range of acceptable results: At least 75% of the measured blocks meet objectives.

Reliability: High Precision: High

Collection of Information

Who collects: Stand Examination Crew or Biological Technician
(district, research, co-op, etc.)

Method of collection: Field plots, preferrably collected during otherwise scheduled post-treatment examinations.
(specific)

Time and frequency of collection: Once, within 2 years of completion of veg. treatment. 10% of project acres.

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

Cost of collections: $100-500 per 100 acres

Analysis/Evaluation of Findings

Who conducts: Silviculturist and Biologist (Forest or District level)

Method of analysis: Comparison of measured data to desired conditions.

Results:

Within range of acceptable results: Y N

Monitoring purpose achieved: Y N

Further monitoring required: Y N

Recommended actions: Y N

Recommended actions implemented: (Date)

Cost of A/E: $250

Total cost of monitoring: $250 + $100-500 per 100 acres.

Report of Findings

Information to be reported: Degree of successful attainment of objective.

Frequency of report: Every 5 years

Method of reporting: 5-year Monitoring Report for Forest

Target audience for report: General & Regional Office

Task Sheet for Monitoring Requirement "m-5"

Goal/DFC: 6 — Management of forest vegetation to promote adequate
Alt F 10 — Restore or maintain forested landscapes in a properly functioning condition (PFC).
Objective:
Standard:
Guidelines 11 — When initiating vegetative management treatments, prescriptions should be designed to leave the following minimum number of down logs and woody debris.

Monitoring purpose:
Question(s): Are down woody debris and logs being maintained in sufficient amounts, sizes and spatial location?

Monitoring item: Numbers and size of down logs, tons of down woody debris.

Range of acceptable results: At least 75% of the measured blocks meet objectives.

Reliability: High Precision: High

Collection of Information

Who collects: Stand Examination Crew or Biological Technician
(district, research, co-op, etc.)
Method of collection: Field plots, preferrably collected during otherwise scheduled post-treatment examinations.
(specific)
Time and frequency of collection: Once, within 2 years of completion of veg. treatment. 5% of project acres.
Source of data (field, research, data base, etc.): Field Data
Cost of collections: $5-10 per 10 acres

Analysis/Evaluation of Findings

Who conducts: Silviculturist and Biologist (District or Forest level)
Method of analysis: Comparison of measured data to desired conditions.

Results:
Within range of acceptable results: Y N
Monitoring purpose achieved: Y N
Further monitoring required: Y N
Recommended actions: Y N
Recommended actions implemented: (Date)
Cost of A/E: $250
Total cost of monitoring: $250 + $5-10 per 10 acres.

Report of Findings

Information to be reported: Degree of successful attainment of objective.

Frequency of report: Every 5 years
Method of reporting: 5-year Monitoring Report for Forest

Target audience for report: General & Regional Office

Task Sheet for Monitoring Requirement "m-7"

Goal/DFC: 10 — Restore or maintain forested landscapes in a properly functioning condition (PFC).

Objective:

Standard:

Guideline g-28 & g-29 — Management of grass, forb and shrub vegetation within forested cover types to promote adequate production of forage, mast and seed for goshawk prey species.

Monitoring purpose:

Question(s): Are appropriate adjustments made to grazing practices in identified "at-risk" locations where grazing is contributing to the "at-risk" condition?

Monitoring item: Ungulate grazing practices in identified at-risk locations.

Range of acceptable results: Results are within acceptable bounds as identified in the landscape assessment.

Reliability: Moderate Precision: Moderate

Collection of Information

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

Method of collection: Field inspection; ocular to actual measurement depending on factor addressed.

Time and frequency of collection: Annually in allotments where "at-risk" conditions have been identified; however, no more than 2 per forest required per year.

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

Cost of collections: $250 to $3500 per allotment depending on element being measured.

Analysis/Evaluation of Findings

Who conducts: Rangeland Specialist

Method of analysis: Comparison of data to desired conditions.

Results:

Within range of acceptable results: Y N

Monitoring purpose achieved: Y N

Further monitoring required: Y N

Recommended actions: Y N

Recommended actions implemented: (Date)

Cost of A/E: $50 per allotment measured.

Total cost of monitoring: $150 to $3550 per allotment depending on element being measured; $300 to $7100 per national forest.

Report of Findings

Information to be reported: Degree of successful attainment of objective.

Frequency of report: Every 5 years

Method of reporting: Allotment inspection forms / records.

Target audience for report: Forest & Regional Office