WASATCH-CACHE NATIONAL FOREST FOREST PLAN SUPPLEMENTAL INFORMATION REPORT (SIR) and DETERMINATION

I. PURPOSE OF THIS SIR

CEQ NEPA regulations (40 CFR 1509.2(c) and FS NEPA procedures) require supplementation of NEPA documents when there are "significant new circumstances or information relevant to environmental concerns and bearings on the proposed action or its impacts."

The purpose of this SIR is to determine if the *Conservation Strategy and Agreement for the Management of Northern Goshawk Habitat in Utah* (Utah Conservation Strategy) represents significant new information or changed conditions bearing on current Land and Resource Management Plan (LRMP) direction or the effects identified in the Final Environmental Impact Statement (FEIS) for that LRMP.

II. INTRODUCTION

NFMA directs the Secretary of Agriculture to issue regulations for the development and revision of forest plans (16 U.S.C. S 1604(g)). These regulations are codified at 36 CFR S219. A forest plan is a dynamic management plan that guides future decisions. It provides multiple-use goals and objectives that constitute the "vision" (or intentions) of the Forest Service regarding the planning unit. The forest plan describes the desired future condition of the Forest, and how progress toward it will be made through the planning period. In addition to providing multiple-use goals and objectives, the plan has some features of a zoning ordinance in that it permits or prohibits activities, and establishes standards and guidelines that regulate them. Thus, standards and guidelines comprise "sideboards" in achieving goals and objectives.

In response to the regulations cited above, the Ashley National Forest in Utah developed a forest plan. The Record of Decision (ROD) to implement this LRMP was signed in September 1985. The six decisions made in the ROD:

- established forestwide multiple-use goals and objectives;
- established forestwide standards;
- established forestwide guidelines;
- delineated management areas and associated management prescriptions;
- idenitified lands not suited for timber production; and
- established monitoring and evaluation requirements.

These six decisions, in part, addressed requirements at 36 CFR S 219.19 that "wildlife habitat shall be managed to maintain viable populations of existing native and desired non-native vertebrate species in the planning area." This section further specifies that "habitat must be provided to support, at least, a minimum number of reproductive individuals and that habitat must be well distributed so that those individuals can interact with others in the planning area." *Id.* In order to estimate the effects of each alternative on fish and wildlife populations, certain vertebrate and invertebrate species present in the planning area were identified and selected as management indicator species (MIS) whose "population changes are believed to indicate the effects of management activities." 36 CFR S 219.19(a)(1). The northern goshawk is *not* an MIS for the Wasatch-Cache National Forest LRMP.

This SIR assesses the need to change (i.e., amend) one or more of the six decision points in the Wasatch-Cache National Forest LRMP due to new information in the Utah Conservation Strategy (hereafter, the

Strategy). This strategy has been developed for use by National Forests in Utah, in part, to further ensure satisfaction of requirements at 36 CFR S 219.19 for the northern goshawk. The strategy is based on information and recommendations found in the *Habitat Assessment and Management Recommendations for the Northern Goshawk (Accipiter gentilis) in Utah* (hereafter, the Assessment; Graham et al. 1998, in press) and *Management recommendations for the northern goshawk in the southwestern United States* (Reynolds et al. 1992).

At 36 CFR S. 219.10(f) it states "The Forest Supervisor may amend the forest plan. Based on an analysis of the objectives, guidelines, and other contents of the forest plan, the forest supervisor shall determine whether a proposed amendment would result in a significant change in the plan. If the change resulting from the proposed amendment is determined to be significant, the Forest Supervisor shall follow the same procedure as that required for development and approval of a forest plan. If the change resulting from the amendment is determined not to be significant for the purposes of the planning process, the Forest Supervisor may implement the amendment following appropriate public notification and satisfactory completion of NEPA procedures."

Therefore, this SIR will compare the six decision points made in the Wasatch-Cache's LRMP to information in the Utah Conservation Strategy to determine if the Strategy can be implemented under the current forest plan, or if amendments are required.

Viability of the Northern Goshawk and the Forest Plan

36 CFR S 219.19 requires that "wildlife habitat shall be managed to maintain viable populations of existing native and desired non-native vertebrate species in the planning area." It also specifies that "habitat must be provided to support, at least, a minimum number of reproductive individuals and that habitat must be well distributed so that those individuals can interact with others in the planning area." To meet these requirements for a far ranging, broadly distributed species such as the northern goshawk--where a Population Viability Analysis (PVA), or surrogate analysis, is conducted at scales larger than an individual planning area--it must be clear what role individual planning areas (i.e., forest plan units) play in sustaining population viability at the larger scale. Matching the scale of analysis to the scale of biological processes is key to the success of PVA. Different taxa, and different ecological processes that influence the life histories of those taxa, call for analyses at different scales.

For the goshawk, the planning area managed under an LRMP provides an important piece of the total habitat that ensures maintenance of species representation throughout the area which defines a self-sustaining population (i.e., the aggregation of landscapes within the State of Utah). Habitat found on each forest provides connectivity and travel lanes, contributes to genetic diversity, and increases the number of individuals in the larger population.

Although the Assessment found that current habitat appears to be capable of supporting a viable population of goshawks at the State spatial scale, it recognized that "habitat deficiencies may be present at the local level" because of the coarse scale of the assessment. The Strategy provides administrative units with the necessary background information and analysis procedures to insure that projects proposed in areas involving goshawk habitat, or potential habitat, are properly designed and implemented to meet habitat goals.

Following the guidance in the Strategy will ensure that the administrative unit sustains habitat for the maintenance of species representation throughout the planning area over time, and contributes to

sustaining habitat connectivity among National Forests. Connectivity among habitats is a key element to population viability because it allows juveniles to disperse from natal areas and individuals to emigrate to new areas. Connected habitat makes it possible for individuals to recolonize habitats or emigrate to new breeding territories throughout the State when habitat values change locally.

III. Relationship between species assessments, conservation strategies, and Forest Plan management direction

Species Assessments

The Habitat Assessment and Management Recommendations for the Northern Goshawk (Accipiter gentilis) in Utah (Graham et al. 1998, in press) considered goshawk habitat relationships and needs, historic and current range, demographic features and population trends, and limiting factors, and provided an estimate of long-term persistence considering past, present, and anticipated future conditions. To complete the assessment Graham et al. considered a portion of the species range (the State of Utah) to address management concerns. Within this spatial area, all land ownerships were included in the assessment to evaluate the contribution of National Forest System lands to long-term persistence and viability. This assessment included habitat findings not only for the goshawk, but also for its prey and other associated species. These findings provide the foundation for the Strategy.

Conservation Strategies and Agreements

The *Conservation Strategy and Agreement for the Management of Northern Goshawk Habitat in Utah* (1998) was developed from information in the *Habitat Assessment and Management Recommendations for the Northern Goshawk (Accipiter gentilis) in Utah*. It recommends management approaches to restore or maintain ecological integrity of goshawk habitat; this contributes to species viability. Management recommendations provide the framework for developing management direction in forest plans to meet the needs of the goshawk, its prey, and associated species.

Forest Plan Management Direction

A forest plan is a dynamic management plan for making future decisions. It has some features of a zoning ordinance in that it permits and prohibits activities, and establishes standards and guidelines ("sideboards") that regulate them.

These sideboards are intentionally broad to accommodate the needs of the many resources; allow for adaptation to the inherent variety of site-specific conditions on a forest; and accommodate adaptation as better science becomes available or policy changes. Plan direction does not provide detailed descriptions of how goals and objectives are to be achieved at the project level. However, the general path defined by the sideboards is narrow enough to insure ecosystem integrity and resiliency are retained, a sustainable level of products and services is provided, and laws and regulations are not violated while project implementation moves the planning area towards its vision.

The Wasatch-Cache National Forest must determine if implementation of this conservation strategy

- redefines the forest plan vision, as defined by its goals and objectives; and,
- is consistent with the existing forest plan direction (sideboards).

If implementation is consistent, the Forests must determine whether the stipulations in the Strategy are different than the operational boundaries defined by the sideboards (i.e., standards, guidelines, general direction, management area prescriptions). If they are, operational sideboards must be reconsidered, and the significance of the proposed changes must be assessed (FSH 1909.12 (5.32(3)) based on NFMA planning requirements.

This SIR assesses the ability of the current Wasatch-Cache National Forest LRMP to implement management recommendations of the Strategy across the planning area.

WASATCH-CACHE NATIONAL FOREST

The Role of the Wasatch-Cache National Forest in Sustaining Viable Populations of Goshawk at the State Scale

36 C.F.R. S 219.19 requires that "wildlife habitat shall be managed to maintain viable populations of existing native and desired non-native vertebrate species in the planning area." It also specifies that "habitat must be provided to support, at least, a minimum number of reproductive individuals and that habitat must be well distributed so that those individuals can interact with others in the planning area." To meet these requirements for a far-ranging, broadly distributed species such as the northern goshawk--where a Population Viability Analysis (PVA), or surrogate analysis, is conducted at scales larger than an individual planning area--it must be clear what role individual planning areas (i.e., forest plan units) play in sustaining population viability at the larger scale:

The planning area managed under a Forest Plan provides an important piece of the total habitat that ensures maintenance of species representation throughout the area which defines a self-sustaining population (i.e., the aggregation of landscapes within the State of Utah). Habitat found on each forest provides connectivity and travel lanes, contributes to genetic diversity, and increases the number of individuals in the larger population.

Based on Forest Inventory and Analysis (FIA) data compiled in 1995, the State of Utah encompasses over 54 million acres. Roughly 29 percent of the State (15.7 million acres) is forest land (all ownerships). Forest land is made up of 58 percent (9.2 million acres) pinyon-juniper and juniper woodlands; the remaining 42% (6.5 million acres) is timberland (based on forest type classifications). Timberland refers to those lands that are typically dominated by tree species favored for commercial timber harvest (i.e., "timber species" such as ponderosa pine, Douglas-fir, and Englemann spruce). This is a land area classification system and is not intended to infer a land use such as timber harvest will occur.

Forested land classed as timberland in the FIA report is most important for goshawk habitat. Though the woodland areas (including pinyon/juniper) have some value as winter foraging habitat, no nesting goshawks have been located in this type. The USDA Forest Service manages 81% of the timberlands in Utah (those lands with forest types or habitat types that may be capable of achieving a goshawk habitat rating of high or optimum as described by Graham et al).

The Wasatch-Cache National Forest encompasses 1,215,219 acres in southwestern Utah (FIA, 1998). It is made up of 863,906 acres of forest land and 351,313 acres of nonforest land or water. Forest land is made up of 90% timberland (776,239 acres) and 10% woodland (87,667 acres), based on FIA forest types. Relative to the State of Utah, the Wasatch-Cache National Forest timberland component represents roughly 12% of the land with forest types or habitat types that may be capable of achieving a goshawk habitat rating of high or optimum. However, some timberland sites on the Wasatch-Cache do not have the productive capability to grow trees of sufficient size and density to meet nest stand characteristics as defined by Graham et al. To achieve an overall habitat rating of high or optimum, a site must be capable of achieving high value for nesting *and* high value for at least one forage/prey species.

Though finer resolution data will be used during project-level landscape assessments to identify "local deficiencies" within a landscape, the coarse scale assessment completed for the State of Utah by Graham et al. provides indicators of habitat conditions on an individual National Forest. The Graham et al. assessment indicates that timberland on the Wasatch-Cache is roughly classed as having 34% optimum habitat, 6% high-value habitat, and 60% moderate- to low-value habitat. Most optimum and high-value

habitat occurs on the Logan and Salt Lake Districts in the Wasatch Range, and Mountain View Ranger Districts in the Uintas Range, though patches occur throughout the Forest. The Kamas and Evanston Ranger Districts appear to be dominated by moderate- and low-value habitat.

In the Wasatch Range on the Salt Lake District optimum habitat coincides with the wildernesses behind Salt Lake City and protected watersheds in Davis County. On the Logan District optimum habitat lies in the Mt. Naomi Wilderness and contiguous undeveloped areas at the north end of the district. In the Uinta Mountains optimum and high value habitat occurs at the middle elevations of the in montane forest types such as aspen, lodgepole pine and mixed pine/spruce/fir. Optimum habitat has been mapped on the Mountain View Ranger District primarily in stands of live lodgepole mixed with aspen. High value habitat tends to occur in spruce/fir forest types on the southeast side of the Logan District. No habitat classified as high value occurs on the north slope of the Uintas, although a small amount is present along the Mirror Lake Highway corridor at the west side of the Kamas Ranger District.

Beetle-killed lodgepole forests typical of the eastern end of the Uinta Mountains, are not so common in the west. However, historic tie-hacking has had a substantial effect on forest structures and ages on the Evanston and Mountain View Ranger Districts reducing habitat value. On the Kamas Ranger District in the Lakes country, natural sparse stand structures do not favor the goshawk. Additionally, historic logging and low site capability (i.e., sites not capable of achieving high or optimum value) has contributed to low to moderate value ratings for goshawk habitat.

Snag loss and risk of large-scale wildfire due to accumulated woody debris in forests are short-term agents acting on the Wasatch-Cache timberlands. These are natural change agents, and are necessary for retaining the early to mid-seral vegetative communities that Assessment identified as important for the continued existence of goshawks in Utah. However, fire is severe, they can substantially reduce goshawk habitat value by creating unfavorable forest structures (lacking large trees) over large areas. At the other extreme are forests where little or no disturbance is occurring. This results in a slow trend toward late seral vegetative communities, which are neither as diverse nor as productive as mid-seral communities and therefore tend to support fewer prey for goshawks. This is particularly true on mid-elevation sites, where a variety of trees are capable of growing but where most are out-competed by one or two dominant species over time. Fire exclusion is one way in which forest management has favored late seral forest composition, to the probable detriment of goshawks. Fire exclusion also tends to create large, homogeneous landscapes which will eventually become susceptible to large-scale insect and fire events, and promotes ingrowth of shade-tolerant tree species, creating dense, cluttered forest structures which are not favorable for goshawks.

Management tools such as prescribed fire and mechanical treatment (including timber harvest) can be used to strike a balance between these trends in forest conditions. The Assessment noted that "...current management policies provide latitude for improving goshawk habitat if applied within reasonable ecological constraints. For example, partial cutting systems are used to maintain or improve stand characteristics for goshawks and their prey, with overall positive effect on goshawk habitat. In addition, timber harvesting has the potential to convert cover types to earlier seral vegetative communities, which is generally good for goshawks. Thus current management policies provide for a wide range of implementation options, with a correspondingly wide range of possible effects on goshawk habitat. The critical decisions are those being made on individual project level analyses, because this is where managers can use the best available information to insure projects are providing for goshawk habitat needs." Integrating principles of the conservation strategy in both landscape and project planning to promote desired habitat attributes (e.g., large trees and snags) will help ensure that projects are developed in such a way as to maintain existing habitat and restore local deficiencies in habitat quality or quantity.

In addition to providing the appropriate quality and quantity of goshawk habitat, the Assessment noted that it was important to ensure that habitat was well-distributed across the forested landscapes in Utah. The purpose of this recommendation was to ensure connectivity between habitat patches. Connectivity exists if individual goshawks using one patch of high value habitat have a reasonable probability of finding and occupying other nearby patches of similar value. This is important to population viability because it facilitates dispersal and maintains genetic diversity, as well as allowing birds to emigrate from patches of declining value and colonize patches that are improving in value.

In order to address this aspect of the goshawk's habitat needs, it is necessary for each land management entity to identify habitat in adjacent forested lands and take management activities occurring on those adjacent areas into consideration when making decisions that affect goshawks. Based on the Assessment, the Wasatch-Cache's nearest neighbors with measurable amounts of timberland are the Uinta and Ashley National Forests. Of these two, the one with the greatest common boundary with potential habitat is the Ashley. Resource specialists from the Ashley and Wasatch-Cache National Forests work together on a daily basis to share information and coordinate management activities along this boundary. In addition, the Wasatch-Cache has and will continue to coordinate goshawk habitat management with all other National Forests in Utah in order to promote consistent management and track habitat trends at the state scale.

Implementing the intent of the principles and processes in the Strategy to address localized deficiencies in habitat conditions will further ensure that the Wasatch-Cache National Forest does its part to sustain goshawk habitat in the planning area and maintains connectivity with neighboring habitat areas. The Strategy relied heavily on management recommendations contained in the Assessment, describing actions that should be taken by Utah's National Forests and the Bureau of Land Management to restore and maintain goshawk habitat. These agencies will contribute to sustaining short and long term habitat for goshawks which is important to the statewide viability of the species.

IV. Evaluation of Forest Plan adequacy for implementing the Utah Conservation Strategy

The following table lists Utah Conservation Strategy stipulations and compares them to applicable direction in the Forest Plans.

a) Comparison of the Utah Conservation Strategy to Current Forest Plan Goals and Objectives

1998 Conservation Strategy	Wasatch-Cache National Forest Plan
Goal: (Strategy, Page 6) Provide habitat capable of sustaining viable populations of goshawk in the state of Utah.	Goal #16: Maintain or improve the current productivity of wildlife habitat. Maintain or increase capacity of big game winter range. (Measured in acres.) (LRMP, page IV-8) Goal #17: Enhance the status of classified species through habitat management, including through direct habitat improvement, coordination with other resources, and agency cooperation. Maintain sensitive plant species. (LRMP, page IV-8.)
Objective 1: (Strategy, Page 6) Design a proactive approach to habitat management which will result in the long term conservation and management of habitat for goshawk, its prey and other associated species.	Objectives: No objective in the Wasatch-Cache LRMP specifically addresses the goshawk. However, the general goals and intent of the plan for wildlife were developed to sustain and conserve wildlife species, with special emphasis on TES species.
Objective 2: (Strategy, Page 6) Provide consistency in management of goshawk habitat on National Forest System lands in the state of Utah.	Objectives: No objective in the Wasatch-Cache LRMP specifically addresses the goshawk. However, the general goals and intent of the plan for wildlife were developed to sustain and conserve wildlife species, with special emphasis on TES species.

b) Comparison of Utah Conservation Strategy Desired Habitat Conditions with Current Forest Plan Direction

1998 Conservation Strategy	Wasatch-Cache National Forest Plan
1) Diverse forest cover types with strong representation of early seral tree species dominante the landscape. (Strategy, Page 6.)	Under Desired Future Condition for the Forest: The future condition of the forest will be more diverse than the present forest. Accelerated conversion of slow-growing overmature stands will create openings. There will be more age classes in close proximity to each other, but with an interspersion of old-growth stands (LRMP, IV-57).
2) High quality habitat patches that are no more that 60 miles apart, preferably less than 20 miles apart, exist throughout landscapes (connected habitat). (Strategy, Page 6.)	Habitat connectivity was not specifically addressed in the Wasatch-Cache Forest Plan; however, the more general desired future conditions and habitat conservation direction would allow for its consideration and achievement.
3) Forested landscapes have 40% of the area dominated by large trees, well distributed. Large trees are defined relative to the average for the cover type and site potential. (Strategy, Page 6.	Under Old-Growth Management - Standards and Guidelines: (S) Ten percent of the forested acreage will be designated as old-growth habitat. This acreage will be distributed proportionally by elevation and vegetative types within each Road Management Unit on the Forest (LRMP, page IV-34). (G) Managed old-growth habitats will develop structural features for future cavity and perch-tree needs, such as broken-topped trees. (LRMP, page IV-34)

4) Habitats for prey and other associated species are present to meet needs as described by Reynolds et al. 1992 and Graham et al. 1998, in press (i.e., snags, down woody, cover, etc.). (Strategy, Page 6)	Under Desired Future Condition for the Forest: Habitat will be improved for sensitive species, especially aquatic species (LRMP, page IV-56). Non-game habitat improvement and non-consumptive wildlife uses will be emphasized in some management areas (LRMP, page IV-57).
5) A variety of structural stages as recommended by Reynolds et al. 1992 are present. (Strategy, Page 6.)	Under Desired Future Condition for the Forest: The future condition of the forest will be more diverse than the present forest. Accelerated conversion of slow-growing over mature stands will create openings. There will be more age classes in close proximity to each other, but with an interspersion of old-growth stands (LRMP, IV-57).

c) Comparison of the Utah Conservation Strategy Project Stipulations with Current Forest Plan Management Direction, Standards and Guidelines.

1998 Conservation Strategy	Wasatch-Cache National Forest Plan
Down logs and tons of woody debris per acre (Strategy, Page 7) ---Ponderosa Pine - at least 3 large downed logs per acre (greater than or equal to 12 inch diameter mid-point, greater than or equal to 8 feet long); 5-7 tons of woody debris per acre. ---Mixed species and spruce-fir - at least 5 large downed logs per acre (greater than or equal to 12 inch diameter mid-point, greater than or equal to 8 feet long), 10-15 tons of woody debris per acre.	Down logs and woody debris per acre The Wasatch-Cache forest plan does not contain standards, guidelines regarding down logs and woody debris except for a definition for old-growth management (which old-growth is to be managed for). This definition reads: 4. Dead woody material which includes 2 standing snags per acre (at the minimum d.b.h. displayed in Item 2) and 2 to 5 tons per acre of down material. (LRMP, page IV-34.) The Goshawk strategy does not propose any stipulations regarding down logs and woody debris that are not achievable under the current Wasatch-Cache Forest Plan

Snags/acre: (Strategy, Page 7)

--Ponderosa pine - at least 2 large snags per acre (greater than or equal to 18 inch dbh, greater than or equal to 30 feet tall) .

---Mixed species and spruce-fir - at least 3 large snags (greater than or equal to 18 inch dbh, greater than or equal to 30 feet tall) .

Snags/acre:

From Snag Management - Standards and Guidelines (LRMP, page IV-34-35)

Snags are standing, dead trees that provide far wildlife habitat for nesting, roosting, perching, courting, denning and foraging activities. Snag management essentially protects snags and their replacements from harvest such that habitat use associated with the snags will be maintained in perpetuity.

Snags should be distributed through all forested communities and age classes, aspects, slopes, and elevations. Management for snags need only be carried out in silviculturally treated and fuelwood harvest areas. In areas exclusively harvested for fuelwood, only snags (not snag replacements) need be marked for protection.

Snag density requirements of birds and mammals are based on territorial requirements of primary excavator species.

(G) The following snag management levels are prescribed on all silviculturally treated areas (saw sales, post and pole sales, and thinnings):

Species	%Potential Max. Population	Snag per Acre
Aspen	70	1.3
Douglas-fir	50	1.0
Lodgepole pine	40	0.7
Spruce/Alpine fir	50	1.0
Riparian	70	1.3

(G) Snags marked in harvest units should be both clumped and dispersed throughout the unit. Selected cull trees should be left standing.

(G) Snag marking to achieve prescribed management levels will be as follows:

Dominant species	% of treated area to be marked
Aspen	20
Douglas-fir	90
Lodgepole	80
Spruce/Alpine fir	90
Riparian	100

(S) Where snags are marked, two to six snags replacements per acre, which range in age Iron 30 to 90 years less than the replaced snag, will be marked to insure the maintenance of prescribed density levels (see above) throughout the rotation of the timber stand.

(G) Snag marking within 200 feet of heavily used roads will be emphasized to prevent snag habitat loss in these areas.

Canopy Cover (Strategy, Page 7)	Canopy Cover
Canopy Cover Nest and / mid-age / mature / old All forest types: NA / 50-70% / 50-70% Home Range Ponderosa Pine: 40-60% / 40-50+% / 40-50+% Mixed species: 40-60+% / 50-60+% / 60+% Spruce-fir: 40-60+% / 60-70+% / 60-70+%	Canopy Cover The Wasatch-Cache forest plan does not contain any specific standards, guidelines, or other direction regarding canopy cover. The Goshawk strategy does not propose any stipulations regarding canopy cover that are not achievable under the current Wasatch-Cache forest plan.
Stand structure and Large trees (Strategy, Page 8) Nest Areas g/f/s / seed/sap / young / mid / mature / old Ponderosa Pine: 0% / 0% / 0% / 0% / 100% / 100% Mixed Conifer: 0% / 0% / 0% / 0% / 100% / 100% Spruce-fir: 0% / 0% / 0% / 0% / 100% / 100% Aspen: None stated Home Range g/f/s / seed/sap / young / mid / mature / old Ponderosa Pine: 10% / 10% / 20% / 20% / 20% / 20% Mixed Conifer: 10% / 10% / 20% / 20% / 20% / 20% Spruce-fir: 10% / 10% / 20% / 20% / 20% / 20% Aspen: none stated	Stand structure and Large trees: The Wasatch-Cache forest plan does not contain and specific standards, guidelines or other comparable direction regarding stand structure and large trees. The Goshawk strategy does not propose any stipulations regarding stand structure and large trees that are not achievable under the current Wasatch-Cache forest plan.
Years to mid-age old forest (VSS 6) (Strategy, Page 8) *Age to mid-age VSS 6 for PP, MS, and S/F is 200+ years.	Years to mid-age old forest Under Old-Growth Management - Standards and Guidelines (S) Ten percent of the forested acreage will be designated as old-growth habitat. This acreage will be distributed proportionally by elevation and vegetative type within each Road Management Unit on the Forest (LRMP, page IV-34).

d) Comparison of Utah Conservation Strategy requirements with Current Forest Plan Management Areas and Prescriptions

There is nothing in the Utah Conservation Strategy which directs the establishment of specific management areas or specific management prescriptions. All requirements in the Utah Conservation Strategy could be covered by forestwide direction, standards and guidelines.

e) Comparison of Utah Conservation Strategy requirements with Current Forest Plan determination of lands not suited for timber production.

1998 Conservation Strategy	Wasatch-Cache National Forest Plan
Nothing stated in the strategy would affect this decision point. The strategy does not preclude the use of mechanical treatments to manipulate vegetation to meet resource objectives.	Derived from Table II-24 --Lands capable, available, and tentatively suitable for timber production, Wasatch-Cache National Forest (LRMP, page II-44) Categories — Acres (thousands) Total Acres WCNF — 1,219.7 Available and tentatively suitable — 412.6 Not available and not suited — 807.1

f) Comparison of Utah Conservation Strategy Monitoring and Evaluation Requirements with Current Forest Plan Requirements

Strategy

Wasatch-Cache National Forest Plan (pages V-5 and V-6; 1995 Rangeland Health Forest Plan Amendment)

ACTIVITIES, EFFECTS AND RESOURCES TO BE MEASURED	MONITOR-ING METHOD	PRECISION/ RELIABILITY-Low,Medium, High	MEASURE-MENT FRE-QUENCY	REPORTING PERIOD	VARIATION WHICH WOULD CAUSE FURTHER EVALUATION AND/OR CHANGE IN MANAGEMENT DIRECTION
Manage-ment Indica-tors	For each species on MIS list minimum viable population and maximum potential acreages is compared to existing acreage of identified vegetation association				
Gray jay	M	Trian-nual	5 years	20% change	
Red-breated nuthatch	M	Trian-nual	5 years	20% Change	
Hairy wood-pecker	M	Trian-nual	5 Years	20% Change	
Pine siskin	M	Trian-nual	5 Years	20% Change	
Yellow-bellied sapsucker	M‘	Trian-nual	5 Years	20% Change	

Black-throated warbler		M	Trian-nual	5 Years	20% Change
From UDWR listing					
Northern flying squirrel		M	Biannual	5 Years	20% Change
Snag manage-ment	Pre and post count and condition survey	H	Annual	5 Years	15% variation in application
Compli-ance with Fuel Loading Stan-dards	Field measure-ments after activity or fuel treatment	M	Sample 30% of projects	5 Years	Exceeding fuel level guidelines by 10% of failure to make targets
Habitat Diversity	Baxter-Wolfe Index (Map Survey)	L	Not stated	5 Years	10% Change
Veg./Ra-nge Measure-ment*					
Utiliza-tion stan-dards	% Utiliza-tion, Key species utilization, Stubble height	L to H depend-ing on method	Annual	Annual	Not moving toward DFC within 5-10 years of implementation of the standard (1995)
Long-term trend	R4 Riparian, Nested frequency, Greenline vegeta-tion, Stream-bank length/sh-ape	M to H depend-ing on method	5-Year	5 or 10 years depend-ing on method	Discernible decrease in ecological status or trend, or lack of improvement in ground cover, erosion, or other unsatisfactory conditions

*See detailed monitoring plan in Rangeland Health Final EIS, ROD, and Forest Plan Amendment (1995)

g) Comparison of Utah Conservation Strategy recommended management activities/actions that should be implemented to maintain or improve habitat for goshawk with Current Forest Plan Direction

1998 Conservation Strategy	Wasatch-Cache National Forest Plan
There are a variety of management activities that could be employed to achieve DHC. These activities should be coordinated at site specific level by local land managers. However, there is a guideline that almost always applies: -Protect active nests and their post-fledgling area (PFA) from disturbance during critical phases on reproduction. The recommended seasonal restriction from the Reynolds et al. 1992 is March 1 through September 30. Seasonal restrictions may vary from this recommendation when site specific information justifies it. (Strategy, Page 8)	The current Wasatch-Cache forest plan has no Standards or guidelines that specifically address active nests, PFAs or disturbance during critical reproductive periods. However, implementation of standards or guidelines (such as the one in the adjacent column) proposed in the 1998 Utah Conservation Strategy is possible under the plan, and not precluded by any part of it.

V. Summary and Conclusions

Implementation of the Utah Conservation Strategy provides reasonable assurance that each National Forest will contribute to the maintenance of high value, connected goshawk habitat throughout the State of Utah sufficient to promote species viability. The question evaluated by this SIR is the need to amend the existing forest plans in order to implement the Utah Conservation Strategy across the planning area. Section IV of this report compares the recommendations of the Strategy with the six decisions of the forest plans.

The following conclusions are reached as a result of the comparisons:

1. Do forest-wide goals and objectives in the current plan embody the spirit and intent of the goals and objectives found in the Utah Conservation Strategy, and to what extent do they compliment or conflict with each other in achieving sustainable goshawk habitat?

A comparison of the goals and objectives in both documents shows a strong intent to maintain sufficient habitat to insure viability of the northern goshawk. Because the goshawk is a classified (Region 4 sensitive) species the current forest plan requires habitat to be maintained. This is also the specific intent of the Utah Conservation Strategy, demonstrating alignment between the two documents.

There is no need for additional goals and objectives in the current forest plan to insure that the Ashley National Forest contributes to the maintenance of high value, connected goshawk habitat throughout the State of Utah. However, during forest plan revision efforts, terminology will be updated and clarity in goal and objective statements concerning goshawk and sensitive species will be improved. Forest plan revision is projected to be completed in 2001 or earlier.

2. To what extent do the forest-wide standards in the current forest plan encourage, prohibit or have a neutral effect on implementation of the Utah Conservation Strategy?

and

3. To what extent do the forest-wide guidelines in the current forest plan encourage, prohibit or have a neutral effect on implementation of the Utah Conservation Strategy?

The current Standards and Guidelines (S+Gs) clearly show intent to maintain or enhance habitat conditions and population status for the goshawk. Nothing in the current S+Gs would prohibit implementation of the Strategy's desired habitat conditions (i.e., consistent). However, they are stated in much more general terms and often allow a broader range of habitat conditions than are recommended in the Strategy. Specific cases in which the Strategy is more restrictive than the LRMP are as follows:

1. Both documents emphasize the importance of vegetative diversity (LRMP IV-54). Only the Strategy identifies early seral vegetative communities as a key source of that diversity.

2. The Strategy identifies connectivity as an important habitat characteristic and provides a way of estimating it. The LRMP provides maintenance of habitats, but does not specifically mention connectivity.

3. The Strategy recommends keeping large trees on 40% of forested landscapes, mature and old forests. The LRMP addresses mature and old forest conditions only in terms of old growth (LRMP IV-33 to 34). Ten percent of the forested acreage will be designated as old growth habitat, distributed proportionally by vegetative type and elevation. It also includes guidance for management of areas to achieve old growth in the future.

4. The Strategy defines desired percentages of various vegetative structural stages, based on forest type. The LRMP states that "future condition of the forest will be more diverse than the present forest (LRMP IV-57), but does not identify specific desired percentages for each structural stage within a forest type.

5. The Strategy defines desired tons and size classes for down woody debris by forest type. By management area the LRMP (i.e., North Slope Management Area, page IV-84) provides a minimum tonnage figure, common to all forest types, which is lower than any figure in the Strategy. The LRMP does not specify desired lengths or diameters for woody debris.

6. The Strategy gives desired numbers of snags per acre and average snag diameters by forest type. The LRMP also gives desired numbers of snags per forest type, but does not specify desired average diameters. The LRMP provides guidelines for snags in Douglas fir, but not specifically mixed conifer.

7. The Strategy defines desired levels of canopy closure by forest type. The LRMP discusses canopy cover only under old growth definitions (LRMP IV-34). To meet old growth the LRMP (page IV 34) states that a stand should have "A combined understory and overstory which provides a minimum 70 percent tree canopy". However, the Strategy calls for 40% or more in all forest types in structure classes VSS 4,5 and 6.

8. The Strategy estimates that it will take 200+ years to achieve many of the desired forest characteristics. The LRMP based its timber management models on rotation lengths of 40 years for aspen, and 115 to 125 years for most conifers. No desired age was identified for forest lands not being considered for harvest. (Note: Ages provided in the Strategy are estimates of the time needed to develop certain stand structures and characteristics. These characteristics are the desired habitat conditions; age is only an indicator. Actual

time required to develop desired forest characteristics will depend site quality, growing conditions, competition, disease, insect activity, and fire events).

Therefore, although current standards and guidelines do not prohibit implementation of the Strategy's recommendations, there are many areas where the LRMP either does not provide specific direction regarding desired habitat conditions or allows a broader range of habitat conditions than the Strategy does.

4. To what extent do current forest plan management areas and prescriptions permit or prohibit implementation of the Utah Conservation Strategy?

There is nothing in the Utah Conservation Strategy which directs the establishment of specific management areas or specific management prescriptions. Management of habitat for sensitive species, such as the goshawk, is provided through current forest plan direction which applies to all management areas, and is an inherent part of their associated prescriptions. This current forest-wide direction states that "Habitat will be improved for sensitive species ..."; and within some management area direction emphasis on sensitive species is provided, "Provide habitat for sensitive species." (e.g., LRMP IV-85). Management of habitat to maintain viable populations is founded in federal regulation (CFR 219.19). Therefore, this requirement must be accomplished and would supercede other forest-wide or management area standards and guidelines which may prescribe a conflicting requirement. What this means is that the current forest plan prescribes the management of habitat for the goshawk sufficient to maintain viable populations, other direction or standards not withstanding. Meeting this requirement under the current plan is assured through the project NEPA decision and associated Biological Evaluations.

5. Would implementation of the Utah Conservation Strategy affect the decision made in the Forest Plan for lands not suited for timber production?

The requirement to identify and make decisions for lands not suited for timber production is found in CFR 219.14 (Timber resource land suitability). This requirement has been addressed in the Wasatch-Cache National Forest Plan (LRMP, page II-44).

To assess if the Utah Conservation Strategy would affect the decision made in the forest plan for lands not suited for timber production, the four factors which affect suitability found at CFR 219.14 were assessed:

Factors which affect suitability include:

1. The land is not forest land as defined by the CFR.
The Strategy does not change forest land to non-forest land.

2. Technology is not available to assure timber production without irreversible resource damage.
The Strategy does not require actions that cause irreversible resource damage.

3. There is not reasonable assurance that such lands can be adequately restocked.
The Strategy does not require actions that affect the ability to restock lands.

4. The land has withdrawn from timber production by act an Act of Congress, the Secretary of Agriculture or the Chief of the Forest Service.
The Strategy does not withdraw lands from timber production.

Implementation of the Utah Conservation Strategy would not change the decision concerning lands classified as not suited for timber production in the Ashley LRMP.

6. Are current forest plan monitoring and evaluation requirements sufficient if the Utah Conservation Strategy is implemented?

The Strategy identifies the need to monitor and evaluate habitat, as well as population trends. It prescribes general methodology to accomplish the monitoring and actions if deficiencies are found. The Wasatch-Cache LRMP also identifies required monitoring and evaluation procedures for elements which affect goshawk habitat and numbers (particularly snag management). To address population trends, the LRMP has a monitoring requirement to do a plot census for all sensitive bird species. The LRMP also requires monitoring habitat decline (Baxter-Wolfe, as a percentage) which would trigger further evaluations, or the need to change management direction.

While both the Strategy and the LRMP require monitoring, the Strategy specifies that population trends and viability determinations will be made at the State rather than the Forest level. It reinforces the importance of population surveys at the forest level so that each Forest's contribution to maintaining state wide habitat can be identified. This is not contrary to the existing monitoring requirements in the LRMP, which use both habitat and population monitoring as indicators of population viability, but is more specific about what should be measured and how often the data should be evaluated.

The Strategy outlines management response to suspected population declines at the landscape, multiple landscape and forest level. The LRMP states that we will evaluate when a habitat decline is observed, but it is does not describe management response to habitat declines at different landscape levels. The LRMP requires that sensitive species populations will be monitored annually, and reported every 5 years. Population trends will be monitored and management will respond with further evaluation and/or change in management direction if more than a 10% change is detected (LRMP V-5). The Strategy requires annual monitoring with further evaluation and change in management direction if a trend of a continuous 20% decline is detected over 3 years. While not entirely equal, the Forest Plan's intent is similar, if not somewhat more stringent in its thresholds for management action.

VI. Determination of need to amend current Forest Plan

Based on the above comparisons, summaries and conclusions I have determined that implementation of the Conservation Strategy and Agreement for the Management of Northern Goshawk Habitat in Utah is consistent with the six decisions made in the existing Wasatch-Cache LRMP, and with the goals and objectives of the LRMP. However, the Strategy provides additional operational sideboards and monitoring requirements not found in the LRMP. This information is best incorporated in the LRMP at the standard and guideline level; goals and objectives concerning elements of this strategy should be clarified in revision, or now if the opportunity presents itself. A Forest Plan amendment should be completed to address differences between the Strategy and LRMP which are identified under Questions 2, 3 and 6 (above).

Significance of proposed forest plan amendments

1) Timing
Implementation of the Strategy at the project level is consistent with current LRMP direction for reasons previously described. However, Strategy recommendations change some operational sideboards and monitoring requirements. The LRMP should be amended as soon as it is practical from a personnel and budget perspective.

2) Location and Scale
The proposed amendment would affect all forested acres within the planning area. This scale of affected area (planning area) considered over an entire planning horizon (50+ years) suggests a significant effect. However, the type of assessment needed to determine these effects is best handled during forest plan revision (projected to be completed in 2001, or earlier). In the interim, an amendment which incorporates additional operational sideboards found in the Strategy will ensure that the 36 CFR S 219.19 requirement to maintain viable populations of all native and desired non-native vertebrate species is met.

3) Goals, Objectives and Outputs
Based on discussion above there is no need to change Plan's goals and objectives immediately. Updating terminology and clarifying of existing goals and objectives will occur during forest plan revision.

Of the outputs and services provided for under the current forest plan, the only one that was identified as a potential concern prior to forest plan revision was forest ASQ. There is no indication that other outputs and services provided for under the current plan (i.e., recreation, range forage, other wildlife habitat, etc.) would be noticeably affected by the proposed interim amendment prior to forest plan revision. Also, ASQ is a ceiling, not a requirement, in the Forest Plan.

A variety of harvest strategies designed to maintain a mature forest structure can provide wood products to the public without conflicting with the Strategy. This may mean that outputs projected in the LRMP will be generated through a different silvicultural prescription than originally envisioned, in order to retain the desired mix of forest structures and tree species, but it does not mean that the quantity of outputs will necessarily be reduced.

We believe the proposed interim amendment would not result in a measurable change in outputs and services over the remainder of this planning period. Effects to outputs over the longer planning horizon (50+ years) are most appropriately evaluated, and adjustments made, during the revision process, when all resource factors are considered concurrently. Revision of the LRMP is projected to be completed in 2001, or earlier.

4) Management Prescriptions
There is nothing in the Utah Conservation Strategy that directs establishment of specific management areas or specific management prescriptions. Management of habitat for MIS such as the goshawk is provided through forestwide direction that applies to all management areas; it is an inherent part of their associated prescriptions.

CONCLUSION

An interim amendment to the current Wasatch-Cache National Forest Land and Resource Management Plan will be completed to address the change in operational sideboards identified in this SIR, and reflect the desire to have a greater percentage of the planning area in a mature and old forest structure. Based on the finding that this interim amendment would not have a significant effect on the Forest Plan outputs and services prior to forest plan revision and that use of the Strategy at the project level is consistent with current Forest Plan goals and objectives, use of the strategy at the project level should continue during the amendment process. The interim amendment process is projected to be completed during the summer of 1999. This amendment will be incorporated into current forest plan direction, as well as into direction in the revised forest plan projected to be completed by 2001, or earlier.

This assessment will be aggregated with the assessments of the other five National Forests in Utah, and delivered to the Regional Forester. The Regional Forester will review the findings of each Forest

assessment to determine what immediate interim amendments to the Regional Guide and/or forest plans are warranted. Because the Strategy may affect current direction in all Forest plans in Utah, the process for completing interim amendments will be handled at the Regional level instead of by each individual Forest. The interim amendments will preserve options for the future that will be considered during the Forest Plan revision process conducted by all Forests in Utah over the next 2 to 4 years.

/S/ Bernie Weingardt DATE: 11/9/98

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