STATE OF THE FOREST REPORT

for the

Uinta National Forest

September 1999

LETTER FROM THE FOREST SUPERVISOR

Dear Uinta National Forest Stakeholder:

The Uinta National Forest has begun the process of revising the *Uinta National Forest Land and Resource Management Plan* (also referred to as the Forest Plan). As part of implementing our current Forest Plan and in preparation for revision of the Forest Plan, we have monitored and evaluated implementation of the existing Forest Plan. This information was documented in the *Preliminary Analysis of the Management Situation* (AMS), which was prepared as part of the revision process. This *State of the Forest Report* summarizes key information from the AMS, and more specifically, describes conditions on the Forest today versus conditions anticipated in the current Forest Plan, and summarizes the proposed changes to be addressed in the Forest Plan revision. This report is fairly brief and to the point. More detailed information is contained in the AMS which is available from any Uinta National Forest office.

The primary purpose of this report is to describe the condition of the Uinta National Forest. State of the Forest reports usually evaluate the need to amend or revise forest plans; however, the decision to revise the Uinta Forest Plan has already been made and the revision effort has already been initiated. This report is intended to meet the requirements for annual forest plan monitoring.

We hope that you will continue to be involved and participate with us as we implement our existing plan, and as we begin the work to make the needed changes in our Forest Plan. If you have any questions regarding this report, please contact Marlene DePietro, Planning Team Leader, at (801) 342-5100, or via e-mail at <**fplan/r4_uinta@fs.fed.us**>.

Sincerely,

/s/ Peter W. Karp

PETER W. KARP
Forest Supervisor

The Forest Service, U.S. Department of Agriculture, is committed to the policy that all persons shall have access to its programs, facilities, and employment without regard to race, religion, color, sex, age, handicap, or national origin.

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INTRODUCTION

The Uinta National Forest provides a diversity of resources and opportunities for an equally diverse public. The Forest lies within five Utah counties (Juab, Sanpete, Tooele, Utah, and Wasatch) with a collective population of approximately 426,000. Counties which lie adjacent to the Forest include Carbon, Duchesne, Salt Lake, and Summit, with a collective population of nearly 936,700. Established in 1897, the Forest ranges from the high western desert of Vernon, to the lofty mountain peaks of Mount Nebo (elevation 11,877 feet) and Mount Timpanogos (elevation 11,750 feet). The Uinta National Forest contains three wilderness areas totalling about 58,400 acres: Mount Timpanogos, Mount Nebo and Lone Peak (shared with the Wasatch-Cache National Forest). The Forest is a major supplier of recreation in Utah due to its close proximity to the main population center. The Uinta ranks sixth of all national forests in recreation use. The high level of human activity across the Forest has had many impacts, from the development of transbasin water diversion facilities and their operation, to winter sport recreation activities.

Throughout Forest Service history, managers have sought to sustain resource-based commodity production and meet demand for a broad mix of natural resource goods, services, and values. Changes in the way Americans value their public lands require a reevaluation of the Forest Service stewardship mission. This mission remains simple and succinct, *"Caring for the Land and Serving People."* Based on law and the principles of stewardship, our challenge is to achieve quality land management under the sustainable multiple-use concept to meet the diverse needs of people, now and in the future.

The Uinta National Forest Land and Resource Management Plan (Forest Plan)

The Forest Plan establishes general management direction for lands administered by the Uinta National Forest. The following decisions are made in all forest plans:

1. Forest-wide goals and objectives
2. Forest-wide standards and guidelines
3. Management area delineations and associated prescriptions
4. Identification of lands not suited for timber production
5. Monitoring and evaluation requirements
6. Recommendations for official designation of wilderness

The National Forest Management Act (NFMA) requires each national forest to develop a forest plan and revise it when conditions have significantly changed, or at least every 15 years. The Uinta National Forest completed its Forest Plan in 1984, with seven amendments and two corrections having been made over the last 15 years. Two additional efforts to amend the Forest Plan are currently underway, the Utah Northern Goshawk and Utah Wildland Fire Amendments. In 1998 Congress prohibited expenditure of funds on formal forest plan revision. In 1999 prohibitions were lifted for 14 national forests, including the Uinta National Forest. These actions have resulted in a short time frame for our revision effort.

Preliminary Analysis of the Management Situation (AMS)

This State of the Forest Report was prepared from information in the Preliminary Analysis of the Management Situation (AMS). Forest planning regulations require that an AMS be prepared when initiating forest planning. The AMS for the Uinta National Forest was developed through a comprehensive review of the 1984 Forest Plan and identification of changed conditions and new information, including new public issues and changed public attitudes. The AMS summarizes the current biological, physical, and social and economic conditions affecting the Forest, and identifies areas where current management direction in the Forest Plan needs to be changed.

The AMS will be used to more effectively involve the public in the initial revision process. The AMS will also help the Forest Service and the public reach a common understanding of what will and will not be addressed in the Forest Plan revision effort by providing the background information we used to determine the revision topics. The public will be able to use the information contained in the AMS to provide detailed comments for alternative development.

National Forests in Utah

Original data was compiled from multiple source data and may not meet the U.S. National Mapping Accuracy Standard of the Office of Management and Budget. For specific data source dates and/or additional digital information contact the Forest Supervisor, Uinta National Forest, Provo, Utah. This map has no warranties to its contents or accuracy.

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Uinta National Forest

Other National Forests

Major Highways

STATE OF THE FOREST

Physical Situation

1984 Uinta National Forest Plan and Its Implementation

The Uinta Forest Plan was one of the first forest plans completed in the nation. The Forest Plan has been amended seven times and corrected twice:

- Strawberry Valley Management Area Amendment, 1990: Added management direction for the newly acquired Strawberry Project lands.
- Predator Control Amendment, 1991: Approved a coordinated predator control program and provided direction on appropriate control methods, areas, and approval procedures.
- Rangeland Ecosystem Amendment, 1992: Defined desired future conditions and associated standards and guidelines and monitoring requirements for rangelands.
- Forest Plan Implementation/Monitoring and Evaluation Program Amendment, 1993: Redefined monitoring and evaluation requirements in the Forest Plan.
- Pleasant Grove Management Area Special Use Provision Amendment, 1994: Eliminated provisions for a Special Use Permit for the proposed Seven Peaks Resort.
- Western Uinta Basin Oil and Gas Leasing Amendment, 1997: Provided new direction for applying lease stipulations for portions of the Heber and Spanish Fork Management Areas.
- Sage Creek Visual Quality Objective Amendment, 1994: Site-specific amendment changed the visual quality objective in the Sage Creek area from retention to partial retention.
- Correction No. 1, 1995: Simplified and clarified management direction for Mount Timpanogos and Mount Nebo Wilderness Areas. Management direction was not changed.
- Correction No. 2, 1996: Corrected an editorial oversight in Correction No. 1.

The Plan identified six management areas, and was amended in 1995 to add Strawberry Valley as a seventh management area. In 1995 the Forest Plan was corrected to add the Mount Nebo and Mount Timpanogos Wildernesses to the Wilderness Management Area. The management areas range in size from 56,775 to 290,925 acres. All are geographically contiguous except the Wilderness Management Area, which includes three separate wildernesses. Each management area has its own description, desired future condition, management direction, standards and guidelines, and proposed and probable management practices and activities.

Management prescription categories are commonly used to provide a basis for displaying management intent. The 1984 Forest Plan did not employ these categories, often resulting in unclear management intent.

The Forest Plan contains approximately 40 goals and 340 objectives. Many of these reiterate law or policy, or pertain to administrative procedures rather than to land and resource management.

The standards and guidelines in the Forest Plan are numbered, which has proven useful whenever they are referenced. The Forest Plan does not differentiate between standards, which must be followed, and guidelines, which describe management intent. Like the goals and objectives, many standards and guidelines reiterate law or policy, or pertain to administrative procedures.

Implementation of the Forest Plan has not been highly controversial, though some appeals have been received. Of the 18 appeals of project or permit decisions received since 1984, twelve pertained to recreation, three to mineral, two to range, and one to lands management.

The 1984 Forest Plan contains an estimated budget (updated in 1992). The budget the Forest has received has ranged from 24 percent (1988) to 66 percent (1990) of the budget identified in the Forest Plan. Not only has implementation of the Forest Plan not been fully funded, but the cost of doing business has often been higher than anticipated. Some resource areas have been funded more fully than others, resulting in inconsistent implementation.

Monitoring and Evaluation

Chapter IV in the Forest Plan lists the Forest Plan monitoring and evaluation requirements. In 1992, the Rangeland Ecosystem Forest Plan Amendment added two requirements for long-term rangeland monitoring.

In March 1993 the Forest issued a Forest Plan monitoring report for the years 1984-91 that noted many monitoring requirements in the Forest Plan had not been fulfilled. Many of the methodologies, measurements, and time scales were found to be inappropriate for the resource being monitored, and the monitoring requirements generally measured outputs rather than effectiveness. The report recommended that the monitoring program be revised, and in October 1993 a Forest Plan Monitoring Amendment was approved to replace Chapter IV of the Forest Plan. The 1993 amendment did retain some of the monitoring requirements from both the Forest Plan and the 1992 Rangeland Ecosystem Amendment. All monitoring requirements were designed to meet all legal requirements.

Monitoring reports using the amended requirements were also completed in December 1993 and 1994. The 1994 monitoring report identified redundancies in the amended monitoring requirements, and recommended these be removed. Most redundancies occurred when different program areas monitored the same things (e.g., both range and wildlife resource areas called for the monitoring of riparian conditions). Additional monitoring reports have been considered since the 1994 report, but have not been completed due to budget limitations.

Soil Productivity

The Uinta National Forest includes lands of the Basin and Range Province, Wasatch Range, Uintah Basin, Uinta Mountains, and the transition valleys that lie between the Wasatch Range, Uinta Mountains, and the Colorado Plateau. The geology is highly vaired and is dominated by sedimentary sandstone, siltstone, shale, and limestone rock types. The Wasatch Front is steep and rugged, with local relief exceeding 7,000 feet along the Wasatch Fault. Away from the Front, the topography is less severe but still mountainous.

Soils on the Forest vary greatly. Eastern areas of the Forest are dominated by shales and sandstones of the Uinta, Green River, and Wasatch Formations of Eocene age. Clay and silt loams are the main soil types present.

Since 1984, Forest Plan direction on the rehabilitation of deteriorated or fire-impacted soils has been effectivly implemented under the Burned Area Rehabilitation Program. Due to a lack of funding and staffing, soils support has not always been available for all activities that might impact soil productivity. Soil productivity is the inherent capacity of a soil to support the growth of specified plants, plant communities, or a sequence of plant communities. Management activities implemented under the Forest Plan which have had an effect on soil productivity include:

- Road, trail, and landing construction,
- Vegetation manipulation such as prescribed fire, timber harvest, and range improvements,
- Dispersed recreation activities such as off-road vehicle use and camping, particularly in riparian areas,
- Livestock concentration areas such as troughs, bedding grounds, and driveways, and
- Catastrophic wildfires and the exclusion of fire, particularly in areas of decadent sagebrush and juniper.

Analysis of the Forest Plan objectives for soil surveys indicate the follow accomplishments and deficiencies:

- Surveys have been completed to the intensity needed for the Forest Plan on nearly 80 percent of the Forest.
- Detailed mapping of wetlands and riparian areas needed to support project level analysis exists for about 5 percent of the forest land base.
- Geologic hazards mapping exists for the entire Forest at a very broad scale, and for some of the Forest at a detailed, site-specific scale.
- The old age and lack of documentation of all existing surveys make it impossible for the Forest to fully cooperate in the National Cooperative Soil Survey program.
- Soil erosion tolerance levels by soil type have not been established.
- Areas of the Forest not covered by landtype inventories have not been determined.
- Benchmark soil types and characteristics have not been established.

Watershed and Water Quality

In 1984 the Forest reported 220 miles of fishable streams and 284 surface acres of lakes and reservoirs. The Forest currently contains 1,429 miles of perennial streams, 4,273 miles of intermittent streams, and 17,772 acres of lakes and reservoirs. The increase is due mostly to land transfers (i.e.,17,160 acre Strawberry Reservoir was transferred to the Forest in 1988) and more accurate data. The surface waters can be divided into two geographic regions: (1) those which flow into the Lower Green and Colorado Rivers, and (2) those which flow into the Great Salt Lake.

Water quality is assessed in terms of designated beneficial uses as defined by the Sate of Utah Division of Water Quality (UDWQ). The majority of streams and reservoirs on the Forest provide

water for domestic and agricultural uses, cold water fisheries, recreation, and wildlife. Maintaining the quality of these waters is becoming increasingly important as the demand for water increases along with the rapidly growing urban population.

In the past, most communities along the Wasatch Front in Utah County used water sources on the Forest for part of their domestic water supply. At present, 11 watersheds on the Forest provide some water for domestic or municipal use and are considered municipal watersheds. In recent years, most of the municipal systems have added groundwater well sources and abandoned some spring sources. At present, roughly 80 percent of the domestic water supply for cities within Utah County comes from off-forest groundwater wells. While this may lessen the potential impacts that land use on the Forest may have on domestic water supplies, forest activities still have the potential to affect the quantity and quality of domestic water supplies.

Portions of the Central Utah Project (CUP) are located on the Uinta National Forest. The CUP includes of a network of structures that annually transfer about 260,000 acre-feet of water from the Duchesne River Basin to the Wasatch Front. This project has resulted in increased concern for maintaining minimum instream flows and channel stability in drainages on the Forest.

The Forest Plan placed a strong emphasis on watershed restoration, due largely to the widespread impacts of the 1983-84 floods. In the 10-year period following 1984, over 9,348 acres of watershed improvements were completed on the Forest. The majority of the watershed improvement projects identified in the Forest Plan were completed by 1992. Some of the listed projects still have not been completed due to changes in priorities, budget constraints, or both.

Surface Water Quality: Surface water quality on the Forest is monitored through a network of 19 baseline water quality stations. In addition to these sites, there are 13 water quality sites in Strawberry Valley and 9 along the route of Utah Highway 35.

Baseline sites have been sampled on a 5-year rotation since 1975. In general, waters on the Forest are rated as “high quality waters” by UDWQ. Five streams on the Forest are currently listed as only partially meeting their designated beneficial use as a cold water fisheries due to high phosphorus loads. Generally associated with high sediment loads, phosphorus is currently classified with the UDWQ as a pollution indicator and not a pollutant. Some of the geologic formations these streams traverse have high natural sources of phosphorus. Grazing, CUP, and recreation activities in these drainages may be enhancing the sediment and thus the phosphorus levels.

Collection and analysis of macro-invertebrate and water chemistry data is used for water quality monitoring. Macro-invertebrate data collected through 1994 indicated overall “stable” aquatic habitat conditions for 1978-93. An exception to this exists in Strawberry Valley, where in 1990 Strawberry Reservoir and its tributaries were treated to eliminate undesirable fish species. Through 1993, 10 to 27 percent of the aquatic invertebrate taxa present before treatment were still missing. Through 1996, each Strawberry sampling station was still missing at least some taxa.

Riparian Areas, Floodplains, and Wetlands: Riparian monitoring has been conducted primarily through use of transects. Normally, only vegetative conditions are monitored with no data collection on channel conditions. There are about 75 such transects on the Forest, and measurements are taken at least once every five years. Monitoring suggests that in most cases standards are being met and the areas are meeting or progressing toward the desired condition.

Public Health: Water quality at public facilities on the Forest is monitored monthly during the season of use. The primary tests are for water-borne bacteria and nitrate. Infrequently, contaminated sources have been identified. When this has occurred, all necessary measures have been taken to correct the problem and ensure that water quality is maintained.

Clean Water Action Plan – Unified Watershed Assessment

In 1997 the Inland West Water Working Group identified a strategy for providing stewardship of watersheds and aquatic resources into the 21st Century. One part of this strategy was to complete a watershed assessment to identify priorities for watershed restoration and protection. The assessment has been initiated, and in April 1999, a map identifying the watersheds in need of restoration in the state of Utah was released. Of the eight assessed watersheds encompassing the Forest, two were identified as priority watersheds: the Spanish Fork River and the Provo River watersheds.

Aquatics

Fishing is the most popular fish/wildlife related recreational pursuit on the Forest, providing an average of 5.3 percent of the total Recreational Visitor Days (RVDs) during 1995. Fishing on Strawberry Reservoir alone equates to 125,000 RVDs. The popularity of sport fishing is increasing at a faster rate than any other consumptive/non-consumptive use on the Forest.

Most perennial streams, lakes, and reservoirs support fish, and some intermittent streams may support early life stages of fish. Amphibians are found in many bodies of water, although minimal inventory has been conducted. The two largest bodies of water on the Forest are Strawberry and Currant Creek Reservoirs.

In 1988 the heavily-fished 17,160 acre Strawberry Reservoir was transferred to the Forest from the Bureau of Reclamation. In 1990 the reservoir and its tributaries were treated to remove non-game fish, then restocked with kokanee salmon and rainbow and cutthroat trout. The Bonneville and Colorado cutthroat trout and spotted frog were petitioned for listing under the Endangered Species Act (ESA), affecting management of habitats where they exist. Genetic testing to the determine the purity of resident cutthroat trout is ongoing under an agreement with the State of Utah. Results of this testing may impact how some aquatic habitats are managed.

Overall habitat diversity has been maintained under Forest Plan direction, although more needs to be done to attain and maintain desired diversity in plant communities. Fewer than half the acres scheduled for treatment in the Forest Plan have been treated. In contrast, because of funding provided by CUP, more structures (mostly for fish) have been developed than were scheduled in the Forest Plan.

The Forest has coordinated with the Utah Department of Wildlife Resources (UDWR), U.S. Fish and Wildlife Service, and other fish and wildlife management organizations on management of the aquatic resource. Close working relationships have been developed with many local and national groups. Through the "challenge cost-share" program, many groups have been involved in projects and activities on the Forest including fishing derbies and fisheries improvement projects.

Air Quality

The Clean Air Act of 1955, as amended, designated certain lands as Class I Areas to receive the most stringent degree of protection. Lone Peak, Mount Nebo, and Mount Timpanogos Wilderness Areas were all established after the passage of the Clean Air Act and are therefore managed as Class II Areas, as is the rest of the Uinta National Forest. Class II Areas receive a moderate degree of protection, and are cleaner than federal air quality standards require.

The Uinta Forest Plan contains one standard for air quality: to determine if air quality in the Lone Peak Wilderness Area meets Class II standards. Air quality criteria for specific pollutants are established by the Environmental Protection Agency (EPA) and regulated locally by the Utah Department of Environmental Quality (DEQ). The national forests within Utah work cooperatively with the Utah DEQ and other agencies in monitoring air quality and meeting air quality objectives. One air quality monitoring station in Timpanogos Cave National Monument is operated under a cooperative agreement between the Uinta National Forest and the National Park Service to monitor air quality in the vicinity of the Lone Peak and Mount Timpanogos Wilderness Areas. Another monitoring station is located nearby at the Snowbird Ski Resort on the Wasatch-Cache National Forest.

Within Utah, a large percentage of air pollutants originate along the Wasatch Front. Davis, Salt Lake, and Utah Counties account for roughly one-third of the statewide emmisions of Particulate Matter 10 (PM10). Provo/Orem, Salt Lake City, and Ogden are nonattainment areas for ozone. Prevailing west winds transport pollutants onto the Forest, though monitoring studies indicate air quality on most of the Forest is not seriously impacted. The Forest has supported lichen biomonitoring since 1995 in partnership with Brigham Young University. These studies have noted elevated levels of arsenic, chromium, and nickel at 11 sites on the Forest. The pattern and distribution of metals indicate Utah Valley is not only the source of these metals on the Uinta, but the source of metals also found at more distant sites.

The primary activities on the Forest adversely impacting air quality are prescribed burns and wildfires. Increased use of prescribed fire could further impact the nonattainment status of Utah County for PM10 as well as new state standards for PM2.5. The Forest currently operates under a Memorandum of Understanding with the Utah DEQ that requires modeling of smoke dispersal and smoke emissions, and monitoring of weather conditions prior to and during prescribed burning operations. Beginning in 1999 prescribed burns will be permitted by the state on an individual basis.

Common Variety and Locatable Minerals Management

Common variety minerals are the sole family of minerals over which the Forest Service has complete discretion to manage and dispose. Common variety minerals on the Uinta National Forest

include sand and gravel, fill dirt and stone, and other materials used in general construction applications. Locatable minerals, the so-called “hard rock” minerals subject to appropriation by mining claim, are those disposed of under the Mining Laws of 1872. Locatable minerals on the Forest include lead, zinc, gold, silver, uranium, gypsum, and some types of limestone and clay.

When the Forest Plan was developed, non oil and gas mineral activity had been insignificant for several decades; common variety and locatable minerals management was not identified as an issue in the Forest Plan. The Forest Plan contains five standards and guidelines applicable to minerals exploration and development that describe situations under which various restrictions on exploration and development would be applied. None are clearly specific as to whether they apply to only leasable minerals or if they apply to common variety and locatable minerals as well.

In 1984 there were several hundred mining claims on the Forest recorded with the Bureau of Land Management (BLM). More than 100 claims were held within what is now the Mount Nebo Wilderness Area. Low-key, casual prospecting was the norm as claimants simply met the demands of doing annual assessment work required to hold their claims. The vast majority of the work was non-impacting and required no permitting. Concurrent with the low level of locatable mineral activity was a low demand for common variety minerals, as strong population growth in Utah Valley had yet to materialize.

The areas withdrawn from mineral claims on the Forest are Mineral Basin on the Pleasant Grove Ranger District, recreation sites, administrative sites, and wilderness areas. Today, there are fewer than 100 unpatented mining claims on the Forest, with only one small mine in operation. Changes in the BLM's mining claim recordation procedures in 1993 resulted in the abandonment of thousands of mining claims in the West. The Utah BLM mining records from January 1998 show only 126 claims still on record for the Uinta National Forest. Seventy-one of these do not have a current assessment on file and will likely be declared as abandoned and void by the BLM.

Leasable Minerals Management

The Uinta Forest Plan provided for oil and gas leasing in all areas outside of designated wilderness. The standards and guidelines in the Forest Plan identify environmental situations which necessitate application of the various stipulations, and identify to which management areas these standards and guidelines apply. The Western Uinta Basin Oil and Gas Leasing Environmental Impact Statement (Leasing EIS) decision amended the Forest Plan, changing some of the standards and guidelines for the area covered by the EIS (see below).

The Forest Plan did not identify any monitoring requirements specific to oil and gas exploration and development; however, the Forest Plan monitoring requirements were amended in 1993 to add monitoring requirements for minerals management. Passage of the Federal Onshore Oil and Gas Leasing Reform Act of 1987 (FOOGLRA) changed Forest Service authority relative to oil and gas leasing and regulating surface disturbing activities pursuant to a lease. The Forest Service now retains the authority to make the leasing decision after a site-specific analysis is completed. The Leasing EIS met the leasing requirements for high and moderate potential areas, and made the leasing decision for that portion of the Forest south of the Strawberry River and east of Diamond Fork Creek. Remaining areas of the Forest are low potential, and site-specific leasing analyses for

these areas have not been comnpleted. In 1992, this analysis was scheduled to be completed as part of the Forest Plan revision.

A uniform format for oil and gas leasing stipulations was adopted by the Chief of the Forest Service in 1989. The stipulations adopted differ from those in Appendix E in the Forest Plan.

Oil and gas leasing activities on the Forest have been limited in recent years. As of January 1, 1998, there was only one oil and gas lease on the Forest. The Forest has received three requests or nominations for leases covering several thousand acres in the area covered by the Leasing EIS. In response to these requests, no leases have yet been offered as areas with higher interest are being processed first. There has also been some recent (1998 and 1999) interest expressed in leasing a small portion of the Forest not covered by the Leasing EIS. This area was not included in that analysis because it was identified as having low potential. Other than interest in leasing, the only recent oil and gas related activity on the Forest occurred in 1994 when one Surface Use Plan of Operation was processed for the south end of the Nebo Unit.

Biological Situation

Properly Functioning Condition (PFC)

Ecosystems are described as being at their Properly Functioning Condition (PFC) when they are dynamic and resilient to disturbances in their structure, composition, and natural processes of their biological and physical components. A *Sub-Regional Assessment for Properly Functioning Conditions for Areas Encompassing the National Forests in Northern Utah* was completed in 1998 to evaluate PFC for various subject areas. This assessment identified subject areas and general locations at various stages of risk for significant loss, or at risk of losing structural and/or biological diversity. The following table summarizes the subject areas and general locations on the Uinta at high or moderate to high risk. These areas will require attention to ensure their sustainability within the landscape.

Table 1. Risk Assessment for the Uinta National Forest

Subject Areas	High Risk	Moderate to High Risk
Seral aspen	All areas	None
Pinyon-juniper	Bonneville Basin	Wasatch Mtns.
Riparian	Wasatch Mtns./ Bonneville Basin	Uinta Mtns
Aquatic	Bonneville Basin	Wasatch/Uinta Mtns.
Tall forb	Wasatch Mtns.	None
Birchleaf mahogany	None	Uinta Mtns.
Douglas-fir	None	All areas
White fir	None	Wasatch Mtns.
Spruce/fir	None	Wasatch Mtns.

Timber Management Practices

Forest stands occupy about 68 percent of the Uinta National Forest. The most common types are aspen (32 percent of the forested area), Gambel oak (20 percent), Douglas-fir (13 percent), spruce/fir (10 percent), white fir (7 percent), and juniper (7 percent).

The Forest Plan prescribes even-aged silviculture for managing timber resources. This has been applied for species that are typically even-aged such as aspen and lodgepole pine. However, most of the timber harvest has occurred in typically uneven-aged spruce-fir stands. Uneven-age silvicultural systems such as single and group selection have been the harvest methods of choice in these stands.

The Forest Plan established an Allowable Sale Quantity (ASQ) of 1.9 million board feet (MMBF). This was to be generated from sales designed to accomplish other, non-timber, resource needs. Over the last several years, about 4 to 5 MMBF of timber has been harvested annually through commercial and salvage sale activities on the Uinta. Only 1.4 MMBF of the annual volume harvested has been chargeable to the ASQ. The salvage program has been used to control insect outbreaks in Engelmann spruce, Douglas-fir and white fir.

Both natural and artifical regeneration methods are utilized on the Forest, with natural regeneration methods emphasized due to economic considerations. Some rodent control (hand placement of strychnine in below-ground gopher runs) has been implemented to protect the regeneration. Research has shown this satisfactorily controls the targeted rodents while protecting other non-target animals. Efforts have been initiated to protect young regeneration from livestock grazing. Monitoring indicates harvested stands have been regenerated in accordance with NFMA requirements.

Some afforestation projects have been implemented on the Forest in the past, typically involving the planting of ponderosa or lodgepole pine seedlings. Over the last few years, insects and disease have taken a heavy toll on many of these stands.

The Forest Plan called for a fuelwood program of 18,000 cords per year. Actual harvest has been approximately 1,000 cords per year due to low levels of demand. The Forest Plan also proposed utilizing Christmas tree cutting activities to support the Timber Stand Improvement (TSI) program. However, this proved ineffective and the commercial Christmas tree permit program was discontinued in 1995. About 1,500 Christmas trees are still offered annually to the general public.

Forest Health Protection

Insects and diseases are disturbance agents which are often beneficial. Many different insect and disease species have been noted on the Forest, including bark beetles, defoliators (both insect and diseases), stem decay fungi, root disease organisms, and dwarf mistletoes. The most significant disturbance agents have been the bark beetles and dwarf mistletoes.

The analysis accompanying the Forest Plan stated that forest pests did not have a significant role on the Forest at that time. Since 1981, there have been two major outbreaks of bark beetles in northern Utah, the first peaking in 1983 (the mountain pine beetle) and the second between 1993 and 1995

(the mountain pine, Douglas-fir, and fir engraver beetles). The mountain pine beetle outbreak mortality was limited to about 1,000 trees on the Forest, but the Douglas-fir and fir engraver beetle outbreaks have been much more significant. The 1995 outbreak of these insects resulted in the death of approximately 120,000 trees on the Forest. A 1993 inventory indicated that mortality exceeded growth for subalpine fir.

The non-native gypsy moth was discovered in Utah in 1989. To eradicate this species, the Forest Service and others, in cooperation with the Utah Department of Agriculture, applied a biological insecticide on over 70,000 acres along the Wasatch Front. Eradication treatments were completed in 1993. In 1998 and again in 1999, a new small population of gypsy moths was discovered nearby in Salt Lake County: this population is currently being treated.

A 1976 survey indicated 38 percent of the Douglas-fir on the Forest is infested with Dwarf mistletoe, a parasitic plant. A recent survey of the White River drainage revealed 56 percent of the Douglas-fir were infested.

Inventories have indicated that approximately 38 percent of the spruce/fir, 100 percent of lodgepole, and 87 percent of the Douglas-fir across the Uinta are at high risk from insect infestations.

Grazing Management

Rangelands on the Forest have provided summer forage for local livestock operators since the arrival of the pioneers. Today, most permittees who graze livestock on the Forest rely on this forage to complete their overall operations. Permitted grazing begins in May and ends in November, with most grazing occurring between June and September. Currently, there are 73 allotments on the Forest encompassing about 708,870 acres.

The 1993 Rangeland Ecosystem Forest Plan Amendment established Desired Future Conditions (DFC) and management standards and guidelines for five rangeland vegetation communities, including subcategories for three riparian value classes. The amendment placed stricter limitations on forage use and called for increased participation by permittees in managing their livestock on the Forest.

Table 2. Livestock Grazing on the Uinta National Forest

	1984	1999	Trend
Allotments	100	73	Decrease
Cattle Permittees	223	48	Decrease
Sheep Permittees	38	20	Decrease
Cattle Grazing	9,530	11,241	Increase
Sheep Grazing	64,680	55,282	Decrease
Animal Unit Months	148,220 (actual use)	102,220 (actual use)	31% Decrease

The changes between 1984 and 1999 are due to a number of factors. Since 1984, 29 allotments have been combined with adjacent allotments and six allotments have been acquired through the 1998 State land exchange. Two sheep allotments on Mount Timpanogos are currently vacant. Consolidation of allotments is primarily the result of smaller operators selling out to other permittees. Sheep numbers have declined in response to changes in grazing standards and economic conditions.

In 1994, forage utilization was monitored on about 81 percent (680,940 acres) of the allotments. This monitoring indicated approximately 55,000 acres were meeting DFC, 612,000 acres were moving towards DFC, and 14,000 acres were not moving towards DFC. Monitoring in 1995-96 yielded similar results.

In 1994, 54 rangeland condition and trend studies were completed that showed range trends were static or upward for most sites. A few big game winter range study sites showed declining trends. Range conditions were generally moving toward DFC, especially in upper elevation aspen. Shrubs were generally in an upward trend, ground cover was improving, but late seral forbs were still uncommon. In 1995 and 1996, data was collected for 27 study sites, with conditions similar to the 1994 observations.

Eight trend studies in wildland fire burn areas were evaluated in 1997. This study found that the post-burn seeding that had been done was successful.

Since 1993, 10 to 12 riparian studies have been measured annually. These indicate that about 75 percent of riparian areas within active allotments are meeting or moving toward DFC.

Grazing Capability and Suitability

The capability and suitability of rangelands for use by domestic livestock is determined through criteria that identify areas where the resource can sustain livestock grazing. Suitable rangeland is determined by evaluating the capable rangelands and determining whether grazing is an appropriate use of the area.

Since 1984, the acreage of the Forest has increased through numerous small land transactions and two large ones: the Strawberry Project lands transfer in 1988 and the State land exchange in 1998. Prior to its transfer to the Forest Service, the Strawberry Project lands had been grazed for many years. Grazing was suspended with the transfer in response to resource concerns. The legislation for the State land exchange provided for a continuation of permits (including grazing) valid at the time of the exchange.

Analysis of the rangeland resource in 1999 to identify capable rangelands indicates approximately 332,460 acres capable for use by cattle and 454,000 capable for use by sheep. Capable acres were determined to be suitable if they fell within established grazing allotments. For purposes of this analysis, acres within those allotments currently grazed by cattle (approximately 158,000 acres) and acres within those allotments currently grazed by sheep (approximately 150,000 acres) were added together to determine total suitable rangelands (308,000 acres).

The Forest Plan discusses range suitability in terms of Animal Unit Months (AUMs), not acres. In 1984, a total of 148,200 AUMs were provided, as compared to 102,220 AUMs in 1999. The Forest Plan defined the minimum suitability level as being the minimum amount needed to support a viable livestock industry. The Forest Plan assumed this to equal the permitted capacity (123,000 AUMs) at the time. It is evident that 123,000 AUMs is high, considering that those operators who continue to utilize the Forest for summer livestock operations have been able to stay in business.

Special Ecosystems and Communities

The Forest Plan did not specifically identify any special ecosystems or communities. Resource management over the last 15 years has identified unique management situations which require special consideration. Some of these situations have unique plant communities and habitat for threatened, endangered, and sensitive (TES) species. These ecosystems are discussed below:

Aquatic and Riparian Ecosystems: Aquatic environments exist throughout the Forest in the form of springs, potholes (< 1 acre), ponds (1-2 acres), lakes (> 2 acres), reservoirs, and streams. Aquatic environments are found throughout all elevation and vegetation zones. They represent some of the most altered communities both on the Forest and throughout the West. Several known sensitive and rare species rely on aquatic systems including the spotted frog, boreal toad, spring snails, and amphibians.

The Forest Plan contains no specific direction for management of aquatic ecosystems other than the riparian section of the Rangeland Ecosystem Amendment. Rangeland Ecosystem Amendment direction focuses on the management of streamside vegetation, not on the function or processes of riparian ecosystems. The time frames prescibed in the Rangeland Ecosystem Amendment for meeting riparian area DFCs are too ambitious. Monitoring indicates that even where standards and guidelines are being met, recovery is not occurring as quickly as was anticipated. This is true even in areas not grazed by domestic livestock. The Forest has implemented numerous projects over the last several years to protect these sites from recreation, roads, and grazing impacts.

Non-Stream or -Lake Related Riparian: Wet meadows, bogs, seeps, springs, and weeping rock walls exist as small, isolated islands of perennially wet habitat not directly connected to stream systems. Many of these areas have not been mapped or inventoried, and information on them is incomplete.

According to law, management activities having direct impact on wetlands (such as dredging or filling) have been managed under permit from the Corps of Engineers. There are also many other activities occurring which may have indirect impact, including contribution of sediment from roads, grazing by livestock and wildlife, and/or off-road vehicle use. Other than grazing utilization and trend studies, little monitoring for these types of impacts has been conducted.

Aspen: Aspen reproduces primarily by suckering from a parent root system, stimulated by disturbance events or by dieback of older individuals. Aspen is relatively intolerant to shade; without disturbance, it may succeed to more shade-tolerant conifer species. Finding a limited amount of aspen in another vegetation type probably indicates the site had a large amount of

aspen at one time. Analysis of 1995 forest inventory data indicates about 285,350 acres of the Uinta were formerly aspen. The same inventory found only 174,450 acres to be considered aspen today. This indicates an on-going loss of the aspen type on the Forest. PFC analyses have recognized this, and identified aspen as at risk. The Rangeland Ecosystem Amendment contains direction to manage aspen to achieve a late seral ecological condition while also specifying the need to treat aspen through disturbance. These statements appear to contradict and have led to some confusion.

Winter Range: The UDWR and Uinta National Forest have identified about 174,400 acres of elk winter range and 151,000 acres of deer winter range on the Forest, with some of these areas overlapping. Winter range contains a variety of vegetation types, but existing Forest vegetation data does not identify the condition of this vegetation. The Rangeland Ecosystem Amendment defined a DFC and standards and guidelines for winter range.

For several years, the Forest has participated in an interagency big game range trend study. This study periodically reevaluates range conditions at several sites around the state. In general, this study has found winter range conditions, especially those along the Wasatch Front, to be less than desired. There are numerous factors contributing to this, including the ever-increasing rapid urbanization of traditional winter range areas, increasingly concentrated use by wildlife, increasing decadence and limited reproduction of several shrub species, invasion by exotic plant species, and impacts due to recreation, particularly off-highway vehicle use.

High Elevation Areas: High elevation areas occurring on the Forest lie at or above 10,000 feet, and include alpine and sub-alpine ecosystems. Several sensitive species and communities occur on these sites. The Forest Plan provides no specific management direction for high elevation areas. Although little domestic livestock grazing occurs on high elevation areas, they are at potential risk from recreation use and grazing by wildlife. Little quantitative monitoring has been conducted to assess these impacts.

Caves and Cliffs: The Forest contains numerous caves and cliffs, including 69 caves identified as significant in accordance with the Federal Cave Resources Protection Act of 1988. The Forest Plan does not contain any direction specific to management of caves or cliffs. In addition to providing a unique recreation opportunity, many caves provide habitat for sensitive bat species. Some of these caves are popular attractions for recreationists, with the potential of adversely affecting the cave resources.

The Forest Plan does not contain any specific management direction for cliffs. Rock climbing activity on the Forest, in the state, and in the nation has grown in popularity over the last several years. Increasing recreational use of cliffs by climbers poses a threat to sensitive flora and fauna habitat. Potential also exists for the loss of cultural features, such as rock art, associated with these areas.

Tall Forb Communities: Prior to the introduction of domestic sheep, tall forb dominated communities were common on broad, open ridges and valleys at mid to high elevations (9,000 to 10,500 feet). Many portions of these areas have been invaded by species such as tarweed and western coneflower, which are difficult to control and have little forage value. It is unclear how

extensive the loss of topsoil from these sites has been and how this has impacted the potential of the sites. With careful management some of these areas can once again support a diversity of tall forb species.

Naturally Occurring Ponderosa Pine: Several small, isolated groves of naturally occurring ponderosa pine occur on the Forest, intermixed with white fir, Douglas-fir, and Gambel oak on white fir habitat types. Natural regeneration is occurring in these stands. These isolated groups, each consisting of only a few dozen individuals, represent the only naturally occurring ponderosa pine on the Forest. The Forest Plan contains little management direction for these unusual stands.

Old Growth: The Forest Plan contains direction to retain at least 10 percent of the forest types in an old growth condition. Since the Forest Plan was developed, the Intermountain Region of the Forest Service developed definitions of "old growth" for several forest types. The Uinta National Forest has not been inventoried to determine which lands meet this definition.

Analysis of 1995 Forest Inventory Analysis data estimated the acreage of "mature" forest (stands over 100 years of age) on the Uinta, but did not make specific determinations for old growth. Many of these "mature" stands on the Uinta may indeed be old growth. According to this inventory, about 85,000 acres (23 percent) of the 377,651 acres of forest on the Uinta is "mature." Although the data and analysis does not indicate the acreage of "mature" forest that meets the definitions of old growth, it is highly probable that the acreage is well above the 10 percent Forest Plan requirement. Due to past fire suppression, this percentage, and the amount of old growth, may also be higher than occurred historically. Fire suppression effects have been off-set, to a limited degree, by pre-1990s harvests. Current management prescriptions may be promoting old growth development in spruce/fir.

Terrestrial Wildlife

Since 1984, the wildlife program emphasis has shifted from planting shrubs on big game winter range to a more integrated approach to enhance or restore environments where the constituent parts (biotic and abiotic) function together to better provide for the needs of all wildlife species.

Current work in the wildlife program area focuses on collecting and storing vegetative wildlife habitat parameters into the forest's Geographic Information System (GIS) and supporting the Endangered Species Act (ESA) and other resource programs. Major projects implemented under the Forest Plan include shrub plantings on big game winter range, wildlife water developments, road closures to provide wildlife security areas, vegetation and watershed rehabilitation on the Strawberry Project lands, installation of bat friendly gates on mineshafts and caves, Rocky Mountain Goat habitat monitoring, sage grouse habitat and population monitoring, northern goshawk and flammulated owl surveys, neo-tropical bird monitoring, and prescribed burns to enhance wildlife habitat.

The Forest Plan contains an objective to improve 26,500 acres of habitat over the 1985-94 time period. Due to funding limitations, only 10,966 acres were treated. However, wildfires during this period, which can improve diversity and benefit wildlife, also burned a considerable acreage.

Management Indicator Species (MIS)

The 1984 Forest Plan listed 29 vertebrate and invertebrate species or groups of species as Management Indicator Species (MIS). Species selected as MIS are used to monitor a particular habitat niche, accomplished by assessing the habitat conditions and population changes of the species that occupy each habitat. In 1993 the Forest Plan was amended and the list of MIS was reduced from 29 to 11 indicator species. Sensitive species were included only if their habitat needs were not addressed by existing indicators. Information on the 11 MIS follows:

Mule Deer and Elk: These species are monitored by the UDWR. Elk numbers in Wasatch Mountains Management Unit 17 are above herd unit objectives, while deer numbers are down but recovering following the winter of 1992-93. Although the Forest does contain some winter range for these species, most of it is off-forest and is being impacted by urban expansion. Monitoring indicates vegetation conditions on these ranges is somewhat stable to deteriorating, and generally not at DFC.

Beaver: No population census for beaver have been conducted. Beaver activity is monitored only where problems exist or where riparian project activities are implemented. Areas where beaver dams were eradicated in 1990 during rotenone treatments for fisheries improvement have been slowly recovering, with beaver recolonizing these areas. Beaver populations may not adequately reflect riparian habitat conditions due to fluctuations from trapping, disease, and other factors. Improvements in riparian conditions across the Forest continue to favor beaver. Potential conflicts continue where livestock grazing and wildlife browsing occur in aspen and willow communities that have been harvested by beaver, but are not adequately rested to allow regeneration. Establishment of new dams and recolonizing of older dam sites is occurring across the Forest.

Bald Eagle: Bald eagle roost and nesting surveys, which occur primarily off-forest, indicate populations are increasing. In response to this trend, the species was recently delisted from the Endangered Species List. Although there has been improvement in the overall habitat and environment used by this and other species, it is not likely that population increases are due to forest management activities as roost sites on the Forest are limited.

Peregrine Falcon: No known nesting sites exist on the Forest for this species. As with the bald eagle, this species was recently delisted. Increases in species population are not tied to forest management activities.

Northern Goshawk: Goshawks have recently become a species of concern, with petitions to list the bird under the Endangered Species Act. Surveys of potential habitat are conducted in association with proposed timber sales or other vegetative management projects. There has not been a forest-wide survey outside of these proposed treatment areas. Several new nest sites have been identified and known nest sites are checked annually. Forest management activities have been modified to avoid impacting this species. These modifications include protection of nest stands and temporal and spatial restrictions to mitigate potential disturbance from nearby activities. With the increased concern for the species' condition, a conservation strategy was

developed by the six national forests in Utah to address habitat and monitoring needs. An effort is currently underway to amend the six forest plans so as to maintain habitat for this species.

Sage Grouse: With declines throughout the West in historic population levels of up to 50 percent, concern for this species is increasing. Known populations on the Forest include the Vernon Division on the Spanish Fork Ranger District and the Strawberry Valley area on the Heber Ranger District. UDWR conducts annual population counts on leks in these areas.

The Forest is participating in an intensive research effort on the Strawberry Valley population to identify factors limiting grouse populations. Preliminary study results indicate habitat is not limiting, but predatation by non-native red fox is having a major effect on the Strawberry Valley population.

The Forest has developed and is continuing to refine vegetation maps for sage grouse habitat in Strawberry Valley and Vernon. Habitat improvement work on the primary Strawberry Valley lek was completed in 1998.

With the increased concern on the species, the UDWR is planning to develop a statewide conservation strategy to identify necessary protection measures. The majority of the habitat for the species occurs off of National Forest System lands in Utah.

Three-toed Woodpeckers: With increased concern for this species, project-specific surveys and mitigation began in 1990. No forest-wide population monitoring for this species has been conducted. Breeding bird surveys are conducted on the Forest and these would indicate the presence or absence of the species, however, population trends would not be detectable with this level of monitoring. With the species' dependency on snags, old growth coniferous forests, and insect levels, it is not likely that past and current management activities have altered the habitat sufficiently to create species declines. Insect activity continues to increase and cycle on the Forest, providing forage and habitat.

Threatened and Endangered Species

When the Forest Plan was implemented, the bald eagle and peregrine falcon were the only two federally listed species on the Forest (both were listed as endangered). In 1995 the bald eagle was downgraded from endangered to threatened, and on July 4, 1999 was removed from the list altogether. In August of 1999 the peregrine falcon was also removed from the list. Since the implementation of the Forest Plan, one bird and three plants have been added to the list of federally listed species. There are also five federally listed fish species that do not occur on the Forest, but which could be impacted if water depletion activities are implemented.

The addition of several species to the Threatened, Endangered, and Sensitive species (TES) list is due not to management practices on the Uinta National Forest, but rather to an increase in knowledge and understanding of species either throughout their range or through range-wide negative cumulative effects. The removal of the bald eagle and peregrine falcon from the endangered species list is due to increased numbers and habitat improvement over their entire range,

although habitat protection through coordination and mitigation on forest proposals has been beneficial.

Conservation strategies for the Colorado and Bonneville cutthroat trout and northern goshawk have been completed. A recovery plan was prepared for management of Clay phacelia habitat. A draft recovery plan is available to manage for Ute ladies' tresses.

Sensitive Species

When the Forest Plan was approved, the Forest Service sensitive species program was in its early stages and made no references to specific species. Similarly, the State of Utah did not have a listing of state sensitive species. In March 1997, the UDWR released the Utah Sensitive Species List. The stated purpose of the list was "to identify those species in the state that are the most vulnerable to population and habitat loss." Species that do not fall under the umbrella of the ESA or Forest Service sensitive species policy have no protection under these situations, but are considered species of concern with added emphasis in forest activities.

Sensitive species are identified by the Forest Service Regional Forester as those for which population viability is a concern, as evidenced by significant current or predicted downward trends in population numbers or density, or significant current or predicted downward trends in habitat capability that would reduce a species' existing distribution. Identification of sensitive species and emphasis on the management of sensitive species habitat are Forest Service policy and are not directly related to federally designated endangered and threatened species protected under the ESA. The Forest Service goal for sensitive species management is to ensure that species numbers and population distribution are adequate so that no federal listing will be required nor any forest extirpation take place.

Four mammals, six birds, one amphibian, two fish, and five plant species occurring on the Forest have been added to the sensitive species list by the Regional Forester. The Intermountain Region of the Forest Service is now reviewing the 1997 Utah Sensitive Species List and is considering revising the Region’s Sensitive Species List.

Fire Management

Fire occurrence has increased nearly 10 fold since the mid-1900s, primarily due to better reporting by the public and an increase in fuels. Suppression policies have changed from full suppression of all wildfires, to making suppression choices based on the resource values involved and the opportunities to meet resource management objectives. There has been a shift to recognize fire as a natural process that helps maintain healthy vegetative conditions by limiting decadence and disease infestations in older growth forms that are more susceptible to deterioration. Unlike many Forest Plans, the 1984 Uinta Forest Plan recognized the role of fire in the ecosystem and provided for the use of prescribed fire.

The 1984 Forest Plan recognized the importance of cooperative fire management. Numerous actions have been taken to implement this concept. This cooperation is expected to continue not only in fire suppression, but also in prescribed fire, fire detection, and fire prevention.

A statewide fire amendment is being prepared that proposes to eliminate or replace outdated and inappropriate direction for fire management with respect to prescribed fire and wildfire. This amendment should be completed in 1999 and will amend the forest plans for the six national forests in Utah.

Socio-Economic Situation

Social And Economic

The Uinta National Forest lies within Juab, Sanpete, Tooele, Utah, and Wasatch Counties. Adjacent areas which may be affected by forest activities are Salt Lake, Summit, Carbon, and Duchesne Counties, and the Skull Valley and Uintah and Ouray Indian Reservations.

A 1997 survey of Utah residents revealed that residents feel Utah's distinction emanates from its people—their honesty, ethics and morality. Residents also indicated Utah's scenic beauty and outdoor recreation operate to enhance the quality of life. The survey revealed the greatest perceived threats to the current life style emanate from transportation infrastructure and traffic, crime, and air quality.

Some decisions made in the Forest Plan were based on anticipated socio-economic changes. The principle change anticipated was in population. Actual population growth in Utah between 1980 and 1995 was 34 percent, slightly more than the 31 percent anticipated. Utah's population in 1995 was 1.959 million, which includes a population of 7,150 in Juab County, 806,000 in Salt Lake County, 19,200 in Sanpete County, 22,400 in Summit County, 29,600 in Tooele County, 308,000 in Utah County, and 12,200 in Wasatch County. The population is expected to exceed 3 million by 2015.

Utah is the seventh fastest growing state in the nation. The population is expected to grow an estimated 2.1 percent annually between 1999 and 2020, nearly double the projection for the nation of 1.2 percent. Because Utah has the highest fertility rate in the nation, two-thirds of this growth is attributable to natural increase. Utah has the highest proportion (33.4 percent) of population under the age of 18 and the lowest percentage (8.7 percent) of those over the age of 65 of any state in the nation.

Utah's employment growth has consistently out-paced that of the nation; this is expected to continue. The average non-agricultural employment grew 3.5 percent from 1980 to 1995, compared to 2.1 percent nationally. All northern Utah counties experienced rates of growth that exceeded the national average. The greatest employment growth was in Summit County (117 percent from 1986 to 1996) and the lowest in Tooele County (6.5 percent).

Utah's unemployment rate in 1997 was 3.1 percent, compared to a national average of 4.9 percent. In northern Utah, only Carbon, Duchesne, and Sanpete Counties experienced unemployment rates exceeding the national average.

Annual per capita income in Utah in 1996 was $19,384 compared to $24,436 nationally. Utah ranked 45th in the nation, primarily due to the large family size. Per capita income in Utah grew at an average of 5.4 percent over the last 10 years, compared to 4.9 percent for the nation. The 1993

median household income for Utah was $32,596, compared to $31,241 for the nation. In 1997, 8.9 percent of Utah's population was in poverty with only 3.6 percent receiving public assistance. Only six other states had lower poverty rates. Utah has the eleventh highest percentage (72.5 percent) of home owners in the nation.

1996 Payments in Lieu of Taxes (PILT) payments were: Juab County - $292,194; Sanpete County - $432,941; Tooele County - $729,890; Utah County - $487,718; and Wasatch County - $305,534. This represented from 1.0 to 8.6 percent of the Counties' budgets. 1998 25 Percent Fund Payments generated from the Uinta National Forest were: Juab County - $19,152; Sanpete County - $4,190; Tooele County - $20,592; Utah County - $77,276; and Wasatch County - $72,080. These represented 0.11 to 1.18 percent of the Counties' budgets.

As the state's population grows, the economy will continue to shift from agriculture to service industries. Tourism has become one of Utah's top private sector industries, drawing visitors to Utah's many national and state parks, as well as its national forests. Additionally, the state's very young population will require access to more of the recreational opportunities the Forest has to offer.

The Skull Valley Reservation is near, but does not directly adjoin any lands administered by the Uinta National Forest. The Goshute Indians; however, consider the Vernon Unit in Tooele County their ancestral homeland. According to the 1990 Census, 32 Native Americans reside on the Reservation.

A Uintah and Ouray Reservation is located within Uintah Basin. A portion of this reservation directly adjoins the Forest. The Ute Indians of this Reservation historically used the Forest for hunting and gathering activities. The 1990 Census indicated that the population of the Reservation was 17,224, of which 15.4 percent were Native Americans.

Cultural Resources

The Forest Plan contains a goal to have cultural resource input on all projects by 1994. This goal was met. The 1984 Forest Plan also set a goal of surveying the entire Forest, but it was not met due to lack of funding. In 1984, only 14,217 acres had been surveyed and 38 sites documented. Utilizing volunteers, approximately 41,292 acres have now been surveyed and 290 sites documented.

Since 1984, the implementing regulations for Section 106 of the National Historic Preservation Act have been amended. The new regulations require higher levels of tribal and community consultation, reduce the options for resolving adverse effects, and require more extensive consultation with State Historic Preservation Officers regarding all stages of the Section 106 process. The Native American Graves Protection and Repatriation Act of 1990 requires an inventory of existing artifact collections and consultation with tribes to develop plans and procedures for use in the event human remains are discovered.

Lands: Real Estate and Property Boundary Management

The Uinta National Forest administers 896,960 acres of National Forest System land. With the proclaimed Forest boundary there are 86,711 acres of private, state, and National Park Service lands.

Since the Forest Plan was approved, there have been adjustments to the exterior boundary of the Forest. In 1988, 56,775 acres encompassing Strawberry Reservoir transferred to the Forest Service. Additional acreage has been acquired through donations (412 acres), land exchanges (12,967 – includes the State land exchange), purchases (188 acres), and transfers from other federal ownership (4,299 acres). The Forest has 32,621 acres where either the surface or sub-surface (mineral estate) is not owned by the United States.

Rapid population growth in northern Utah has increased development within and along the Forest boundary. The result has been a loss of historical access to public roads and trails, reduced amounts and quality of wildlife habitats, increased encroachment, and increased use of and damage to watersheds.

There are currently over 20 encroachment (unauthorized use of National Forest System lands) cases on the Forest. Since 1984, the Forest has taken action to resolve over 25 cases of encroachment.

While maintaining posted boundaries, the Uinta is also identifying opportunities to utilize land exchanges to establish more defensible boundary lines along roads, trails, and ridgelines.

In 1995, the national forests in northern Utah completed a Rights-of-Way (ROW) Acquisition Plan identifying a need for 33 ROW on the Forest. Four ROW easements have been acquired. The Forest has also cooperated with and encouraged cities and counties to acquire ROW within their jurisdiction.

There are currently 144 term (one year or longer) non-recreation special uses authorized by special use permits on the Uinta National Forest. Sixteen applications for ditch easements have been received as a result of the Colorado Ditch Bill of 1986. Fourteen ditches are currently authorized by special use permits that will be eliminated if easements are granted. The Forest has three hydropower projects that Federal Energy Regulatory Commission (FERC) will be considering for relicensing in the next four years.

Six energy transportation corridors were identified in the 1984 Forest Plan and there are requests to designate more. These corridors do not include the high voltage powerline and natural gas pipeline traversing Provo East Bench, the high voltage powerline traversing Provo Canyon, or the American Fork Canyon transmission line.

Facilities

There are approximately 272 government-owned buildings and 2 leased buildings (Provo Supervisor's Office and Nephi Office) on the Uinta National Forest. Seventy-four of these support administration, fire, and other activities. The remaining 198 are restrooms at recreation sites. Nineteen buildings on the Forest are potentially eligible for the National Register of Historic Places.

The Forest Plan calls for monitoring facilities for safety problems and increased maintenance costs. Asbestos removal, radon monitoring, and some energy efficiency improvements have been completed since 1984. Condition surveys for health and safety are being done. Accessibility and

vulnerability assesments have also been completed. Most offices have been modified to meet current accessibility requirements.

The 1986 Facilities Master Plan for the Uinta National Forest called for new District and Supervisor's Offices. A new Heber District Office has been constructed. There are 14 administrative sites and work centers on the Forest. Many of these buildings are deteriorating and reaching the end of their useful life. Some site locations are no longer aesthetically pleasing and have been surrounded by residential areas since their construction.

Nineteen dams are located on the Forest. The Forest Service owns one and is responsible for its operation and maintenance. The other 18 dams are under special use permits with the permitted party responsible for operation and maintenance. Recent inspections indicate all dams on the Forest are in a safe condition.

Interpretive Services

Since 1984, at least 10 interpretive plans or projects have been completed. These include the Heber Ranger District Interpretive Plan, Devil's Kitchen Trail, Nebo Loop National Scenic Byway, Cascade Springs Trail, Strawberry Discovery Trail, and the American Fork/Alpine Loop Interpretive Master Plan. Many small interpretive sign projects and brochures have also been produced.

Recreation (Dispersed)

Dispersed recreation use on the Forest is rapidly growing. Part of this growth is due to population growth, developments in technology, changes in life-style, and management restrictions in other Forest and off-Forest areas. As developed facilities fill and fees increase, people are often displaced to dispersed areas. Forest plan projections (2,150,000 Recreation Visitor Days or RVDs) for 1996 dispersed recreation use were exceeded (2,650,000 RVDs) by more than 23 percent.

It is unclear how dispersed recreation capacity in the Forest Plan was derived. Current thinking is to employ descriptions of Limits of Acceptable Change (LAC) rather than visitor numbers to define capacity.

The Forest Plan refers to Recreation Opportunity Spectrum (ROS) by acreages, but includes no maps or specific location references. ROS is a good management tool that can be used to deal with a variety of recreation issues. The Forest has some ROS maps; however, these were not made a part of the Forest Plan. The exception to this is for the Strawberry Valley Management Area. Because of these factors, this tool currently has limited utility.

There is more demand for outfitter and guide permits than resources allow. The Forest has turned down recent requests for outfitter and guide operations because the allocation process has not been defined and capacity determinations have not been made.

The needs for law enforcement are outpacing the agency's ability to respond. Urban influences have caused an increase in vandalism, which then necessitates increased maintenance and prevention efforts.

Recreation (Developed)

Developed recreation use has increased more than anticipated in the Forest Plan. Construction of facilities was not accomplished as proposed. On peak weekends and holidays, demand at most facilities exceeds supply. Since 1984, 30 additional sites have been completed or acquired. The current capacity of all recreation developments on the Forest is 28,475 People At One Time (PAOTs), for a yearly capacity of 3,155,600 RVDs. There is a large maintenance backlog associated with these sites.

Accessibility surveys for most developed sites have been completed. All site development proposals and site improvement plans are reviewed for compliance with Americans with Disabilities Act requirements. At many sites across the Forest, improvements in accessiblity have been made.

Law enforcement efforts are not keeping pace with increasing urban influences. Cooperation with local law enforcement agencies has helped, but the combined effort is still less than desired. Forest Service presence in campgrounds has been significantly reduced in recent years due to budget constraints, organizational changes, and many areas are now managed by concessionaires. The number of Forest Protection Officers has also decreased.

The Forest Service has been working the last few years to develop a new inventory and cost estimating tool for recreation called *Meaningful Measures*. This tool blends both quantitative and qualitative aspects.

The Forest Plan identified an initial period from 1980 through 1990 when developed sites normally closed to horse use would be opened to that use during hunting season. However, no direction was provided past 1990. Since 1990, horse use in sites not designed to accommodate that use has been prohibited because of experience with user conflicts, resource and facility damage, and associated maintenance costs.

Trails

There are approximately 667 miles of system trails and 41 trail heads on the Forest. In addition, there are 911 miles of road where high clearance vehicles are required or advised, including 389 miles of road open to non-street legal Off-Highway Vehichles (OHVs). About 473 of the 667 miles of trail meet appropriate maintenance standards. Over the last several years, an average of about 15 miles of trail has been constructed or reconstructed annually and 260 miles maintained to standard. Much of the trail maintenance is performed by private entities. Volunteer labor accounts for about 60 percent of the yearly maintenance. Currently, about 5 miles of trail are under Adopt-a-Trail agreements. With the present trail system and related support facilities, use levels are often high enough that negative impacts are occurring. A large backlog of work exists and many trails are in poor locations.

Winter recreation continues to grow. There are 119 miles of groomed snowmobile trail and nine trail heads. Construction of trail heads and most of the trail grooming has been partially funded by Utah State Parks and Recreation. Daniels Summit Lodge grooms a few miles of trail on the Forest. The Utah Department of Transportation and Forest Service plow the parking lots. There are 11 miles of

marked, but not groomed, cross-country ski trails. Four trail heads are currently being planned for construction.

At present there are some conflicts between user groups. Many trails have evolved without considering suitability and priority of uses. Difficulty levels for the types of uses are not identified by signing or maps. Two problems with trail management are the less than desired level of clear travel management direction and the lack of loop opportunities.

Transportation Facilities: Roads

There are presently 1,370 miles of Forest Development Roads (FDR) that are inventoried on the Uinta. There are 421 miles of maintenance level 3, 4, and 5 roads (open roads passable with passenger cars), 911 miles of maintenance level 2 roads (high clearance vehicles); and 38 miles of maintenance level 1 roads (road closed to use) on the Forest. There are approximately 140 miles of asphalt surfaced roads on the Forest.

According to an Intermountain Region Pavement Management Survey, asphalt or surface seal coat roads on the Uinta were at an average Survey Pavement Condition Index (PCI) of 77 percent. Roads with a PCI below 70 percent are considered in need of "preventative maintenance."

There are 25 road bridges on the Uinta National Forest. These are inspected according to guidelines established by the Federal Highway Administration. Due to age, and in some cases, inadequate maintenance, 14 of the 25 bridges have less than 10 years left before replacement is necessary. Seven of those 14 bridges have lesss than 5 years of design life left. Of the 7 bridges with less than 5 years of design life left, one has been closed due to loss of structural integrity and 3 others are in critical condition.

In 1997 the Forest maintained 170 miles of road using Forest Service crews, 242 miles through agreements with the Counties, and 3 miles by timber sales. Levels of maintenance conducted vary.

Uinta National Forest System lands are closed to vehicle use unless designated open, with the exception of game retrieval during hunting season. Non-compliance is occurring across the more accessible areas of the Forest, creating "ghost roads" and causing resource damage. No formal surveys have been conducted to quantify the extent of this damage.

The 1988 Travel Plan required all maintenance level 3, 4, and 5 travel routes be signed by 1998. This has not been accomplished due to funding limitations.

Roadless

The 1984 Utah Wilderness Act, Forest Service policy, and the regulations implementing NFMA require roadless areas to be considered for wilderness during revision. The Final Environmental Impact Statement for the 1984 Forest Plan identified 461,282 acres of roadless areas on the Uinta National Forest. Approximately 32,000 acres of this was designated wilderness in 1984. A draft updated roadless inventory was completed in 1999 utilizing more accurate maps and analysis tools

than were available in 1984. The new inventory identified 528,015 acres, including seven areas not included in the 1984 inventory.

Wilderness

The Uinta National Forest has three designated wilderness areas: Lone Peak, Mt. Nebo and Mt. Timpanogos. Lone Peak was established in 1978 and is 31,165 acres in size. The Uinta National Forest manages 20,829 acres and the Wasatch-Cache manages the remaining 10,336 acres of Lone Peak Wilderness Area. Mt. Timpanagos Wilderness Area was established in 1984 and it encompasses 10,518 acres. Mt. Nebo Wilderness Area was also established in 1984 and it encompasses 27,070 acres.

Issues pertaining to management of the wilderness that have emerged since the Forest Plan was prepared include management of transplanted wildlife species and the role of fire and other natural processes. The Utah Fire Amendment Environmental Assessment (currently in progress) will allow wildland fires and in some situations, prescribed fire, to be used in all wilderness areas in Utah. This will allow fire to once again play its natural role in the ecosystem.

Since the Forest Plan was approved the Forest Service has embraced Limits of Acceptable Change (LAC) to define capacity, rather than using numbers of persons present. This process subzones wilderness into three opportunity classes and defines what biological, social, and physical conditions are acceptable within each class. In Mt. Nebo Wilderness Area issues have been identified, opportunity classes have been defined, and an inventory of existing resources and social conditions has been made. In Mt. Timpanogos and the Uinta National Forest portion of the Lone Peak Wilderness Area, only inventories have been completed.

Although there are no private land inholdings (surface ownership) within any of the three wilderness areas, there are numerous valid special use permits for water transmission lines, municipal water sources, one dam, one weather monitoring station, and one active outfitter-guide permit. Some seemingly incompatible, but nonetheless valid, uses occur within all three wilderness areas. A gypsum mine is slated for development on privately owned minerals within the Mt. Nebo Wilderness Area.

A major wilderness related law enforcement issue is motorized encroachment by ATVs and snow machines. Enforcement is hampered by staffing and funding. Other problems include illegal campfires, group size violations, and trail cutting.

Recreation use in all three wilderness areas, and especially in Mt. Timpanogos and Lone Peak, is heavy. Most use occurs in late spring through fall, with over 90 percent of use along trails. Technical rock climbing has increased significantly in Lone Peak in the last five years. In Mt. Timpanaogos 95 percent of all use is by day visitors. Some overnight camping occurs in Mt. Nebo and Lone Peak Wilderness Areas. Limited winter use occurs in all three areas. Total use in the three wilderness areas is estimated to be 132,000 RVDs per year.

Research Natural Areas (RNAs)

RNAs are lands within the National Forest System that are permanently protected as places to conduct research and monitoring, maintain biological diversity, and foster education. There is one RNA on the Forest: Jumpoff Point. The Establishment Record for this RNA was completed in 1987 and the area designated an RNA in 1988. Although the Forest Plan was never amended to reflect this designation, the area has been managed as an RNA and its values protected.

Scenery

The Forest Plan was developed utilizing the 1974 Visual Management System (VMS). A Visual Resource Management Implementation Plan for the Uinta National Forest was prepared as a supplement to the Forest Plan; however, the Forest Plan was never amended to incorporate this direction. Regardless, this inventory of Visual Quality Objectives (VQOs) and the comparative layer of the Visual Absorption Capability (VAC) has been use to provide scenery management direction for a number of proposed forest activities.

The Strawberry Valley Management Area Forest Plan Amendment established VQOs for the Strawberry Project lands. These VQOs have been amended once. The Strawberry Management Area has been managed in accordance with this direction, as amended.

The Forest Service is now in the process of replacing VMS with the 1995 Scenery Management System (SMS).

Wild and Scenic Rivers Inventory

In 1997 the Uinta National Forest, in consultation with other federal agencies, undertook an inventory to satisfy the provisions of the Wild and Scenic Rivers Act. As a result of this effort, four segments emerged as being free-flowing and possessing at least one outstandingly remarkable value, making them eligible for the National Wild and Scenic Rivers System. The four eligible river segments are: (1) the upper mile of the South Fork of American Fork River, (2) the upper 1.1 miles of the North Fork of Provo River, (3) the 2.6 miles of Little Provo Deer Creek including and directly downstream of Cascade Springs, and (4) the entire 7.8 miles of Fifth Water Creek. Since the 1997 inventory was completed, no management actions have been implemented or are being considered that would affect the free-flowing character or outstandingly remarkable value(s) of these four rivers.

Human Resources

The Uinta National Forest has never achieved the funding or staffing levels envisioned in the Forest Plan. It appears unlikely this will occur in the foreseeable future.

The Uinta National Forest shares several personnel with the Wasatch-Cache and Ashley National Forests, and the Forest Service's Geometronics Service Center in Salt Lake City. From 1992 throgh 1997, the Uinta averaged 75 permanent, full-time employees. In 1997, the Forest Service's

Intermountain Region established a personnel ceiling for the Forest of 114 Full Time Equivalents (FTEs). Actual FTEs have ranged from 90 in 1988 to 116 in 1993, with an average of 108.

The Uinta National Forest work force is supplemented by volunteers and Senior Community Service Employment (SCSEP) enrollees. The Forest consistently leads the region and nation in its volunteer program. From 1992-1997 the Forest averaged about 8,000 volunteers per year. These accomplished about $1,500,000 of work annually. In addition the Forest has hosted an average of 30 SCSEP enrollees per year over the last five years. This equates to about 15 person-years and a value of $300,000 per year.

A major source of non-appropriated funding for Forest activities is from grants and partnerships with State, other federal, and private organizations. Over the last 10 years, the value of projects accomplished in this manner has averaged about $500,000 per year.

Timber Supply and Demand

Since implementation of the 1984 Forest Plan, most sawtimber has been harvested on the Heber Ranger District. There have been a few sales on the Spanish Fork Ranger District to address insect and disease problems. The volume of timber offered for sale has averaged between 4 and 5 MMBF annually since the late 1980s. Market conditions have not changed substantially since 1984 when demand was listed at 6 MMBF per year. Purchasers continue to be locally owned, small, family-operated mills. Mill capacity for the four primary purchasers of Uinta National Forest sawtimber totals between 6 and 10 MMBF annually.

The 1984 Forest Plan severely overestimated fuelwood demand at 9 MMBF. Fuelwood demand has dropped substantially and over the last several years has ranged between 800 and 1,200 cords per year (0.4 to 0.6 MMBF). Supplies have been primarily provided by the Heber Ranger District through collection of dead and down material and utilization of logging debris. Currently, the fuelwood supply is limited by access, but is adequate to meet or slightly exceed demand.

Christmas tree permits have only been issued on the Heber Ranger District. Commercial Christmas tree sales are not offered on the Forest. Personal-use Christmas tree permits are offered; however, in 1992 the number was reduced from 3,000 to 1,500 per year. Demand for these remains extremely high and permits are sold-out within a few hours of going on sale.

Limited amounts of post and pole material exist on the Forest, however, most pole stands on the Uinta are of low quality for products, yet are highly valued for wildlife habitat. Consequently, all post and pole requests are referred to the Ashley and Wasatch-Cache National Forests.

Grazing Supply and Demand

Demand for forage for cattle on the Forest currently exceeds supply. The declining supply of lands suitable and available for grazing in Utah and within the market area, coupled with a slowly increasing demand for forage for cattle, will continue to result in a situation where demand exceeds supply. Implementation of any additional closures or restrictions on grazing on public lands could exacerbate this situation.

Current demand for forage for sheep is approximately at or somewhat less than the supply of forage available on the Forest, particularly along the Wasatch Front. The sheep industry is declining locally, statewide, and nationally. This is expected to result in a situation where the potential supply of forage available for sheep grazing on the Forest will meet, and possibly in the future, exceed demand. If additional closures or restrictions on grazing on public lands occur, this situation could change and the supply of forage may not be sufficient to meet demand.

Recreation Supply and Demand

The rapidly growing travel and tourism industry is vital to the economic well-being of the State. Recreation, travel, and tourism employment increased from 7.5 percent of the total in 1981 to 9.3 pecent of the total by 1995. Today, travel is a $3.8 billion industry in Utah. In 1996, the Uinta reported 4,623,000 Recreation Visitor Days (RVDs) of use, about 1,660,000 of which involved developed recreation. The current capacity of recreation developments on the Forest is approximately 3,155,600 RVDs. This includes campgrounds, picnic areas, boat ramps, organization camps, and recreation residents. More dispersed recreation facilities such as trail heads, information sites, and overlooks add an additional 1,591,400 RVDs. According to the Forest Plan, dispersed recreation capacity in 1984 was 3,070,000 RVDs.

After adjusting for the addition of Strawberry Reservoir, the Forest had a 1984 capacity of 22,096 PAOTs for all types of recreation developments. The current total capacity of the 173 recreation developments on the Forest is 28,475 PAOTs. This includes: 11,152 PAOTs at campgrounds; 2,229 PAOTs at picnic areas; 3,367 PAOTs at fishing access facilities; 3,250 PAOTs at boat ramps; 2,335 PAOTs at information and interpretive sites; 2,576 PAOTs at trail heads; 1,175 PAOTs at snow parking areas; and 1,140 PAOTs at organization camps.

In the Final Environmental Impact Statement (EIS) for the 1984 Forest Plan, desired future acreages of ROS classes were summarized. However, neither the Final EIS nor the Forest Plan specifically delineated what lands were allocated to specific ROS classes.

Approximately 44 percent of camping use occurs in developed campgrounds. Most of these campgrounds on the Forest are at or near capacity on holidays and holiday weekends. During the week, campgrounds average about 20 to 25 percent occupancy, and on non-holiday weekends, developed campgrounds are typically at 70 to 90 percent occupancy. Dispersed campsites are generally occupied during holidays, holiday weekends, and deer season. During the week and on off-peak weekends, only the most preferred dispersed camping spots are occupied.

There are no downhill ski areas on the Uinta National Forest. However, Snowbird Ski Area, on the Wasatch-Cache National Forest, is currently proposing expansion onto private lands in Mineral Basin on the Uinta.

Snowmobile use is an increasingly popular recreation pursuit. The Forest's capacity to meet this demand has increased significantly since 1984. In 1984 there were 25 miles of groomed trail and 2 parking lots; today there are over 119 miles of groomed trail and 9 parking areas. Despite this increase, snowmobile parking lots are usually full or overflowing on weekends with good weather.

During week days, these parking lots are often at 30 to 60 percent occupancy. The ability to remove snow in order to provide parking has been a limiting factor.

Cross-country and backcountry skiing are popular activities. Because winter parking and access is limited, many of these skiers share common parking areas and groomed trails with snowmobile users. The Forest is currently constructing four parking lots specifically for cross-country users in Strawberry Valley.

Reservoir, stream, and/or river fishing are very popular on the Forest. During weekends and holidays, angler densities near access sites for popular waters are fairly high, and parking areas are often full or near capacity. Fishing pressure is relatively light in streams in more remote areas.

Motor boating is also growing in popularity and some use occurs on Strawberry Reservoir. Most small lakes on the Forest are managed as non-motorized and most recreation boating, other than fishing, occurs off-forest.

Driving for pleasure and/or viewing scenery accounted for approximately 609,000 RVDs of use in 1984. By 1996, this use had grown to an estimated 1,002,000 RVDs. Since 1984, ownership of four-wheel drive sport utility vehicles and ATVs has increased dramatically. As a result, a greater percentage of the public is accessing and using primitive roads than did in 1984. This has effectively increased the opportunities on the Forest for driving for pleasure.

Much of the non-motorized recreation on the Forest occurs along the Forest trail system. On the Uinta, there are about 667 miles of trails, about 341 of which are open to both motorized and non-motorized recreation. The remaining 326 miles are open only to non-motorized uses. Approximately 71 miles of this are in wilderness areas. The Forest is currently involved in two trail systems expected to receive significant recreation use: the Bonneville Shoreline Trail and Great Western Trail.

There were no designated OHV parking lots or trails on the Uinta in 1984, although street legal OHVs were allowed to use forest roads. Currently, Phelps Brooks is the only designated OHV trail head on the Forest. Much of the OHV use is on forest roads and is not tied to the designated OHV trail head. Monitoring indicates OHV use continues to cause resource impacts.

WHERE DO WE GO FROM HERE?

Determining the Scope of the Forest Plan Revision

The regulations in 36 CFR 219.12(b) provide the following direction regarding the scope of the revision process: *"The Forest Supervisor shall determine the major public issues, management concerns, and resource use and development opportunities to be addressed in the planning process."*

The Forest initiated a four-step process to identify the needs for change in management direction on the Forest. The process included: (1) a review of monitoring items in Chapter IV of the Forest Plan; (2) a review of existing legislation, regulations and Forest Service Manual policy; (3) a review of management direction in the Forest Plan, and (4) an assessment of existing conditions.

A Forest Interdisciplinary Team compared the identified needs for change against the six decisions made in forest plans to determine which topics were planning related and which were project-level issues.

Public Involvement and Collaborative Planning

The authority for making forest plan decisions rests with designated federal officials, in this case, the Intermountain Regional Forester and Uinta National Forest Supervisor. These decision-makers are responsible for ensuring appropriate public participation and guaranteeing no group has undue influence or unfair access to the decision process. By law (Federal Advisory Committee Act of 1972 as amended), intergovernmental partners (tribal, state, federal, and local) have access to decision-makers to provide input and seek consensus in the development of forest plan direction. The law also controls how decision makers obtain advice from the public, but does not limit how the public may choose to give advice. To this end, the decision-makers and Planning Team members will:

- Be effective listeners,
- Meet with single individuals at their request,
- Speak to groups upon their invitation,
- Conduct public meetings open to all who are interested,
- Gather factual data from the public but not solicit advice,
- Seek input from intergovernmental partners, and
- Interact with the public via the mail (correspondence, comment periods).

The Uinta National Forest borders a portion of the Uintah and Ouray Ute Reservation and is in close proximity to the Skull Valley Goshute Reservation. Collaboration with these tribes will focus on respecting their sovereignty and rights, and developing meaningful relationships to understand and incorporate tribal cultural resources, needs, interests, and expectations.

Early and active involvement with government partners (federal, state, and county) by sharing ideas and strategies is needed. Collective support within and between governments is necessary, particularly before asking the public to invest time and energy into providing comments.

Setting the Context for the Revision

The Forest Plan is part of a 50-year framework for long-range resource planning established by the 1974 Forest and Rangeland Renewable Resources Planning Act (RPA). The Forest Service has conducted several internal reviews throughout the planning process to help set the context for forest plan revisions. This review of national, regional, and local findings provides the context in which forest planning occurs.

National Direction, Policy, and Strategy Review Findings

In accordance with the 1974 Forest and Rangeland Renewable RPA, the national RPA program provides a programmatic context and general strategic course the Forest Service is striving to attain for the years 1995-2045. The RPA program describes all Forest Service activities under its jurisdiction and identifies broad resource and program needs that respond to anticipated demands. It provides general guidance for forest planning, state assistance planning, and research planning. On March 2, 1998, Forest Service Chief Mike Dombeck unveiled the agency's Natural Resource Agenda for the 21st Century. The agenda focuses on four key areas:

- Watershed health and restoration
- Sustainable forest ecosystem management
- Forest roads
- Recreation

One of the primary forces affecting management of the Forest today is the shift in focus toward ecosystem management and sustainability. Ecosystems are places where all plants, animals, minerals, soils, waters, climates, people, and processes of life interact as a whole. They may be small, such as a rotting log, or large, such as a mountain range; smaller ecosystems are nested within larger ecosystems. The structure and function of a healthy ecosystem allow maintenance of a desired condition of biological diversity, biotic integrity, and ecological processes.

The goal of ecosystem management is to restore and/or sustain the health, productivity, and biological diversity of ecosystems. Social values and economic goals are included as an important part of all ecosystems. Ecosystem management focuses on overall ecosystem health and productivity rather than on achieving a set of resource outputs. This is achieved through an understanding of how different parts of the ecosystem function with each other.

Regional Direction, Policy, and Strategy Review Findings

The Uinta National Forest is an integral part of larger ecosystems. As part of the context for Uinta National Forest planning efforts, it is important to consider the findings and management strategies contained in these larger assessments and their application on the Forest.

- Utah Northern Goshawk Amendment, in progress
- Utah Wildland Fire Amendment, in progress
- Sub-Regional Assessment of Properly Functioning Conditions for Areas Encompassing the National Forests of Northern Utah, May 1998

Local Direction, Policy, and Strategy Review Findings

The Uinta National Forest is working to complete Landscape Assessments for the American Fork, Diamond Fork, and North Zone areas, and has completed assessments for the Strawberry, Vernon, and White River areas. Their scope was to review the interrelationships between the biological, social, and economic components of landscape; identify cause and effects associated with historical land uses; and describe the range of natural variability of these components. This data was then synthesized to identify the relative sustainability of each component and develop a desired future condition for each landscape.

Application of Ecosystem Management In Forest Planning

Forest planning determines standards and guidelines, goals and objectives affecting the health and productivity of the forest's ecosystems. Ecosystems and their needs must first be defined through a process of Properly Functioning Condition (PFC), which defines ecosystems at any temporal or spacial scale when they are dynamic and resilient to disturbances in structure, composition, and processes of their biological or physical components.

While there are important differences between ecosystem management and the way National Forest System lands have been managed in the past, we are still managing under the Multiple-Use, Sustained-Yield Act. We have, however, placed a greater emphasis on sustaining ecological processes as well as providing for a wide variety of goods, services, conditions, and values. The 1984 Forest Plan lacks the integrated, multi-scale focus on the principles of ecosystem management. The ecosystem management framework will establish limits, to some degree, as to what we will and will not be addressed in the Forest Plan revision. The framework will also have a big influence on how we define and describe Desired Future Conditions (DFCs).

Principles of Ecosystem Management

- Sustainability
- Goals
- Sound ecological models and understanding
- Complexity and connectedness
- Dynamic character of ecosystem
- Context and scale
- Humans as ecosystem components
- Adaptability and accountability

Steps Required to Implement Ecosystem Management.

- Delineate ecosystems
- Understand ecosystems' ecologies
- Make management choices
- Adapt management to new information

Proposed Revision Topics

The following topics are being considered for revision in the Forest Plan. Each need for change was placed into one of three categories: (1) appropriate for inclusion in the revision; (2) able to be postponed and addressed later through the continuous assessment process; or (3) not requiring attention.

Identified needs for change are addressed in the following sections, with a short description of what each change entails and why it is necessary.

1. **Topics Appropriate for Inclusion in the Forest Plan Revision:** The following topics will be included in the Forest Plan revision because law and/or regulation require them to be considered in all forest plan revisions.

    a. **Wild and Scenic Rivers:** The Wild and Scenic Rivers Act of 1968 was enacted to protect and preserve, in their free-flowing condition, certain selected rivers of the nation and their immediate environments. The Act established the National Wild and Scenic Rivers System (NWSRS), designated rivers included in the system, established policy for managing designated rivers, and prescribed a process for designating additional rivers to the system. The Act requires consideration of Wild and Scenic Rivers as part of the ongoing planning process. In 1997 the Uinta National Forest, in consultation with tribal governments and state and other federal agencies, undertook an inventory of the rivers on the Forest. Four segments were found to be free-flowing and in possession of at least one outstandingly remarkable value, making each eligible for designation. Until such time as a suitability determination and congressional designation can be made, the Forest Service must protect the values that made each stream eligible for NWSRS, and maintain the rivers' free-flowing character. The proposed action is to establish direction to provide interim protection for these four rivers and to defer decisions on NWSRS recommendations until these decisions can be made later through separate, more focused analyses.

    b. **Wilderness Recommendation From Existing Roadless Inventory:** Forest Service policy, the regulations in 36 CFR 219.17, and the 1984 Utah Wilderness Act require that roadless areas be evaluated and considered for recommendation as potential wilderness areas during the forest planning process. In 1997 the Forest began updating its inventory of roadless areas. A Draft Inventory of Unroaded and Undeveloped Lands on the Uinta National Forest was released for public review in April 1999, identifying 528,015 acres of roadless areas on the Uinta National Forest.

c. **Reevaluation of Lands Not Suited for Timber:** NFMA and its implementing regulations require identification of lands appropriate for timber management. Although monitoring has not identified a major need for change, the regulations require that lands identified as not suited for timber production be examined at least every 10 years to determine if they have become suited (36 CFR 219.12 (k)(4)(ii)). The revision process provides an opportunity to reassess and better define the lands deemed appropriate for timber management, and to account for changes in land status and uses having occurred in the past 10-15 years. The revision will also use more accurate technology (such as GIS data) that was not available during development of the original Forest Plan. The proposed action is to make any appropriate adjustments and better define the lands suited for timber production.

d. **Areas Where Change May Be Needed:** The topics in the following sections were included in the revision based on information found in monitoring reports, insight from Forest Service employees and their experience with the public regarding the effectiveness (or ineffectiveness) of the current Plan, requirements in Forest Service Handbooks and Manuals, and employment of new direction and policy.

The following topics will be included in the Forest Plan revision. Experience indicates that existing direction for the following topics is too limited or is inappropriate. Forest plan direction could be changed on a project by project basis through amendment; however, addressing these topics through the revision would eliminate the need for several future site-specific amendments and would facilitate achievement of other Forest Plan, ecosystem management, and Natural Resource Agenda goals.

e. **Revise the List of Timber Practices:** The Forest Plan identified the even-aged silvicultural system as the primary means of forest regeneration. While this may be appropriate for lodgepole pine and aspen, which develop an even-aged structure, many spruce/fir stands naturally develop an uneven-aged structure, and consequently, individual and group selection (instead of clearcutting) have been the preferred regeneration methods under an uneven-aged silvicultural system. The proposed action is to expand the array of silvicultural systems and harvest methods that may be used.

f. **Eliminate Game Retrieval Policy:** The current Forest Plan allows off-road and trail motorized vehicle use to retrieve legally taken big game animals. Monitoring has revealed that the practice often causes resource damage. The policy is inconsistent with other local national forests and other Uinta National Forest policies. Ghost roads are created that are difficult to control and that increase road densities. Limiting off-road motorized vehicle use to only game retrieval purposes is virtually impossible. The proposed action is to eliminate this provision.

g. **Expand Management Direction for Areas of Heavy Dispersed Recreation Use:** Dispersed recreation use on the Forest has increased significantly over the last several years, and this is expected to continue in the future. This use is resulting in resource damage and conflicts in some areas. The proposed action is to develop Limits of Acceptable Change (LAC) guidelines for determining unacceptable impacts to resources,

and to use Meaningful Measures (another set of criteria developed by the Forest Service) for defining recreation management objectives. Meaningful Measures blends both quantitative and qualitative aspects of recreation and will be more useful in budgeting and monitoring than were the reports previously used.

h. **Revise Fuelwood Harvest Levels:** The 1984 Forest Plan projected an annual fuelwood program of 18,000 cords (equivalent to 9 million board feet (MMBF)). Although there has been little interest in commercial fuelwood, the Forest has maintained a personal-use fuelwood program. Current annual demand is about 1,000 cords (equivalent to 0.5 MMBF). The proposed action is to revise the objective for fuelwood harvest to more closely reflect demand.

i. **Update/Revise Management Indicator Species (MIS):** The regulations in 36 CFR 219.19 require identification and monitoring of MIS to indicate the effects of management activities on fish and wildlife. A list of MIS were identified in the 1984 Forest Plan, and was subsequently amended in 1993. Experience with these MIS indicates additional refinements may be needed. Some of the species listed are difficult to monitor accurately, and/or their population trends may be affected by things other than forest management. The proposed action is to change the list of MIS.

j. **Eliminate Emphasis On Adding Developed Recreation Capacity:** The 1984 Forest Plan placed an emphasis on the construction of additional recreational facilities to accommodate an expected increase in demand. Since the Plan was written, inadequate funding and limited personnel have restricted both new construction and the expansion of existing facilities. As this trend is expected to continue, the proposed action is to change the focus in the Plan to managing existing facilities to increase utilization, and to provide for reconstruction when necessary.

k. **Remove Post and Pole Harvest Objectives:** Forest Plan timber objectives include providing posts and poles to the public as a service. While limited post and pole opportunities do exist on the Uinta National Forest, these stands are valuable for wildlife, with most requests referred to the Ashley and Wasatch-Cache National Forests. The proposed action is to remove post and pole harvest objectives from the Forest Plan.

In addition to the topics previously listed, the following topics will be included in the revision. Experience has shown the lack of specificity or direction in the following areas has severely hampered implementation of the Forest Plan. Addressing these topics, while not required, would provide the over-arching framework needed to effectively implement the Forest Plan.

l. **Refine Management Area Boundaries:** To implement the Forest Plan, ecosystem boundaries must be delineated. The present management areas are less useful than they could be given the current understanding of ecosystems from both a social and biological standpoint. The seven current management areas range in size from 56,775 to 290,925 acres and are not easily recognized as distinct places. They are not directly related to ecological units such as watersheds, and their usefulness in examining actions and their

effects is limited. The proposed action is to redefine management area boundaries, generally using watersheds as revised management areas.

m. **Define Management Prescription Categories:** A management prescription category is a set of management practices and intensities scheduled for application on a specific area. Management choices must be made in determining management prescription categories, as these in turn determine the direction for specific areas based on the resource emphasis. Once management areas are defined and potential Desired Future Conditions (DFCs) for those areas are identified, management prescription categories will be used to describe what is and is not allowed in a given area. With some exceptions, the current Forest Plan does not clearly identify the management prescription for any specific area. The proposed action is to identify the management prescription category applicable to each specific area of the Forest.

n. **Identify Desired Future Conditions (DFCs) For All Ecosystems:** DFCs describe the land, resources, or social and economic conditions that are expected in 50-100 years if objectives are achieved. It is a vision of the long-term conditions of the land. The current Forest Plan describes a DFC for each management area; however, these are often vague and/or do not address all components of the ecosystem. Failure to adequately describe the DFC results in a high degree of uncertainty as to what management actions were intended and needed. The proposed action is to develop, for each management area, DFCs addressing all affected ecosystems.

o. **Identify Desired Recreation Environments Using the Recreation Opportunity Spectrum (ROS):** The ROS allocation in the 1984 Forest Plan is incomplete and is not being utilized as intended. The Forest Plan references locations and acreages, but includes no map. ROS can be used together with Limits of Acceptable Change (LAC) to define capacity and establish standards and guidelines, particularly for wilderness and many types of dispersed recreation. ROS can be incorporated into the description of the DFC as a useful tool for allocating and separating conflicting or competing uses. Establishing ROS will facilitate travel management planning, which strongly influences the supply of opportunity for various activities. The proposed action is to identify the ROS allocation for each area of the Forest and to incorporate ROS into the descriptions of DFC.

p. **Identify Desired Scenery Management Objectives:** The visual quality objectives in the 1984 Forest Plan are incomplete and outdated. The 1974 Visual Management System used in the 1984 Forest Plan was replaced in 1995 with the Scenery Management System (SMS). The SMS process can assist in the establishment of overall resource goals and objectives to monitor the scenic resource and ensure high quality scenery for future generations. However, fully implementing SMS would not be practical during revision, given the revision schedule and available staffing and funding. The proposed action is to identify desired scenery management conditions across the Forest, and initiate implementation of the SMS.

q. **Delineate Areas Suitable For Domestic Livestock Grazing:** The Forest Plan addresses suitability of lands for domestic livestock grazing, but discusses capability and suitability in terms of animal unit months of forage rather than acres. This makes comparison between the current Plan and current conditions difficult. Some large tracts of land, including the Strawberry Project Lands, have been added to the Forest since the suitability analysis was completed. These areas were grazed for many years prior to their transfer to the Forest Service, and the Forest annually receives some requests to restore grazing on these lands. In addition, two domestic sheep allotments on Mount Timpanogos were identified as suited for grazing in the 1984 Forest Plan. These allotments are currently vacant and adjoin a proposed bighorn sheep reintroduction site. The Strawberry Project Lands and these two vacant allotments are part of important watersheds, provide valuable wildlife habitat, and support heavy recreation use. The proposed action is to delineate the areas of the Forest suited for domestic livestock grazing using acres instead of animal unit months, identifying the Strawberry Project Lands and lands within the two allotments on Mount Timpanogos as not suited for domestic livestock grazing.

r. **Establish Direction For Managing Cave Resources:** Since the Forest Plan was written, the Federal Cave Management Act of 1988 was implemented. As the Forest Plan provides no direction for managing cave resources, the proposed action is to develop direction for accessing and managing cave resources on the Forest.

Addressing the following topics in the Forest Plan revision would simplify and clarify the intent of the Forest Plan without requiring significant resource expenditures. Consequently, these topics will be addressed in the Forest Plan revision.

s. **Remove Administrative or Procedural Direction:** The proposed action is to remove information that is not related to land and resource management planning or to one of the six decisions made in forest plans, or that is redundant. Such information can be found in Forest Service Handbooks or Manuals or other reference materials.

t. **Correct Typographical and Description Errors:** The proposed action is to make editorial corrections, clarifications, and updates in order to present an accurate and more professional document.

u. **Correct and Clarify Direction for 3-Pasture Rest Rotation:** The proposed action is to reword an existing standard and guideline to identify the 3-pasture rest rotation as one of several recognized livestock management strategies, instead of it being the only management option.

v. **Clarification of Existing Minerals Goals and Objectives:** Current direction does not specify if goals and objectives for minerals management refer to leasable or common variety minerals. Management of these minerals is governed by different laws and regulations. The proposed action is to refine the existing management direction to be more specific as to the type of mineral resource concerned.

w. Incorporate Best Management Practices (BMPs) and Air Quality Standards: The Utah Department of Environmental Quality has been working in cooperation with the Forest Service and other state and federal agencies to develop a set of BMPs as part of a statewide Non-point Source Management Plan for Silvicultural Activities. This plan, which will be adopted by the national forests in Utah, provides a set of standard management practices to reduce non-point source pollution from silvicultural activities.

Air quality and visibility are a national concerns, goals, and priorities. The proposed action is to add direction to the Forest Plan to address these issues.

x. Remove Direction for Afforestation of Oak Woodlands: Ecosystem management implies managing wildlands using vegetation native to the site. Past afforestation practices on the Uinta have included the planting of tree species on oak sites where such species would not have otherwise established. These plantings have sometimes done well for a number of years, but many have then exhibited a rapid decline. These plantings also have the potential to replace the vegetation natural to the site. Current thinking on ecosystem management is to manage wildlands using vegetation native to the site. The proposed action is to eliminate direction in the current Plan calling for afforestation of oak woodlands.

y. Elimination of Numerical Objectives and Implementation Schedules: Many of the objectives and schedules in the existing Plan are not required, are quickly out-of-date, and have lead to frequent confusion. The proposed action is to eliminate those that are not required by law or regulation.

z. Update Property Management Goals and Terminology: Right-of-Way and Land Adjustment Plans for the Forest have been updated since the 1984 Forest Plan was completed. The proposed action is to incorporate goals and objectives from these in the revised Forest Plan.

aa. Remove Direction Allowing Horse Use During Hunting Season in All Developed Sites: The Forest Plan allowed for this practice for the period of 1980-90, with no direction following that period. The Forest has not continued this practice outside of the designated time frame. The proposed action is to remove this direction.

bb. Identify the Jumpoff Point Research Natural Area (RNA) and Establish Management Direction for It: In 1987, the Chief of the Forest Service signed an Establishment Report designating the Jumpoff Point Research Natural Area (RNA). The Jumpoff Point RNA was designated after the completion of the Forest Plan, and no amendment was completed at the time of establishment. The proposed action is to map this 290 acre area as a unique management prescription category and to develop appropriate management direction.

cc. Identify Standards Versus Guidelines: Standards are not currently distinguished from guidelines. Standards are direction which must be followed; guidelines are direction which generally should be followed. The propoed action is to identify which

management direction are standards and which are guidelines. This will clarify the intent of the Forest Plan and eliminate unnecessary site-specific amendments in implementation.

dd. Revise/Correct the Section Describing Amendment of the Forest Plan: The Forest Plan implies amendments may be needed when the list of projects proposed in the Forest Plan must be altered. A Forest Plan defines programmatic actions and does not make project decisions. The proposed action is to revise this section to state that amendment is needed when one of the six decisions made in the Forest Plan must be adjusted.

ee. Eliminate Redundant Monitoring Requirements: Currently, the Forest Plan requires monitoring of items pertaining to individual resource areas. This has lead to overlapping and redundant monitoring of items such as riparian habitat and water quality. The proposed action is to eliminate redundant and overlapping monitoring.

ff. Correct the Monitoring Frequency for Timber Suitability: Current direction requires suitability determination and monitoring to be completed every 10 years. The Forest Plan erroneously states it is to be completed every year. The proposed action is to correct this error.

gg. Update Acreages and Other "Current Situation" Data: Numerous changes in the environment have occurred since this section was prepared in 1984. The proposed action is to update this section to reflect changes that have occurred.

hh. Use People At One Time (PAOTs) Instead of Recreation Visitor Days (RVDs) for Developed Recreation Supply Objectives: PAOTs are commonly used to define capacity; RVDs are used to define use. The Forest Plan uses RVDs for both. Using PAOTs to define capacity is more accurate. The proposed action is to revise objectives for developed recreation capacity using PAOTs rather than RVDs.

2. Topics Not Addressed in the Forest Plan Revision But To Be Addressed Through Continuous Assessment and Planning (CAP): The following topics are areas where existing management direction needs to be clarified, refined, or changed. These topics will not be addressed in the Forest Plan revision, but will be addressed through project or Forest Plan amendments. Addressing these topics in the Forest Plan revision would likely require significant and unavailable resources, given time and funding limitations. These are topics where implementation can usually proceed and be consistent with existing Forest Plan direction (only occasional site-specific amendments to Forest Plan direction may be needed to allow implementation to proceed).

a. Refinement of grazing standards for stream channel types
b. Management direction for non-greenline conditions in streamside management zones
c. Species-specific conservation measures for threatened, endangered, or sensitive species

There is a need for management decisions on the following topics, to the extent they involve Forest Service discretionary decisions. More thorough, detailed analysis and consideration of

these topics and related issues would occur if they were analyzed through localized, site-specific analyses conducted outside of the revision process.

- **d.** Wild and Scenic River suitability determinations (Little Provo Deer Creek, North Fork of the American Fork River, South Fork of the Provo River, and Fifth Water)
- **e.** Wildlife reintroductions
- **f.** Non-conforming uses in wilderness areas
- **g.** Energy corridors

3. **Topics Where No Change Is Proposed:** The following topics would not be addressed through the Forest Plan revision, except to the extent they are directly impacted by other revision topics being addressed. These topics cover areas where the Forest Plan provides management direction that some may want changed, but which otherwise appears to be adequate (and therefore, not a need for change).

- **a.** Western Uinta Basin Oil and Gas leasing decisions
- **b.** General intent of DFCs established through the Rangeland Ecosystem Amendment
- **c.** Predator control direction established through the Predator Control EIS
- **d.** Direction to harvest timber only where needed for forest health or other resource objectives
- **e.** Identification of recreation residences
- **f.** Direction established through the ongoing Utah Fire Amendment
- **g.** Direction established through the ongoing Utah Goshawk Amendment

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