



United States  
Department  
of Agriculture



Forest Service

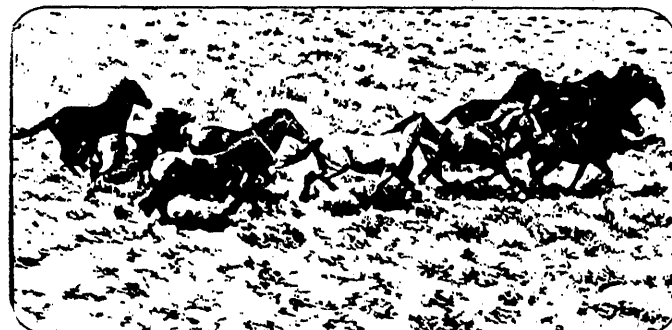
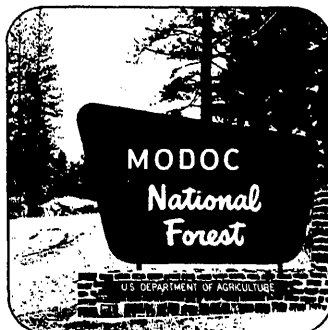
## Modoc National Forest

# Record of Decision

Pacific Southwest Region

1991

## Land and Resource Management Plan



# **RECORD OF DECISION - USDA FOREST SERVICE**

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## **Final Environmental Impact Statement**

### **Modoc National Forest**

### **Land and Resource Management Plan**

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## **Final Environmental Impact Statement**

### **Modoc National Forest**

### **Land and Resource Management Plan**

**Lassen, Modoc, and Siskiyou Counties, California**

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#### **I. Decision**

It is my decision to adopt the Preferred Alternative as presented in the FEIS and Land and Resource Management Plan (Forest Plan) for the Modoc National Forest (the Modoc). This specifically includes:

- The Forest multiple-use goals and objectives identified in Sections B and C of Chapter 4 of the Forest Plan.
- The Forest standards and guidelines and management prescriptions identified in Sections D and E of the Forest Plan.
- The designation of 519,000 acres of land suitable for timber production (Appendix D of the Forest Plan).
- The allowable sale quantity (ASQ) of 45.5 million board-feet (MMBF) of timber per year which includes 9.0 MMBF of timber in the Big Valley Federal Sustained Yield Unit.
- The monitoring and evaluation requirements displayed in Chapter 5 of the Forest Plan.

The Preferred Alternative will provide management direction on the Modoc over the next ten to fifteen years. The Preferred Alternative was developed in response to public comment to the draft Environmental Impact Statement (DEIS) and draft Forest Plan and is described in detail in the final Environmental Impact Statement (FEIS) and Forest Plan. Over the past ten years, the Modoc has completed a detailed study of its lands, resources, and social and economic interests. Six alternatives were analyzed in the DEIS and, based on the

public's response, three were modified, resulting in the six management alternatives analyzed in the FEIS for the Modoc's Land and Resource Management Plan.

As a long-range strategy for managing the Modoc National Forest, the Forest Plan and accompanying FEIS are programmatic in nature. That is, the documents do not outline project-level decisions or site-specific environmental analyses. These decisions will be made using Forest Plan management direction, and following appropriate NEPA analysis. The Forest Plan provides management direction to produce goods, services, and uses in a way that maximizes long-term net public benefits. It describes a broad management program, but not the individual activities that will carry out that program. It is not a plan for day-to-day administrative activities of the Forest; it does not address such matters as equipment management or work force organization.

The goals and objectives in the Forest Plan can be achieved from a physical, biological, economic, social and legal perspective. It is not, however, certain that they will all be accomplished for two reasons. First, outputs specified in the Plan are estimates and projections based on the available inventory and assumptions. As new data is obtained, and assumptions monitored, original estimates may also change. Second, all activities may be affected by annual Forest budgets. Budget allocations may cause projects to be rescheduled. If actual budgets are significantly different from those projected over a period of several years, the Forest Plan may have to be amended and, consequently, would reflect different outputs and environmental conditions. This will be determined as the Forest Plan is implemented and monitored. Regardless of budgets, resource protection will be the first priority.

This Record of Decision summarizes the principal management objectives of the Forest Plan and the rationale for my decision.

## **II. Major Provisions of the Modoc Land and Resource Management Plan**

The Forest Plan protects and enhances the environmental, recreational, and wildlife benefits provided by the Modoc while maintaining approximately the same level of livestock use and about an 18% reduction in timber offered for sale from that which has occurred annually over the last 10 years. The Forest Plan is responsive to the "Environmental Agenda for the National Forests in California" issued in February, 1990. Described below are the major provisions of this Forest Plan in relation to the Preservation, Biodiversity, and Sustainable Development for People objectives that are the essence of the Environmental Agenda.

### **A. Preservation**

Preservation refers to land that is managed primarily to preserve unique ecosystems, species of fish, wildlife and plants, and wild and scenic characteristics for the indefinite future. The following specific actions are taken to ensure the preservation objective.

#### **Wilderness**

The Forest Plan will continue to manage the 70,385 acres of the South Warner Wilderness to preserve the unique ecosystems and other wilderness values of this area. A Wilderness Management Plan will be developed and implemented for the South Warner Wilderness subsequent to the release of the Forest Plan.

#### **Research Natural Areas**

The Forest will continue to manage the 800-acre Devil's Garden Research Natural Area(RNA). The Forest Plan also recommends the designation of Raider Basin as an RNA. This 6,481-acre basin in the South Warner Wilderness is largely undisturbed by fire, grazing, or logging. Designation of this area will complement the National RNA system. The Chief of the Forest Service makes the decision whether to designate Research Natural Areas.

#### **Special Interest Areas**

The Forest has three approved geological Special Interest Areas (SIAs): Burnt Lava Flow, Medicine Lake Glass Flow and Glass Mountain Glass Flow. The Forest Plan recommends nominating the Burnt Lava Flow and Medicine Lake Glass Flow SIAs to the National Natural Landmark (NNL) program administered by the National Park Service. The Glass Mountain Glass Flow is not recommended for NNL status due to existing mining claims which would conflict with NNL objectives. The Forest Plan also recommends evaluating Dismal Swamp in the north Warner Mountains as a botanical SIA. This meadow/marsh/riparian forest complex boasts an assemblage of riparian plant communities unique to California. It is described in Appendix N of the FEIS.

The Forest will also evaluate seven cultural resource sites for SIA recommendation subsequent to the release of the Forest Plan. The authority to establish SIAs rests with the Regional Forester, who will make that decision after reviewing the Forest's recommendations and analysis. These sites Anklin Village Archaeological Site, Black Cow Spring, Cuppy Cave, Mildred Ann Archaeological Site, Seven Mile Flat Site, Skull Ridge and Skull Spring are also described in Appendix N of the FEIS. Activities within SIAs are designed to preserve these areas and the attributes that make them special. Specific direction for currently designated areas is displayed in Management Prescription 8, Special Areas Management Prescription.

#### **Wild and Scenic Rivers**

Based on public comment on the draft Forest Plan, the Modoc conducted a comprehensive stream inventory to review Wild and Scenic River status for the rivers on the Forest. The study team reviewed all rivers on the Forest and determined that seventeen have high resource values meriting detailed review. The Forest interdisciplinary team (ID team) evaluated these 17 streams and determined two, Willow and Boles Creek, are eligible for Wild and Scenic River designation because they possess one or more outstandingly remarkable values. Suitability and classification will be assessed through studies to be completed within three years of the Forest Plan's release.

#### **Roadless Areas/Semi-Primitive Non-Motorized**

Nineteen roadless areas totalling 201,600 acres, identified by the 1979 Road Areas Review and Evaluation, were released for other multiple uses by the California Wilderness Act of 1984. Approximately 59,440 acres of the 201,600 acres are assigned to Management Prescription 4, Semi-Primitive Non-motorized Management

(SPNM). Appendix E contains maps and descriptions of Forest roadless areas. The SPNM prescription will be applied to 23,013 acres of timberlands (See ROS Map for locations). Management by this prescription will retain the values necessary to meet the preservation objective while still providing options to meet the other two objectives of the environmental agenda.

#### Visual Resources

The Forest Plan manages 31,127 acres of timberlands to preserve visual qualities. These lands are managed under Management Prescription 7, Visual Retention Management. Management by this prescription will retain the values necessary to meet the preservation objective while still providing options to meet the sustainable development for people and biodiversity objectives of the environmental agenda. Activities such as timber harvesting, range management and minerals development are managed to meet the objectives of the visual retention management prescription.

#### Water Quality/Riparian Values

The Forest Plan emphasizes preserving and improving water quality by applying best management practices identified in Appendix N of the Forest Plan, and through watershed restoration projects on 260 acres per year. As shown in Chapter 2 of the EIS, this represents a substantial increase from the negligible accomplishments displayed for the 1982 base year. Riparian areas will be managed by the direction in Management Prescription 17, Riparian Area Management. Management by this prescription will retain the values necessary to meet the preservation objective while still providing options to meet the other two objectives of the environmental agenda. This includes timber harvesting, range management, minerals development, and wildlife and fish habitat improvement modified to meet the objectives of the management prescription.

#### Soils

The Forest Plan expands current management direction to preserve soil productivity by improved standards for compaction, soil porosity, and large woody debris.

#### Fire and Fuels Management

A key to preserving national forests is the appropriate management of wildfire and fuels. The Forest will manage fire at the most efficient level, balancing the costs of fire suppression, pre-suppression, fuels management and the potential values lost.

#### Air Quality

The Forest Plan provides standards and guidelines to maintain air quality.

#### Sensitive Plants

Ten sensitive plant species are known or thought to grow on the Modoc. The Forest Plan provides for sensitive plant inventories to precede all site-specific projects. In the event that a sensitive plant species is found, the Forest Plan directs that activities will be managed so that viable populations of the plant species are maintained.

#### Wildlife

The Modoc provides habitat for six threatened and endangered species: bald eagle, peregrine falcon, Modoc sucker, Lost River sucker, shortnose sucker, and northern spotted owl.

Until 1989, only one spotted owl was documented on the Forest, in the Warner Mountains. In 1989, portions of the Big Valley, Doublehead and Warner Mountain Ranger Districts were extensively surveyed for spotted owls.

Spotted owls have been documented on the Doublehead Ranger District near the Medicine Lake Highlands. The owls documented are believed to be the northern subspecies. The northern subspecies is federally listed as threatened, while the California spotted owl is not federally listed.

In the past three years, responses were heard on 15 occasions: on four of those occasions, pairs were suspected. No nest sites were located, and the birds could not be found during daytime surveys. No birds were found on the Big Valley or Warner Mountain Districts.

Habitats on the Modoc National Forest are considered marginal for northern spotted owls because of natural fragmentation of habitats and historically intensive timber management. Further, the Modoc is on the eastern fringe of the northern subspecies' known distribution. Considering these two factors, it is reasonable to expect that the birds encountered on the Modoc are probably extensions of the population found on the adjacent Klamath and Shasta-Trinity National Forests. No information exists to indicate that the birds encountered on the Modoc are permanent or nesting residents. However, their presence indicates that the Medicine Lake Highlands may have habitat with potential to support nesting birds.

The Forest Plan provides direction to continue surveying habitats where owls responded in 1989-1991, and to expand those surveys into areas planned for timber harvest activities. When the presence of northern spotted owls is verified, Category 3 Habitat Conservation Areas will be proposed and managed in a manner not inconsistent with *A Conservation Strategy for the Northern Spotted Owl* (p. 324, Appendix Q). The Forest will continue to consult and confer with the U.S. Fish and Wildlife Service on a project-by-project basis. We will mitigate potential impacts to the northern spotted owl by modifying or deferring timber harvest activities.

The Forest will cooperate with the U.S. Fish and Wildlife Service and the California Department of Fish and Game to maintain habitat for the bald eagle, peregrine falcon, Modoc sucker, Lost River sucker and shortnose sucker. We will develop and implement recovery plans for the Forest's contribution toward eventual removal of these species from federal listing. The Forest Plan manages 52,111 acres under Management Prescription 9—Raptor Management Prescription—to promote the recovery of bald eagle.

## **B. Biodiversity**

Maintaining the biodiversity of ecosystems, including the diversity of plants, fish, and wildlife and the age diversity of habitats, is a primary objective. Biodiversity will be maintained by the implementation of the management direction in Chapter 4 of the Forest Plan. Following are the key provisions.

### **Seral Stage Diversity**

The Modoc will maintain a diversity of age groups that represent the successional stages, commonly referred to as seral stages, between newly started stands to old growth and late seral stage stands. The Forest will maintain 5% of each seral stage, with the 22 management areas on the Forest serving as the control for acreage. The Forest projects an overall decline for old growth below 5% in eastside pine. In management areas with a deficiency, the Forest will dedicate current old growth and designate suitable stands to grow into old growth. As displayed in Chapter 4 of the FEIS, the 5% old-growth requirement should be met by the 7th decade. When all species are considered, the Forest-wide average will be above 5% for all time periods.

### **Vegetation Diversity**

Besides seral stage diversity, the Forest will manage for a diversity of vegetation types. The Forest Plan provides guidelines to reforest with tree species that reflect natural diversity and maintain other woodland species such as black oak and aspen.

### **Viable Populations**

The Forest Plan provides standards and guidelines to assure that viable populations are maintained for more than 350 species of fish and wildlife and a variety of plant species on the Forest. Besides the seral stage and vegetation diversity described above, the Forest Plan provides for managing snags, dead and down materials, and developing territories for certain management indicator species (MIS), such as marten and pileated woodpeckers. A discussion of MIS begins on page 3-97 of the FEIS accompanying the Forest Plan. This Record of Decision further discusses MIS in the Viable Populations/Plant and Animal Diversity section (p. 12).

### **Reintroductions**

The Forest will restore the richness of species by reintroducing peregrine falcon and bighorn sheep on the Forest. The peregrine falcon will be reintroduced based on the Pacific Coast American Peregrine Falcon Recovery Plan as applicable to the Modoc. The bighorn sheep reintroduction will follow criteria set in California Bighorn Sheep Recovery Guidelines for Northeastern California.

## **C. Sustainable Development for People**

The Forest Plan provides natural resources to meet the needs of the American people. The level of production projected by the Forest Plan for timber, livestock, minerals, water, recreation and special uses is set at the highest sustainable level possible that is compatible with the preservation and biodiversity objectives. Following are the major provisions of the Forest Plan for achieving this objective.

### **Timber**

The first decade average annual allowable sale quantity (ASQ) will be 45.5 million board feet (MMBF). This will be an 18% reduction from the 55.6 MMBF average annual timber offerings for the time period 1980-1989. This reduction is necessary to meet the preservation and biodiversity objectives discussed above. The Forest ASQ includes the ASQ for the Big Valley Sustained-Yield Unit (BVSU) which will be 9.0 MMBF. This is a 33%

reduction in harvest from the prior ASQ of 13.5 MMBF. According to the BVSU policy, a 20% reduction in ASQ triggers the requirement for an advisory hearing for all interested parties to express themselves on the advantages and disadvantages of continuing the BVSU (policy is included in Appendix R of the Forest Plan). The policy for the BVSU is approved by the Chief of the Forest Service. This advisory hearing will be held within 60 days of the release of this ROD. Based on the testimony at this hearing, the final recommendation and policy will be sent to the Chief for approval.

Timber is estimated to be harvested on about 8,040 acres per year (Table 4-3 of the Forest Plan). This includes 3,740 acres of regeneration harvest, 200 acres of commercial thinning, 1,900 acres of sanitation salvage (will only occur on lands meeting snag standards), and 2,200 acres of harvest from lands allocated to the Visual Retention, Riparian and Timber Management on Low Productivity (< 20 lands) prescriptions. Silvicultural practices used on these lands will be selected on a site-specific basis and will emphasize objectives of the prescription (Visual Retention, Riparian, and Timber Management on Low-Productivity Lands). The volume harvested from the 2,200 acres is considered a non-interchangeable component of the ASQ. This volume cannot be substituted for the ASQ from other lands. The majority of this volume is from the < 20 lands.

Timber stands will be managed two ways on the Modoc National Forest—even-aged and uneven-aged management. In determining the appropriate silvicultural systems, I considered several factors. These considerations are explained in more detail on page 11 of this document (see *Silvicultural Practices*).

After considering these factors, the Modoc has identified 17,114 acres in four timber planning compartments to be managed primarily using uneven-aged practices. On the remaining acres, the Forest will use a mix of silvicultural practices based on a site-specific silvicultural examination, an on-the ground-analysis of the area, and a site-specific prescription. The prescription will provide details of the selected silvicultural system.

The term *clearcutting* describes several cutting practices: removing all trees; cutting all but residual trees; or cutting to create regeneration mosaics by retaining young conifers, hardwoods, snags and down logs. The final decision to apply silvicultural prescriptions will be made only after site-specific analysis is done at the project level.

The Forest will remove all trees only where no practical alternatives exist. For example, complete tree removal may still be necessary to control diseases such as dwarf mistletoe and certain root diseases.

The Forest will apply clearcutting while maintaining residual trees only when optimum for achieving management objectives—including landscape conditions such as biodiversity and sustained productivity.

Most clearcuts will produce regeneration mosaics that will retain young conifers, hardwoods, snags and down logs to meet diversity, wildlife, and soil objectives. These mosaics will result in regenerated stands of timber that are currently poorly stocked. About 60% of the timber stands on the Modoc are currently in poorly stocked condition.

I estimate that the Forest will apply clearcutting that retains young conifers, hardwoods, snags and downed logs to 80% of the acres regenerated. I estimate that all three kinds of clearcut prescriptions will be applied on approximately 3,000 acres annually, while shelterwood prescriptions will be applied on approximately 300 acres annually. Selection prescriptions are estimated at 300-400 acres annually. Again, these acreages are estimates. Final decisions on silvicultural prescriptions will be made after site-specific analyses. Clearcutting to remove all trees may be used *only* where no practical alternatives exist.

Tree planting will remain the primary reforestation practice in clearcuts and regeneration mosaics. Retaining small groups of existing young trees will supplement tree planting. The Forest Plan estimates that 3,400 acres of reforestation and 5,400 acres of stand improvements (thinning and release) will be accomplished annually during the first decade. In shelterwood areas and in areas planned for uneven-aged management, regeneration by natural seeding is the desired method of reforestation. Supplemental planting will be done if necessary.

### Livestock Grazing

The Forest Plan will provide an estimated 118,800 animal unit months (AUMs) for livestock grazing in the first decade. This is a projected 3% reduction from the current permitted use level of 122,500 AUMs. Actual use levels will be determined during site-specific allotment management planning. The Forest Plan incorporates goals to develop and revise allotment management plans so that permitted grazing and forage capacity are balanced by the year 2000. Forage availability will be reduced as a result of loss in transitory forage, increased forage available for deer, and site-specific adjustments in timing or duration of livestock use that may be needed to implement riparian management objectives or to improve range ecological condition. Forage production will

be increased through 6,800 acres of nonstructural range improvements, such as prescribed burning, and by maintaining 22,000 acres of seedings.

#### **Wildlife and Fish Use**

The Forest Plan projects increases in both consumptive and non-consumptive use of wildlife and fish. This is in part due to the increased forage made available to meet State deer herd goals but also is influenced by the non-game and wetlands improvements planned by the Forest.

#### **Recreation Use**

The Forest Plan projects increased recreation use for both developed and dispersed recreation. The Forest will expand or construct new developed sites where use is high. The Forest will construct 57 miles of new trails and reconstruct 40 miles of trails in the first decade. The Forest will continue managing the Highgrade and Blue Lake National Recreational Trails. The Forest trails program is detailed in Appendix L of the Forest Plan. The Forest will manage about 78,000 acres outside the Wilderness to maintain a semi-primitive non-motorized recreation experience. Eighty-seven percent of the Forest remains open to off-highway vehicle (OHV) use, although seasonal restrictions may apply in some areas. OHV use is managed in accordance with the direction in the Forest Plan. A new, more detailed OHV plan will be developed with public involvement during implementation of the Forest Plan.

#### **Minerals**

The Forest Plan encourages exploration and development of mineral resources, subject to valid existing rights and withdrawals. The Forest Plan contains direction for responding to mineral development proposals in a manner that facilitates development while minimizing adverse effects to surface resources. The Forest Plan requires that all mineral developments have a reclamation plan for rehabilitation of surface and vegetation resources. The Forest has identified lands withdrawn from mineral entry in Appendix H of the FEIS. Stipulations for mineral leasing activities, identified in Appendix I of the Forest Plan, will be applied on a site-specific basis for future lease applications. Future lease applications will require additional NEPA analysis and will be consistent with the management direction displayed in Chapters 4 and 5 of the Forest Plan.

#### **Land Uses**

The Forest will aid in sustainable development by making land available for the use of utility corridors, electronics sites and other appropriate lands uses. Appendix U of the Forest Plan lists the designated electronic sites. The Forest Plan contains direction for responding to land use proposals while minimizing adverse effects to Forest resources.

### **III. Alternatives Considered**

#### **A. Description of the Modoc National Forest**

Located in the northeastern corner of California, the Modoc National Forest is bordered by the Winema and Fremont National Forests to the north and the Nevada desert to the east. The Shasta-Trinity and Klamath National Forests neighbor to the west while the Lassen National Forest lies to the south. The most remote Forest in California, the Modoc is about 355 miles from San Francisco, 300 miles from Sacramento, 140 miles from Redding, California, 180 miles from Reno, Nevada, and 100 miles from Klamath Falls, Oregon.

The primary zone of influence for the Modoc National Forest includes Modoc, Lassen, and portions of Siskiyou Counties and is characterized by a rural setting dominated by National Forest System lands, low population densities, and limited job diversity centered around agriculture, the timber industry and recreation. The Forest's extended zone of influence includes urban centers throughout California, southern Oregon, and western Nevada. Users from this zone are primarily hunters, recreationists and commercial firewood cutters.

The combination of limited employment diversity and large acreages held in National Forest System lands make management of Forest resources an important issue to the local population in terms of economic and social impacts.

The Forest encompasses 1,651,630 acres. Approximately 40% of the Forest is covered with commercial timberlands, primarily eastside pine and mixed conifer stands. The remaining 60% is non-forested or forested lands not capable of producing commercial timber. The Forest is relatively arid with an average precipitation of approximately 12 inches.

Historically, the major program areas on the Forest have been livestock grazing, timber management, fire and wildlife. The Forest has the highest AUM production in Region 5. The Forest's timber harvest program is one of



the smallest in the Region but consists primarily of very high value eastside pine species. The Forest has one of the highest average annual burned acre totals in the Region. Deer herds on the Forest are some of the largest in the State and are a major hunting attraction. The Forest wetlands program has received national attention and is considered to be a critical part of the wetlands habitat on the Pacific Waterfowl Flyway.

The demand for timber, recreation, range and wildlife on the Modoc results in increased resource conflicts. After 85 years of effective multiple-use management by the Forest Service, the Modoc is an environmentally sound and highly productive national forest that contributes to the social, economic, and environmental needs of society. Management under the Modoc's Plan will continue the mosaic of uses already established.

## **B. Public Involvement**

The Modoc began seeking public comment to this Plan on October 10, 1979, with publication of a Notice of Intent in the Federal Register. Notices were also published in local newspapers and in the Modoc Newsletter. To initiate the planning process, a preliminary list of issues and criteria were presented at a public meeting in Alturas on November 15, 1979; 26 people attended. In March 1980, the Forest jointly held 4 workshops with the Bureau of Land Management to develop planning issues; 105 local residents attended one or more of the sessions. The Forest also held a public hearing on the Big Valley Sustained Yield Unit in June 1982. Nineteen of 100 people attending the Adin hearing testified. The Forest received fourteen letters and one petition with 106 signatures as a result of this hearing. Initiated with a Notice of Intent to reevaluate roadless areas, the Forest held an open house daily between July 25 and August 12, 1983; and mailed a newsletter to 366 individuals, agencies, and organizations to invite comments. Eight letters were received.

The Modoc released the DEIS and proposed Forest Plan to the public for review on November 2, 1987. The documents were distributed to agencies, organizations and individuals on the mailing list, and were made available at public libraries. During the 120-day comment period, which ended March 7, 1988, the Forest conducted or participated in 43 public meetings. This included 6 public workshops held in Alturas, Cedarville, Canby, Adin, Tulelake and Reno. Toward the end of the comment period, two public hearings were held in Alturas and Adin. Over 300 individuals attended these hearings and 105 presented testimony to the Forest Supervisor. These comments, which provided helpful in-

sight into public concern, were carefully considered as the Modoc sought to resolve key issues. Details on the Modoc's efforts to seek public comment are included in FEIS Appendices A and U, and in the planning records available to the public at the Forest Supervisor's Office.

The major public issues and concerns raised from review of the DEIS and draft Forest Plan are discussed in Section IV.A of this Record of Decision. A more detailed discussion of these planning issues can be found in Chapter 2 of the Forest Plan, and Appendix U of the FEIS. Table 2-24 in the FEIS summarizes how each issue is addressed in each alternative.

Many people requested to work with the Forest in developing the final Forest Plan. The Forest agreed it would be valuable to clarify issues and generate solutions with the people who expressed an interest. A public meeting was held in Alturas in 1989 to share results of the public involvement on the DEIS and to explain and form issue groups. The Forest formed two working groups based on the broad issues identified in the public comment analysis; a rangeland riparian group and a timberlands management group. Each group was composed of representatives of local government, industry (including range and timber members), environmental organizations, California Department of Fish and Game, local interested publics, and a Forest Service member. The groups were asked to evaluate issues and propose consensus solutions. If they were unable to reach consensus, they were asked to document their discussions so that the Forest could make informed decisions. The groups worked from March 15 until May 25, 1989. The Forest Plan reflects the recommendations of these groups.

## **C. Alternatives**

The FEIS and Forest Plan were developed under the implementing regulations of the National Forest Management Act (NFMA), Title 36, Code of Federal Regulations, Part 219 (36 CFR 219) published in 47 CFR 43026 on September 30, 1982. The planning actions described in 36 CFR 219.12(b) through (k) have been completed and are properly documented. The National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) Regulations (40 CFR 1500-1508) were also followed. In addition, the Forest Plan preparation was guided by the Regional Guide for the Pacific Southwest Region, dated August 1984, as well as many other laws and regulations.

In response to planning issues, concerns, legislation, and regulations, a range of alternatives was developed and analyzed in the DEIS. Each alternative reflected a different resource management emphasis. Forest-wide

standards and guidelines were developed to assure careful management of all resources. More information on this process can be found in Chapter 2 of the FEIS.

The public review of the DEIS and draft Forest Plan helped focus on the major issues. As a result, the Modoc reevaluated the 6 alternatives in the draft, and modified some, to develop the six alternatives considered in the FEIS. The FEIS alternatives clearly address the major issues and are within the spectrum of alternatives discussed in the draft.

Public review and comment also helped identify changes or additions to the Forest-wide standards and guidelines, and to the proposed management area direction in the Forest Plan. The Forest Plan has been revised in response to this public comment.

The use of herbicides is assumed in all alternatives. For a complete discussion of the differences among alternatives and their effects, see Chapters 2 and 4 of the FEIS.

#### **Preferred Alternative (PRF)**

The Preferred Alternative in the draft was modified as a result of public comments and additional analysis to become the Preferred (PRF) Alternative in the FEIS. The PRF Alternative, as modified, establishes a high level of protection for wildlife, riparian areas, soil productivity, water quality, and visual quality. This alternative provides the highest sustainable level of timber sale offering possible, commensurate with other resource objectives. Modifications between draft and final are improved management of habitat for marten and pileated woodpecker (see issue resolution), concentrating treatment of snags in eastside pine on acres entered for timber harvest, with a goal of achieving more snags (see issue resolution discussion) and implementing the fire management program at the most cost-efficient level. The PRF Alternative continues an increased recreation emphasis. It will increase the level of environmental protection for riparian areas while maintaining projected grazing outputs near existing levels. Timber sale offerings will be about 10 MMBF less than the average for the past decade (55.6 MMBF).

#### **Current Management (No Action) Alternative (CUR)**

The No Action alternative remains unchanged from the DEIS. This alternative continues current direction, policies, and practices as of 1982. Timber, grazing, and other goods and services are provided at levels consistent with the 1982 productions levels. A mix of recreational opportunities including semi-primitive non-motorized is

also provided. Standards implemented for the CUR Alternative provide for basic protection of soil productivity, water quality, and maintenance of viable populations of fish and wildlife. All issues are addressed to the extent allowed by current direction and budget. All former roadless areas are available for uses other than wilderness. The ASQ is projected to be 51.4 MMBF, increasing to 53.6 MMBF by the second decade and remaining constant until the fifth decade. The 10-year average for actual timber sale offering has been about 55.6 MMBF annually.

#### **Resources Planning Act with Departure Alternative (RPD)**

This alternative, unchanged from the draft, achieves the 1980 Resources Planning Act (RPA) program targets assigned to the Modoc by providing high levels of timber and livestock production. This alternative cannot achieve the RPA targets on a sustained basis; a departure alternative was developed. All former roadless areas are available for uses other than wilderness. Standards implemented for the RPA Alternative provide for minimum protection of soil productivity, water quality and maintaining viable populations of fish and wildlife. The ASQ is 74.6 MMBF in the first decade, decreasing to 49.8 MMBF in the second decade, increasing to 57.8 MMBF in the third and fourth decades, and then increasing to 58.7 MMBF in the fifth decade.

#### **Industry Alternative (IND)**

The IND Alternative as described in the draft is modified and emphasizes timber production and livestock grazing in the first decade. No unroaded areas are allocated to a semi-primitive non-motorized recreation opportunity. Standards implemented for this alternative provide for minimum protection of such resources as riparian and streamside zones, viable wildlife populations, water quality, soil productivity, and visual quality. The ASQ is 60.1 MMBF for all five decades.

#### **Reduced Budget Alternative (RBU)**

This alternative produces a mix of commodity and amenity outputs subject to a budget reduced to 75% of the current budget level. This alternative provides the lowest level of management for visuals and semi-primitive recreation management. The Wilderness and developed recreation programs are managed at a low standard. Timber is produced at the highest level permitted by the budget. Livestock grazing decreases. This alternative provides for minimum protection of such resources as riparian and streamside zones, viable wildlife

populations, water quality and soil productivity. The ASQ is 36.9 MMBF for the first decade, increasing to 40.9 MMBF for the remaining 4 decades.

#### **Amenity Alternative (AMN)**

This alternative has been modified from the DEIS to include a higher emphasis on uneven-aged management. Over 50% of the ASQ in the first decade is produced using uneven-aged management. The ASQ is 31.8 MMBF in the first decade, increasing to 36.0 MMBF by the second, 38.3 MMBF in the third decade, 38.7 MMBF in the fourth decade and 40.2 MMBF in the fifth decade. This alternative provides for the highest response to amenity values on the Forest. It maintains the highest levels of visual quality and semi-primitive recreation opportunities. This alternative provides for improved management of habitat for marten and pileated woodpecker and concentrating treatment of snags in eastside pine on acres entered for timber harvest, with a goal of achieving an upward trend. Bighorn sheep are reintroduced throughout their historic range, and livestock grazing in allotments where combined use would be incompatible are closed or reduced.

## **IV. Rationale for the Decision and Response to Public Comment**

Authorities for the Forest Service are found in many laws enacted by Congress and in regulations and administrative directives that implement these laws. Major laws which govern Forest Service programs include:

- Organic Administration Act of 1897.
- Sustained Yield Forest Management Act of 1944.
- Multiple Use-Sustained Yield Act of 1960.
- Forest and Rangeland Renewable Resource Planning Act of 1974.
- National Forest Management Act of 1976.
- Federal Land Policy and Management Act of 1976
- Cooperative Forestry Assistance Act of 1978.
- Forest and Rangeland Renewable Resource Research Act of 1978.

The Modoc will provide a continuous flow of natural resource goods and services to help meet the needs of the Nation by:

- Making the renewable resources of the National Forest System fully productive to provide a sustained flow of outdoor recreation, forage, wood, water, fish, wildlife, and wilderness.

- Administering the minerals and energy resources of the National Forest System to help meet the Nation's needs in a manner consistent with other resource values.
- Providing opportunities for human development and work programs.
- Communicating with the public about the management of natural resources.

The decisions contained in this Record of Decision guide the Modoc's contributions to accomplishing the mission and objectives of the USDA Forest Service.

The Modoc is, and has been, an important source of timber for local industries and ultimately for the residents of California. The Forest also contains highly valuable recreation lands and habitats for a wide variety of both game and non-game wildlife and fish species. Conflicts for use of these resources have increased dramatically over the past 10 years, as evidenced by the public response to the draft Forest Plan. Based on this past experience, I expect that the intensity of controversy will continue to increase over the next 10 to 15 years.

In selecting the Preferred Alternative I considered many factors, including monetary and non-monetary costs and benefits, the capability of the land and the need for protection of resources as evaluated in the FEIS, concerns expressed by people interested in the Forest, advice received from other agencies and resource professionals, and the legislative mandate of the Forest Service. National, Regional, State, and local objectives were considered in making the decision.

The **Preferred Alternative** provides the mix of resource activities that I consider most appropriate for existing and projected conditions on the Modoc. The ASQ of 45.5 MMBF is about 10 MMBF less than the average sale offerings over the past 10 years. This ASQ reduction will affect economic benefits. With the projected timber prices, the returns to the Treasury and County receipts are projected to rise 7 percent. Employment in the timber industry is projected to decrease by 1% (see Table 4-2A in FEIS). This alternative maintains grazing use close to existing levels in the first decade while projecting a 21% decrease in available forage for domestic livestock by the fifth decade. Positive benefits will occur to wildlife requiring dense, closed-canopy forests, such as marten and goshawks. There will also be improvement in visual quality and water quality. This alternative provides for enhanced protection of the soil and water resources on the Modoc.

Response to the draft Forest Plan clearly indicated the public's concern for management and protection of the recreation and amenity resources, including wildlife. I agree that a need exists to provide increased protection to riparian and streamside areas; to provide for wildlife habitats by maintaining old growth, snags, and meadow edges; and to provide for visual quality and a range of outdoor recreation experiences. Therefore, the final Forest Plan contains specific management direction to maintain or enhance these resource values. Management direction for these areas of concern constrains commodity outputs and results in the projected reduction in timber sale offerings and forage availability discussed above. All resource values of the Modoc are important to the public. I conclude that the benefits to the public of providing for amenity values, including our obligation to protect our sensitive, endangered, and threatened species, justifies the reduction in ASQ.

The **Amenity Alternative** would adversely affect the local communities by reducing the levels of timber supply and grazing use. Timber industry employment in the first decade would be greatly reduced compared to the Preferred Alternative. The people dependent on the Forest to graze their livestock would be especially affected if this alternative were implemented, because grazing use would be at the lowest level of any alternative. Additionally, this alternative has the lowest present net value; and there are concerns about implementing uneven-aged management at this level. Classical uneven-aged management designed to achieve high timber yields has not been implemented over large areas for long periods of time. Therefore, high yield uneven-aged management must be tried and tested before being implemented on a large scale. The Modoc and other forests are testing uneven-aged practices. Major changes in operational and administrative record-keeping systems would need to be developed to implement this alternative.

The **Industry and Reduced Budget Alternatives** are not as responsive to public comment as the Preferred Alternative because they do not meet the public's need for a variety of high quality recreation opportunities, nor do they maintain the level of visual quality enjoyed by the public. Although meeting minimum requirements for riparian areas, soil protection, and diversity for wildlife, these two alternatives do not provide for protection and enhancement of these resources as well as the Preferred Alternative. Comments received on the DEIS and draft Forest Plan clearly indicate the public's concern and desire for a higher level of protection for riparian areas, soil productivity, and wildlife. On balance, the higher timber outputs of the IND Alternative or the reduced

budget of the RBU Alternative do not outweigh the loss of quality recreation opportunities and other amenity resources.

The **Current Alternative** is not as responsive to public needs as the Preferred Alternative. While harvesting more timber than the Preferred Alternative, the species mix is much different. The Current Alternative harvest is comprised of only 5% high value eastside pine while the Preferred Alternative is nearly 40% eastside pine. This renders federal revenues and county receipts in the first decade the same for both alternatives. The Current Alternative does not respond as well as the Preferred Alternative to the needs of marten, and has nearly the lowest projected deer herd numbers of any alternative.

The **RPD Alternative** provides the highest levels of commodity outputs and provides the most local employment and income. It also has the highest level of clearcutting of any alternative. It does not respond as well as the Preferred Alternative to the needs of marten or in providing late seral stage habitats. It is also the highest cost alternative. In balance, the higher commodity outputs do not outweigh the higher costs, increased disturbances, and other amenity resources.

Therefore, for all of the above reasons, I judge the Preferred Alternative to have the greatest long-term net public benefit when compared to other alternatives; and I have selected it to be the management direction for the Modoc.

## **A. Response to Public Comments and Management Concerns**

This Record of Decision reflects many helpful comments received from agencies, organizations, and the public on the draft Forest Plan and DEIS. Discussed below are more specific responses to the major public issues raised and further rationale for my decision.

### **Timber Supply**

**Issue:** The level of timber production and its effects on other resources and the timber industry is a major issue.

**Draft Plan:** The draft Forest Plan provided for an ASQ of 52.1 MMBF. Recent timber sale offerings on the Modoc have averaged about 55.6 MMBF over the last ten years. Public comment was mixed. The majority of local commenters protested the lowered level of timber offer with concerns about the local economy. Other people thought the sale level was too high and would result in adverse impacts to soil productivity, water quality, visual quality, and wildlife.

**Final Plan Response:** The Forest Plan recognizes the importance of non-commodity resources while retaining a relatively broad land base for a variety of extensive and intensive timber management practices. The Forest Plan establishes an ASQ of 45.5 MMBF, or about 10 MMBF below the ten-year average sale offering. This ASQ reflects a 10- to 15-year average of the maximum regulated volume of timber to be offered on the Forest. Actual sale offerings may be above or below the ASQ in individual years.

Timber management is intertwined with almost every other issue. While some uses are compatible with timber production, others such as primitive recreation are not. In many places it is necessary to reduce timber harvests to maintain other values such as fish and wildlife habitat or scenic vistas.

The Forest Plan takes all appropriate measures to mitigate the effects of other resource allocations and prescription constraints on the timber resource. Land allocations that preclude or reduce timber management are carefully evaluated to minimize the effects on ASQ. For example, where feasible, marten territories are located in the South Warner Wilderness, and in areas already constrained for reduced yields where they contain suitable habitat.

The Forest Plan provides a combination of even-aged and uneven-aged timber management practices. While the harvest will primarily come from mature stands, actual harvest units within these stands will often have small inclusions of younger timber. The need to disperse the harvest may result in programming some otherwise low priority stands to avoid creating a scheduling problem for the future.

The ASQ has been reduced from the draft by about 7 MMBF as a result of a higher level of protection provided for key wildlife habitats of marten and pileated woodpeckers. The Forest has maximized timber potential within the land base and other resource constraints. Any further increases in ASQ would require accepting a decline in protection of other resource values.

### **Silvicultural Practices**

**Issue:** The appropriateness and extent of clearcutting on the Modoc is highly controversial. The clearcutting issue received much comment.

**Draft Plan:** The draft Forest Plan projected about 3,400 acres of clearcutting, 300 acres of shelterwood and 100 acres of selection cutting annually.

Many comments expressed a great deal of concern about the amount of clearcutting proposed on the Forest and its effect on visual quality and the environment. Some support was received for properly managed clearcutting to produce higher sustained yields of timber and to reduce costs.

**Final Plan Response:** Basically, timber stands can be managed two ways on the Modoc National Forest – even-aged and uneven-aged management. In determining the appropriate silvicultural systems, I considered three groups of factors.

The first group includes major vegetative types and individual stand conditions found on the Forest. Our analysis indicates that either even-aged or uneven-aged management can be used on any of the vegetative types on the Modoc; however, individual stand conditions are critical to the decision. For example, stands that are currently poorly stocked or have sparse natural regeneration are more likely to benefit from even-aged silvicultural practices than from uneven-aged management. Additionally, even-aged practices may be the preferred method in treating timber stands that are at high risk for damage from insects and disease.

The second group of factors includes non-timber resource objectives and the way silvicultural systems affect them: e.g., wildlife disturbance from logging and related activities, economic efficiency of timber harvesting and transportation system, impact on visual quality, ability to meet riparian-dependent resource needs, and the growth rate of regenerated stands. Because these factors vary greatly from site to site, probably no single silvicultural system can respond to all the variations in every situation.

The final group of factors include the compatibility of the systems with acceptable logging methods, and the need to develop new administrative systems to track and control stand conditions. Because uneven-aged management practices have not been as widely used as even-aged, we have not had an opportunity to refine systems for monitoring, tracking and controlling stand conditions. Further, we may have to refine current logging methods or create new approaches to implement uneven-aged management over large areas.

After considering these factors, the Modoc has identified 17, 114 acres in four timber planning compartments to be managed primarily using uneven-aged practices. From this program, the Modoc will be able to determine whether increased use of uneven-aged management practices is feasible during the next 10-15 years. The four compartments, on each ranger district, represent all major timber types on the Forest.

On the remaining acres, the Forest will use a mix of silvicultural practices based on a site-specific silvicultural examination, an on-the-ground-analysis of the area, and a site-specific prescription. The prescription will provide details of the selected silvicultural system.

I estimate that clearcutting will be the silvicultural practice on approximately 80% of the acres regenerated, and implemented on 3,000 acres per year. I estimate that shelterwood prescriptions will be applied to approximately 300 acres, while selection prescriptions are likely to be used on 300-400 acres. Timber harvest in most clearcuts will result in a regeneration mosaic that will retain young conifers, hardwoods, snags and downed logs to meet diversity, wildlife, and soil objectives. These mosaics will regenerate stands of timber that are currently poorly stocked. Approximately 60% of the timber stands on the Modoc are currently in poorly stocked condition.

No clearcutting is planned that would remove all trees, except where no practical alternatives exist. For example, complete tree removal may still be necessary to control insect and disease problems such as dwarf mistletoe and certain root diseases.

#### **Viable Populations/Plant and Animal Diversity**

**Issue:** Increasing activities and uses have the potential to affect adversely many plant and animal species. Diversity and maintenance of viable populations are major issues.

**Draft Plan:** To maintain diversity and viable populations of native and desired non-native vertebrates, the Modoc chose a variety of species as management indicator species (MIS), in accordance with NFMA regulations, national direction, and Regional direction. The species list in the draft Forest Plan included threatened and endangered species, sensitive species, and some harvest and special interest species. The draft Forest Plan included standards for hardwoods, riparian areas, snags and dead and down materials as well as a Regional standard requiring the retention of 5% of each seral stage of the major vegetative types.

The Forest received public comment calling for the inclusion of all species considered rare and/or endangered by the State of California, all Forest Service sensitive plants and animals, and ecological indicator groups for certain habitats. Respondents also suggested the development of comprehensive species models and site-specific management standards for target species. Many comments related to the adequacy of proposed standards for maintenance of viable populations and the need to preserve "biological reserves" or "old-growth" forests

and riparian areas. The Forest also received much comment on whether our seral stage and snag management requirements were needed and appropriately applied.

**Final Plan Response:** The list of MIS has been revised from that presented in the draft Forest Plan. The Forest has added the greater sandhill crane, the red-breasted and red-naped sapsuckers, Swainson's hawk and northern spotted owl. The Forest now has MIS species from the following categories:

- Federal and State listed threatened and endangered species (e.g., Modoc sucker, bald eagle),
- Forest Service sensitive species (e.g., goshawk, marten),
- Species with special habitat needs that may be influenced significantly by planned management programs (e.g., pileated woodpecker),
- Species that are commonly hunted, fished, or trapped (e.g., mule deer, pronghorn), and
- Non-game species of unique or special interest (e.g., golden eagle, prairie falcon).

The standards and guidelines for marten, pileated woodpecker, and goshawk have been modified from the draft Forest Plan:

- The draft Forest Plan assumed that marten and pileated woodpecker habitat needs would be met by the old-growth requirements. Additional habitat capability modeling, based on the Region 5 Furbearer Literature Review, indicated that relying solely on old-growth requirements would not provide for viable populations of these species. The final Forest Plan contains standards and guidelines that give direction for establishing and evaluating a system of territories that are in accordance with the habitat and spatial parameters displayed in the R-5 Furbearer Literature Review. These territories will be identified, validated and established during project implementation after the Forest Plan is released. As knowledge of the habitat requirements for marten and pileated woodpecker improves through monitoring and research, modifications to the management standards and guidelines may be made.
- Additional information on management of goshawks indicated a need to provide a minimum of 100 acres for a nest stand and alternate. This requirement will be met by the stands reserved for old growth and is not projected to have additional impacts.

The Modoc also reviewed the standards for snag management. After review, the Forest determined that the snag standard of 1.5 snags per acre was an appropriate standard and it is retained in the final Forest Plan. In the draft Forest Plan the Modoc aggressively pursued meeting this standard Forestwide, because the Forest does not currently meet the standard. After review, the Forest determined that this approach was not prudent. Instead, as areas are entered for timber harvesting, they will be managed to meet the standard. This will increase snag numbers while reducing the effect on other resources and funding.

The Forest Plan also calls for conserving sensitive plant species and their essential habitats.

The Forest Plan recognizes the importance of working closely with the California Department of Fish and Game and the U.S. Fish and Wildlife Service as full partners in the Forest fish and wildlife habitat management program. Efforts to work cooperatively toward common goals benefit all aspects of the fish and wildlife program.

#### Soil Erosion/Long-Term Soil Productivity

**Issue:** The potential for intensive timber management to reduce soil productivity and contribute to soil erosion is a major public concern.

**Draft Plan:** The draft Forest Plan provided for basic protection of soil productivity. The public expressed concern over the levels of timber harvest and grazing use and their effect on long-term soil productivity.

**Final Plan Response:** Based on the public comment and an interdisciplinary review of the standard in the draft Forest Plan, additional Forest-wide standards and guidelines to maintain soil productivity have been developed. Standards are set for soil organic matter, soil porosity, and soil loss. Each project will be developed within these standards and guidelines. A monitoring program will be used to improve the data base for future planning efforts, and to evaluate the effectiveness of the standards in meeting the objective of protecting long-range soil productivity.

#### Herbicides

**Issue:** The possible effect of herbicide use on ASQ, human health, water quality, fisheries, and other resource values is a major issue.

**Draft Plan:** Herbicides were assumed to be available for use when the draft Forest Plan was released and the draft Forest Plan assumed their use. The public expressed concern over the effects of herbicides on humans and natural resources.

**Final Plan Response:** The concerns raised by the public were addressed in a separate Regional Environmental Impact Statement on Vegetation Management for Reforestation and Record of Decision, dated February 27, 1989. Certain herbicides can now be used by the forests. Decisions to use herbicides or other vegetation management tools for reforestation will be based on site-specific environmental analyses.

#### Former Roadless Areas

**Issue:** The management of former roadless areas not designated as Wilderness by the California Wilderness Act of 1984 is a concern for many individuals and groups.

**Draft Plan:** The draft Forest Plan provided for timber management in those areas with suitable timberlands, and provided for a mix of motorized and non-motorized recreational uses on high quality recreation lands.

Many of the respondents supported protection of unroaded areas from road construction and timber harvest; others wanted to develop the unroaded areas for timber management and motorized recreational uses.

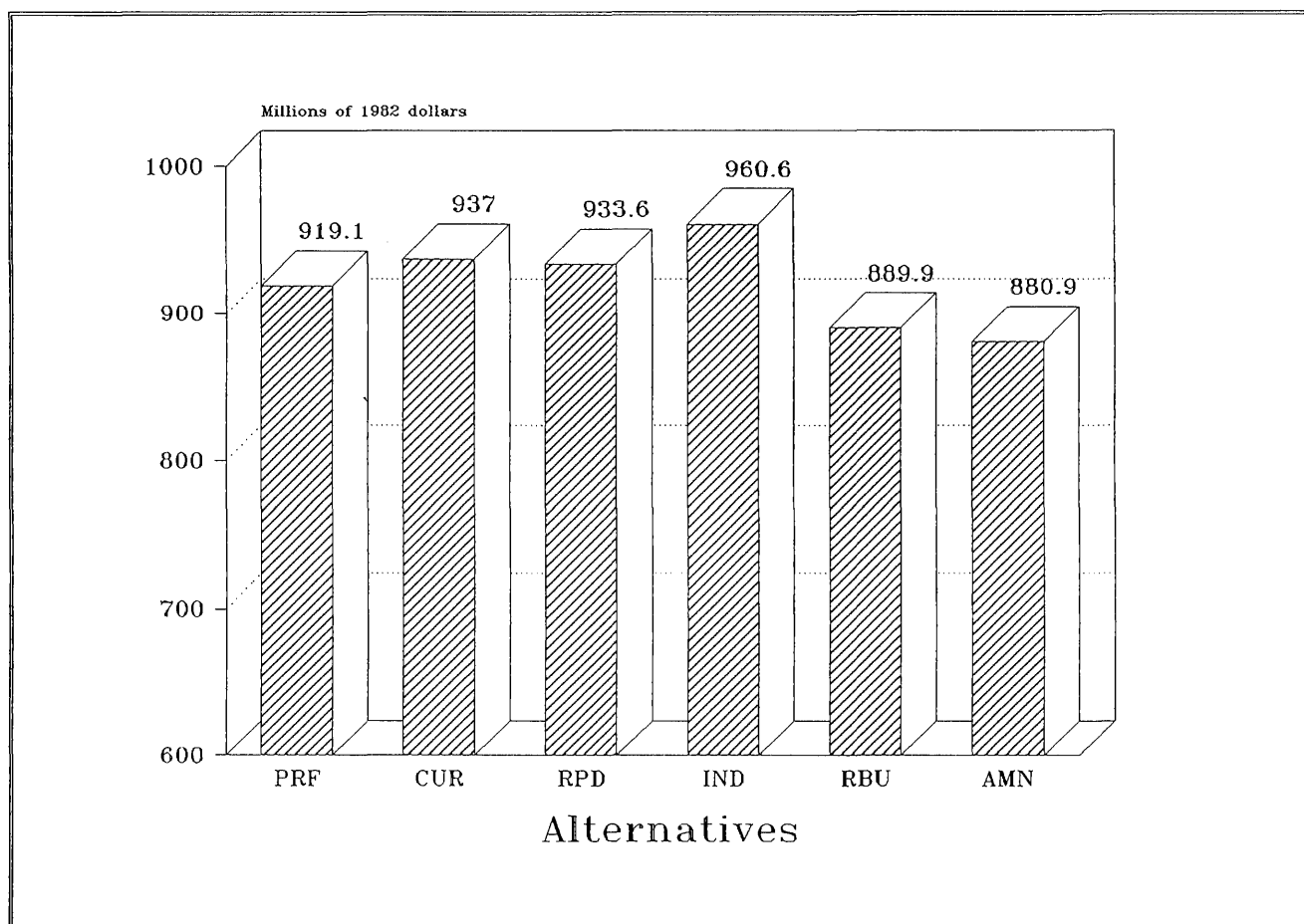
**Final Plan Response:** In the California Wilderness Act of 1984, five areas (1,940 acres) were added to the South Warner Wilderness. This is the only wilderness on the Forest. The remaining roadless areas were released from further planning consideration by the 1984 Act. The Forest reviewed the roadless areas and determined that the proposed mix of uses in the draft Forest Plan, including managing for recreation those lands that provide high quality recreational experiences while making highly productive timberlands available for timber management, is appropriate and is retained in the final.

#### Rangelands Management

**Issue:** Significant reductions in the amount of forage available to local permittees could cause economic hardships on individual permittees while negatively impacting the local economy which has an agricultural base. Other publics are concerned that continuation of grazing at the current levels will accelerate degradation of riparian areas and other critical wildlife habitat, and impair water quality.

**Draft Plan:** The draft Forest Plan provided for 113,600 animal unit months (AUMs) of livestock grazing in the first decade, dropping to 97,100 AUMs in the fifth. This represents a substantial decrease from the 122,500 AUMs permitted in the 1982 base year. Further, the draft Forest Plan incorporated management direction that provides high levels of protection and enhancement for

## Comparison of Present Net Value



riparian-dependent resource values and other critical wildlife habitat. Additionally, forage allocations to deer were increased in order to meet State deer herd goals.

**Final Plan Response:** In response to the diverse public comments received on this issue, a rangeland/riparian work group was established, composed of representatives from State and federal agencies, environmental groups, the ranching community, local business and governments (see section III.B). The group was asked to review the draft Forest Plan and make consensus recommendations for modifications. Generally, the group modified standards and guidelines pertinent to range, riparian, and wildlife management. They stated that AUM reductions should be accomplished allotment by allotment after site-specific analysis — and not as result of Forest Plan approval.

Consequently, the final Forest Plan estimates the AUMs that will be available for livestock and deer, and clearly states that actual allocation of forage will be done on an allotment-by-allotment basis. Any reductions will be accomplished through the allotment planning process and subsequent monitoring. The Forest Plan incorporates goals to develop and revise allotment management plans so that permitted grazing and forage capacity are balanced by the year 2000. The Forest Plan also displays priorities for allotment management plan development and riparian area improvements.

Further, the Forest Plan continues to provide a high level of protection and enhancement for riparian-dependent beneficial uses and wildlife habitat, but refines the standards and guidelines to be consistent with the work group's consensus recommendations.



The final Forest Plan estimates that 118,800 AUMs will be available for livestock grazing in the first decade, decreasing to 94,200 AUMs by the fifth decade.

### **Budget**

**Issue:** The public expressed a concern regarding the feasibility of the Modoc ever receiving the budget required to implement the draft Forest Plan.

**Draft Plan:** The draft Forest Plan proposed a budget of 12.4 million dollars. Several respondents were concerned that the mix of resource programs would if the budget were reduced below that level.

**Final Plan Response:** The Forest Plan is primarily a land allocation document. It tells how each area will be managed if funds are available. The Forest Plan describes specific funding levels to achieve Plan objectives. Most Plan objectives are based on programs for which funding is allocated by Congress. Examples of these are the timber sales program, outputs associated with construction of recreational developments, and wildlife and range improvement projects. Other Forest uses, such as recreation use, fishing and hunting use, and wilderness use are expected to continue regardless of funding levels, but at a lower level of quality.

## **B. Economic Efficiency of Alternatives**

The IND and CUR Alternatives have the highest present net value (PNV), because they produce more timber, followed by the RPD, PRF, RBU and AMN Alternatives. However, the alternatives with the highest PNV do not adequately reflect values for some amenity resources. If these high PNV alternatives were implemented, visual quality, water quality, and plant and animal diversity would be reduced as compared to the PRF Alternative (see issue resolutions previously discussed). The PNV comparison for the 6 alternatives is displayed on page 14.

## **C. Contribution to the Regional Production of Goods and Services**

The Preferred Alternative will manage and protect all resources while providing substantial opportunities for recreation, wildlife, forage, timber, and firewood needed for local economic growth and stability. It provides a continued level of all outputs, while protecting soil and water, and responding to public preferences and legal mandates. Recreation opportunities, minerals, range, wildlife, and timber outputs will benefit Northern California, Southern Oregon, and Western Nevada.

## **D. Social and Economic Stability**

Effects on jobs, revenues, recreation opportunities, firewood availability, resource protection for future generations, and social and economic stability for people living in Modoc, Lassen, and Siskiyou Counties, were considered in selecting the Preferred Alternative. Public lands make up a large percentage of the total land base in most of these counties, and the commodity and non-commodity resources provided by the Forest significantly affect the livelihoods and quality of life of many residents. Wood products employment constitutes a substantial share of all employment in Modoc and Lassen Counties, and revenues produced from all activities on the Forest are important sources of funding for local county schools and roads. The Preferred Alternative provides a small increase in employment from the 1982 base year but a reduction from employment based on the 10-year average.

The Forest Plan estimates grazing use at approximately current levels and reduces the available supply of timber by approximately 18% from the 10-year average. The Forest Plan also provides for a wide range of recreation opportunities while increasing protection for wildlife, soil and water, and visual quality. The level of outputs will not significantly affect historical uses of the Modoc nor will the Preferred Alternative significantly affect lifestyles of the public who use and enjoy the Forest. The Modoc will follow a policy of non-discrimination in providing work, recreation, and educational experiences for the community and will promote active participation by all segments of the public. With implementation of the Preferred Alternative, as modified, no changes in outputs will result that would create significant social or economic impacts.

## **E. Environmentally Preferable Alternative**

I judge the Amenity Alternative to be the environmentally preferable alternative. It emphasizes protection of water, soil, riparian areas, air, visual quality, enhancement of wildlife habitat, and diversity. It provides the highest level of management for visual quality, the most acres of semi-primitive recreation opportunity, the highest level of old growth by the fifth decade, the most habitat for bighorn sheep reintroduction; and has the fastest recovery rate for water quality and riparian areas.

## **F. Compatibility with Goals and Plans of Other Agencies**

The goals and plans of other agencies were considered throughout the planning process. The FEIS and Forest Plan reflect this consideration and the comments received from public agencies during the public review period. The Forest Plan is compatible with other agency goals and plans. Federal agencies commenting on the draft were the U.S. Fish and Wildlife Service, the Department of Interior, the U.S. Air Force, the Department of Energy, and the Environmental Protection Agency. Tribal communities commenting on the draft EIS include the Fort Bidwell Indian Community, Pit River Home and Agricultural Cooperative Association, Klamath Tribal Council, and the Pit River Tribal Council. California state agencies included the Departments of Parks and Recreation, Water Resources, Fish and Game, Forestry, and Transportation; the Central Valley, North Coast and Lahontan Regional Water Quality Control Boards; the State Board of Forestry; and the Office of Historic Preservation. The Oregon Department of Fish and Wildlife provided comments. Local governments and agencies and elected officials also commented on the DEIS and draft Forest Plan.

Public input provided much worthwhile information and demonstrated the need for coordination. The participation of representatives from the timber industry, range industry and environmental organizations assisted the Forest in looking at alternative ways to address the issues. Dialogue with other federal agencies, State and local governments, and the interested public will continue. Involvement by interested parties is critical to successful Forest Plan implementation. As more site-specific planning is done, the Modoc will continue to involve the public.

## **V. Implementation, Mitigation of Impacts, and Monitoring**

The Forest Plan will not be implemented sooner than 30 days after the Notice of Availability of the Forest Plan, FEIS, and Record of Decision appears in the Federal Register. The time needed to bring all activities into compliance with the Forest Plan will vary depending on the type of project. As soon as practicable after approval of the Forest Plan, the Forest Supervisor shall ensure that, subject to valid existing rights, all outstanding and future permits, contracts, cooperative agreements and other instruments for occupancy and use of affected

lands are consistent with the Forest Plan. The Forest Supervisor shall also assure that (1) annual program proposals and projects are consistent with the Forest Plan; (2) program budget proposals and objectives are consistent with management direction specified in the Forest Plan; and (3) implementation is in compliance with the Regional Guide and applicable regulations.

As a long-range management guide for the Forest, this Forest Plan is a programmatic document and does not make site-specific project decisions or set specific resource outputs. During Forest Plan implementation, when the various projects are designed, site-specific analyses will be performed in compliance with the National Environmental Policy Act of 1969. These analyses may result in environmental assessments, environmental impact statements, or categorical exclusions and, possibly, an amendment or revision of the Forest Plan. Many of these documents will be tiered to the final Environmental Impact Statement for this Forest Plan pursuant to 40 CFR 1508.28.

Implementation will be guided by individual management area direction and by the management requirements contained in the goals, objectives, standards and guidelines, practices, and prescriptions that are found in Chapter 4 of the Forest Plan. These management requirements were developed through an interdisciplinary effort and contain measures necessary to mitigate or eliminate any long-term adverse effects. To the best of my knowledge, all practical mitigation measures have been adopted.

Outputs associated with Forest Plan implementation may be adjusted as a result of research efforts that produce new information and technologies. Air quality, prescribed fire, riparian trend studies, wildlife habitat studies, and other data will enhance and affect Forest Plan implementation. Management direction contained in the Forest Plan will be used to analyze any proposal involving use of Modoc National Forest lands.

The purpose of the monitoring program is to evaluate whether the Forest Plan goals and objectives are being met, to determine how closely management requirements are being followed, and to assist in assessing achievement of the environmental standards. The results of monitoring and evaluation will be used to measure the progress of Forest Plan implementation. These results will also help to determine when Forest Plan amendments or revisions are needed.

## VI. Planning Records, Amendments and Revisions, and Administrative Review

### A. Planning Records

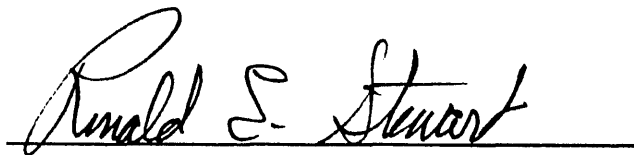
Planning records contain detailed information and document decisions used in developing the Forest Plan and EIS as required in 36 CFR 219.12. All of the documentation detailing the Forest planning process is available for inspection during regular business hours at:

*Forest Supervisor's Office  
Modoc National Forest  
441 North Main Street  
Alturas, CA 96101*

These records are incorporated by reference into the EIS and Forest Plan.

### B. Amendments and Revisions

The National Forest Management Act requires revision of the Forest Plan at least every 15 years. The Forest Plan may be revised sooner whenever the Forest Supervisor determines that conditions or demands in the area covered by the Forest Plan have changed significantly, or when changes in National policies, goals, or objectives, such as special Congressional land designations, catastrophic events, or major new management or production technologies, would have a significant effect on programs of the Modoc. All procedures set forth in 36 CFR 219.12 will be followed; this includes scoping, an analysis of the management situation, formulation of alternatives, an estimation of effects, an evaluation of alternatives, identification of a preferred alternative, documentation in a draft EIS and draft Forest Plan, and formal public comment before approval and implementation of the revised plan.



**RONALD E. STEWART**  
Regional Forester

The Regional Forester approves any significant amendments to this Plan while the Forest Supervisor has the authority to approve non-significant amendments. The determination of significance or non-significance will be documented in the appropriate decision document. No changes will be implemented prior to appropriate public notice. Determinations of significance or non-significance are appealable under 36 CFR 217.

### C. Right To Administrative Review

This decision is subject to appeal in accordance with the provisions of 36 CFR 217. Any written notice of appeal of this decision must be fully consistent with 36 CFR 217.9, "Content of a Notice of Appeal", including the reasons for appeal. Two copies of the Notice of Appeal must be filed within 90 days of the date of the published legal notice (Sacramento Bee, Sacramento, CA) of this decision and filed with:

*F. Dale Robertson, Chief  
Forest Service—Appeals  
U.S. Department of Agriculture  
Auditors Bldg., 201 14th St., S.W.  
Washington, DC 20250*

My recommendation for Research Natural Area (RNA) designation for Raider Basin is not appealable. The Chief decides on RNA establishment. Specific decisions regarding interim management of RNAs pending a final decision by the Chief are appealable.

An appeal of my decision does not halt Forest Plan implementation. Requests to stay the approval of this Plan, prepared pursuant to 36 CFR Part 219, shall not be granted. However, where a project or activity would be implemented before an appeal decision could be issued, the Chief of the Forest Service will consider written requests to stay implementation of that project pending completion of the review of the Forest Plan appeal.

**NOV 27 1991**

Date