SUMMARY OF THE EIS

I. PURPOSE OF AND NEED FOR ACTION

This chapter describes why the Plan is being produced and the issues and concerns that form the basis for this Environmental Impact Statement. The Inyo National Forest proposes the implementation of a comprehensive Land and Resource Management Plan (Plan). The Plan provides direction for the management of all lands and resources administered by the Inyo National Forest for the next ten to fifteen years. This Environmental Impact Statement (EIS) documents the environmental analysis conducted as part of the planning process.

The planning process is conducted under the auspices of the Multiple Use-Sustained Yield Act of 1960, the Forest and Rangeland Renewable Resources Planning Act of 1974 (RPA) and the National Forest Management Act of 1976 (NFMA). The planning process itself is outlined in the implementing regulations for those acts (36 CFR 219). Planning on each National Forest is coordinated with comparable planning at the regional and national levels for all National Forest System lands.

The Plan will supersede all past plans for individual resources or land units on the Forest. See Appendix A in the Plan for listing of the documents. These past plans fit into one of three categories: (1) incorporated into the Plan without revision; (2) incorporated with direction to be revised or updated; or (3) replaced by the Plan. All future environmental documents for plans and projects on the Forest will be tiered to the Plan.

The Plan can be amended at any time, and all National Forest Plans will be revised every ten to fifteen years. Amendment and revision will include environmental analysis, documentation, and public involvement to the degree appropriate for the change proposed. The Regional Forester's decision to approve the Plan and its EIS is subject to the public's rights of administrative appeal. Preliminary process decisions are not subject to appeal [See 36 CFR 211.18(b)(11)].

The area covered by the Plan includes National Forest System lands within the Inyo National Forest boundary (1,931,115 acres) and 25,201 acres of the Sierra National Forest administered by the Inyo.

Inyo National Forest Lands

County	National Forest acres	% of total
Mono (California)	811,049	42.0
Inyo "	794,352	41.1
Tulare "	186,165	9.7
Madera "	50,406	2.6
Fresno "	25,256	1.3
Esmeralda (Nevada)	49,884	2.6
Mineral "	14,003	0.7
Total	**1,931,115**	**100.0**

In September, 1984, Congress designated the Mono Basin National Forest Scenic Area, which encompasses 116,000 acres of land within the Forest boundary. Detailed resource and development planning for the Scenic Area is being conducted separately from this planning process.

Public issues and management concerns are aspects of natural resource management that receive special emphasis in planning. The issues and concerns collectively indicate the scope and nature of the analysis needed for the Environmental Impact Statement; serve as blueprints for the structuring of alternatives, direct the evaluation of environmental consequences, and outline the resource use and development opportunities on the Forest. The following are the issues and concerns identified for the Inyo National Forest.

1. How can the Forest produce goods and services to maximize economic efficiency?

2. How does the management of the Inyo National Forest influence the local social environment and lifestyle?

3. What can the Forest do to influence air quality?

4. How should the Forest manage cultural resources and provide for the use of Forest lands by American Indians for traditional practices?

5. What is a desirable level of vegetative diversity for the Inyo, and what should the Forest do to maintain or achieve that level?

6. How does energy development fit in with the overall resource management program on the Forest?

7. What level of facility construction and maintenance is needed to support Forest management objectives?

8. How should fish habitat on the Inyo National Forest be managed?

9. How should Further Planning Areas on the Forest be managed?

10. What is the role of geologic resources and services in the overall Forest management program?

11. What land use and landownership adjustment policies and procedures are needed to respond both to local community needs and to the demands of regional and national publics?

12. How can the Forest best encourage mineral (including geothermal) exploration and development while protecting surface resource values and other land uses?

13. What is the appropriate pest management strategy for the Inyo?

14. What is the appropriate fire management strategy for the Inyo?

15. How should the Inyo balance the needs of the range program (domestic livestock and wild horses and burros) with the need to protect and/or produce other resources?

16. What is the best recreation opportunity program for the Inyo (considering supply, demand, other resource management and development opportunities, and environmental protection needs)?

17. What contribution should the Inyo make to the national and regional systems of Research Natural Areas?

18. What is the significance of riparian areas on the Forest, and how should riparian area-dependent resources be maintained, enhanced, and/or restored?

19. How should the Forest manage habitat for sensitive plant species?

20. Should the Forest consider establishing any additional Special Interest Areas?

21. What is the best balance between timber (including fuelwood) production, other resource management and development opportunities, and environmental protection needs?

22. What role does visual quality play in the overall resource management program, and how can that quality be protected and enhanced?

23. How should the Forest respond to the needs for water quality, increased water yields, water rights for Forest resource management, and healthy watershed condition?

24. What recommendations should the Forest make for the management of candidate wild and scenic rivers?

25. Is there any need for change in the management of designated wilderness on the Forest?

26. How, where, and to what degree should wildlife habitat be maintained and enhanced, and how should wildlife needs be coordinated with other resource management and development opportunities on the Forest?

II. ALTERNATIVES, INCLUDING THE PROPOSED ACTION

This chapter describes the alternatives analyzed in the planning process. Each alternative describes management direction that is designed to guide the management of Forest lands and resources from their current state to a desired future condition. Many combinations of resource uses and management activities are possible in formulating a reasonable range of alternatives.

The alternative formulation process began with the analysis of Benchmarks. Benchmarks are analytical models that serve three functions: to determine resource costs and outputs at the minimum level of management; to determine

the maximum physical and biological capacity of the Forest to produce certain key resources; and to calculate the most economically efficient mix of management activities under different sets of objectives. By establishing minimum, maximum, and cost-efficient output levels, the Benchmarks describe a "decision space" within which reasonable alternatives can be developed and set standards with which the alternatives can be compared.

All alternatives were designed to meet a set of management requirements and standards and guidelines that would be acceptable to the public and could be implemented on the ground. Those requirements address such issues as long-term sustained yield and non-declining even flow of wood products, wildlife and fish population viability, vegetative diversity, soil productivity and water quality, riparian area protection, and scenic quality.

Eleven alternatives were initially developed. Of those eleven, five were eliminated from further study and six were studied in detail. Alternatives were eliminated from further study for various reasons. Two of the alternatives had extremely high projected timber outputs, but failed to meet the timber policy requirement of non-declining even flow. Two additional alternatives, with large wilderness recommendations, did not respond to the management concern that wilderness on the Forest be suitable for and manageable as wilderness. The fifth alternative, which had a severe budget limitation, responded very poorly to the primary public issue on the Inyo National Forest, which is the quality and quantity of recreation opportunities.

The following six alternatives were studied in detail.

PRF: PREFERRED ALTERNATIVE

This is the modified Preferred Alternative resulting from public comments received on the Draft Preferred Alternative and intensive review by the Inyo National Forest management and interdisciplinary teams. It is designed to reflect the changes needed to incorporate identified concerns. A mixture of both commodity and amenity outputs will be produced, with provision for the historic uses of the Forest.

Developed summer recreation will be managed with the objective of increasing opportunities in response to demand with the amount of development limited to the number of inventoried, undeveloped sites. Alpine skiing will increase consistent with approved development plans and at a rate that responds to demand consistent with environmental and infrastructure constraints. The amount of development will be closely coordinated with community planning, so that ski area capacity and the community's ability to provide support services will be developed together. Additional dispersed recreation opportunities will be provided for both winter and summer use.

Timber will be managed to provide a continuing supply of wood products to meet demand. Timber management objectives will be compatible with recreation, wildlife, visual and other resource values.

Domestic livestock grazing will be managed to meet local demand and to be compatible with timber and wildlife objectives.

The wilderness land base will be increased by the addition of Further Planning Areas with high wilderness recreation value, in combination with a low level of conflict with other resources; ecological systems not yet represented in wilderness on the Inyo; or logical additions to existing wilderness, in combination with a low level of conflict with other resources.

Wildlife habitat will be managed with the objectives of maintaining or enhancing deer habitat capacity; achieving recovery for threatened and endangered species; maintaining or enhancing habitat for sensitive and special interest species; and maintaining population viability for all other native vertebrate species. Fish habitat will be managed with the objectives of responding to projected increases in dispersed recreation and achieving recovery for threatened trout species.

CUR: CURRENT (1982) PROGRAM - NO ACTION

This alternative displays the current program of management activities on the Inyo National Forest and projects it over the fifty-year planning horizon. The 1982 Forest budget is a constraint in the FORPLAN model. The budget remains essentially constant over the planning horizon and continues to be distributed among the resources in roughly the same proportions as in 1982.

Developed summer recreation will be managed with the objective of maintaining use at current levels through the fifth decade. Alpine skiing will increase at a rate that responds to demand. The actual amount of development will be closely coordinated with community planning so that ski area capacity and the ability of the community to provide support services are developed together. The management of dispersed summer and winter recreation will allow for an increase in use, but the quality of the experience will deteriorate because of reduced standards due to a limited budget.

Timber will be managed with the objective of maintaining currently projected outputs over the planning horizon.

The grazing program will be managed with the objective of maintaining the current level of management intensity through the fifth decade.

The wilderness land base will be increased by the addition of Further Planning Areas with ecological systems not yet represented in wilderness on the Inyo.

Wildlife habitat will be managed with the objectives of minimizing Forest-wide reduction of deer habitat capacity; achieving recovery for threatened and endangered species; maintaining or enhancing habitat for sensitive and special interest species; and maintaining population viability for all other native vertebrate species. Fish habitat will be managed with the objectives of responding to projected increases in dispersed recreation and achieving recovery for threatened trout.

RPA: MEET TARGETS AND GOALS OF THE 1980 RESOURCES PLANNING ACT PROGRAM

This alternative is designed to meet the targets and goals of the 1980 RPA Program, representing moderate to high outputs of commodities and selected amenities. Some of the assigned RPA targets and goals for the Forest are not mutually compatible. Where there is a conflict, market outputs (timber, range, and developed recreation) are given priority over non-market outputs and amenities. In cases for which RPA goals could not be met in this alternative, they are met in one or more of the other alternatives studied in detail. There is no budget limitation in the FORPLAN model.

Timber will be managed with the objective of achieving a programmed annual harvest of 19.2 million board feet (MMBF).

Domestic livestock grazing will be managed with the objective of producing at least 55,600 average annual Animal Unit Months (AUMs) by the fifth decade, representing the President's target of a 46 percent increase over the specified base level.

Developed recreation will be managed with the objective of increasing opportunities in response to demand. The actual amount of development will be limited by potential supply. Alpine skiing will increase in response to demand to the extent compatible with timber objectives. The management of dispersed summer and winter recreation will provide for an increase in use roughly proportional to developed site use.

Wildlife habitat will be managed with the objectives of minimizing Forest-wide reductions in deer habitat capacity, given range and alpine skiing priorities; achieving recovery for threatened and endangered species; and maintaining population viability for all other native vertebrate species. Fish habitat will be managed with the objectives of achieving recovery for threatened trout species; responding to projected increases in dispersed recreation; and increasing stream trout habitat by 20 percent in response to the RPA goal.

CEE: MAXIMIZE COST-EFFICIENCY

This alternative seeks the most cost-effective mix of land allocations and management practices available on the Inyo National Forest, given the application of Minimum Management Requirements (MMRs), Timber Policy Requirements, Minimum Implementation Requirements, and Forest-wide Standards and Guidelines.

If the Forest is managed with the single objective of maximizing cost-efficiency, the following conditions will exist:

> Developed recreation (including alpine skiing) and dispersed recreation will be provided in response to projected demand to the extent possible, limited by supply. All potential sites will be developed and operated at standard levels of service.
>
> Those Further Planning Areas with moderate to high potential for wilderness recreation use will be recommended for wilderness.

Timber outputs will be managed at cost-effective levels outside developed recreation sites and ski areas, representing an Allowable Sale Quantity of 10.1 MMBF by the fifth decade.

The grazing program will be managed at cost-effective levels, representing 46,500 AUMs, or a 12 percent increase over the base year of 1982 by the fifth decade.

Wildlife and fish habitat improvement for harvest species will be maximized in response to demand for hunting and fishing (the supply could not, however, meet that demand). Habitat for threatened and endangered species will be managed for recovery. Habitat for all other species will be managed for population viability.

AMN: MAXIMIZE AMENITY VALUES

Under this alternative, amenities are maximized with little regard for the effects on commodity outputs. Wilderness, wildlife, and primitive and semi-primitive dispersed recreation are emphasized. There is no budget limitation in the FORPLAN model.

The wilderness land base will be increased by the addition of all Further Planning Areas that are at least minimally suitable for wilderness, considering wilderness characteristics and boundary manageability.

Wildlife habitat will be managed with the objectives of increasing mule deer habitat capacity by at least 20 percent in response to the RPA goal of maximizing habitat for threatened and endangered species; meeting the RPA goal of at least maintaining current habitat capacity for cavity-nesting birds; maximizing habitat capacity for sensitive and special interest species; and maintaining or enhancing habitat for all other native vertebrate species. Fish habitat will be managed with the objectives of responding to projected levels of dispersed recreation and maximizing habitat for threatened trout species.

Dispersed recreation will be managed with an emphasis on the quality of the experience, rather than the quantity of use. Primitive and semi-primitive opportunities and a high level of scenic quality will be emphasized. Developed summer recreation will be managed with the objective of maintaining current levels of use through the fifth decade. Alpine ski area development will increase at a rate that responds to demand to the level projected in the Mammoth-Mono Unit Plan.

Timber will be managed for commercial production to the extent compatible with cost-efficiency and amenity objectives.

Domestic livestock grazing will be managed to the extent compatible with wildlife objectives.

AMB - EMPHASIZE WILDLIFE AND RECREATION

This alternative places a primary emphasis on the quality and quantity of wildlife habitat with a secondary emphasis on moderate expansion of the developed recreation program. Other commodity outputs are produced to the degree compatible with wildlife and recreation objectives. Amenity values other than wildlife receive a moderate degree of emphasis. There is no budget limitation in the FORPLAN model.

Wildlife habitat will be managed with the objectives of increasing mule deer habitat capacity; maximizing habitat for threatened and endangered species; maximizing habitat for sensitive and special interest species; and moderately improving ecological diversity to enhance habitat for other native vertebrate species. Fish habitat will be managed with the objectives of responding to projected increases in dispersed recreation and maximizing habitat for threatened trout species.

Developed recreation will be managed with the objective of increasing use 30 to 35 percent by the year 2030. Alpine ski area development will increase in response to demand where compatible with wildlife objectives. The management of dispersed summer and winter recreation will provide for an increase in use roughly proportional to developed site use.

The wilderness land base will be increased by the addition of Further Planning Areas with moderate to high wilderness recreation values and/or ecological types not yet represented in wilderness on the Inyo.

Domestic livestock grazing will be managed to the extent compatible with wildlife objectives.

Timber will be managed for maximum production to the extent compatible with cost-efficiency and wildlife, recreation, and range objectives.

COMPARATIVE OVERVIEW OF ALTERNATIVES

The following discussion compares the six alternatives studied in detail in terms of the Forest's resources.

MINERALS

It is assumed that the quantity of geothermal, small hydroelectric, wind, and solar energy resource development that could occur is generated by private industry. There are no plans to lease additional land for geothermal development under any alternative.

The greatest acreage of land with high and medium mineral potential withdrawn from mineral entry is in the AMN alternative, followed by CEE, AMB, PRF, CUR and RPA. Most of the difference in acreage results from the differences in withdrawals for wilderness.

RANGE

The competition between domestic livestock and mule deer is addressed differently in each alternative. Cattle have priority over mule deer (in terms of increased forage resulting from range improvements) on key deer winter range in RPA. Mule deer have priority in PRF, CUR, and CEE; cattle are removed entirely from key winter range in AMN and AMB. Cattle grazing in key deer fawning areas is deferred until after July 15 in AMN and AMB; fawning areas are also emphasized in PRF and CUR, but specific details are left to resolution in allotment management plans.

The competition between livestock grazing and timber management is also handled differently in each alternative. Cattle grazing is allowed to decline from current levels in suitable timber under all alternatives except AMB, in which current levels area maintained.

Range outputs are increased in most alternatives. RPA represents a 34 percent increase in grazing over current levels. CEE represents a 12 percent increase; PRF maintains current levels. CUR, AMN, and AMB involve 6, 15, and 5 percent reductions in range outputs respectively by the fifth decade.

RECREATION

The quantity of use, quality of recreational experiences, and type of recreational opportunities differ considerably by alternative; however, most of that difference occurs on a limited number of acres.

Most differences in the quantity of developed recreation, other than alpine skiing, occur primarily in concentrated recreation areas as a result of increased developed site capacity. Differences in quality of developed recreation result from maintenance and service standards.

The greatest differences in quantity of dispersed recreation use occur in concentrated recreation areas in association with the quantity of developed site use.

These differences tend to be concentrated on lands in the area from Mammoth to Lee Vining with timber, geothermal, alpine skiing, and developed site potential; the major Sierra Nevada drainages from Convict Lake to Horseshoe Meadow with developed site potential; and the Monache area of the Kern Plateau with timber potential.

The assumption is that, other than a moderate trend toward more dispersed use, recreation on most Forest lands will not change substantially from the current situation under any alternative.

Developed Recreation

The quantity of developed summer recreation represents a wide range of outputs under the alternatives. CUR and AMN represent the lowest level of use with the maintenance at current levels. AMB represents a moderate increase in use. PRF, RPA, and CEE represent the high end of the scale with

an increase of 57 percent over base year use by the fifth decade. Increases will occur primarily in the public sector.

The quality of developed recreation experiences will also vary. A standard level of facility maintenance and service contributes to recreational quality; low standard levels detract from such quality. The quality of developed recreation experiences will be impaired by low standard operation only in CUR.

Alpine Skiing

Alpine ski area capacity estimates differ considerably by alternative. Projected ski area capacity ranges from 31,000 SAOT (1,678,600 RVDs) at the low end to 61,000 SAOT (3,372,600 RVDs) at the high end. AMN provides for the least growth with the other alternatives increasing in order: CUR, AMB, RPA, to CEE. PRF calls for capacity at approved development plans. Additional development will require a cumulative impact study. The Sherwin Bowl proposed ski area is currently being analyzed outside this planning process in a separate Environmental Impact Statement.

Dispersed Recreation

The quantity of dispersed recreation is assumed to increase in general proportion to public developed site capacity and use. A large part of dispersed summer use on the Forest is generated by campground use. To a lesser degree, dispersed winter use is generated by people who come to the Forest primarily because of alpine skiing opportunities.

The quality of dispersed recreation in concentrated recreation areas is related to the overall amount of use and the availability of facilities such as trails, restrooms, and interpretive signs that distribute use and protect resource values. Increased use will be highest in PRF, RPA, and CEE because of the full development of facilities and standard levels of service. CUR will perpetuate the current low level of recreational quality, despite the minimal increase in use, due to a lack of support facilities and low levels of service. AMB will represent higher overall quality with a moderate increase both in use and in facilities. AMN projects high quality with slightly increased use and substantially increased facilities.

Dispersed recreation opportunities vary from primitive (no facilities, no vehicles, few people), through semi-primitive to intensively developed (many facilities, many vehicles, many people). These will be clustered at the primitive and semi-primitive end of the scale in AMN and AMB. More opportunities related to road construction and facility development are available in PRF, CUR, RPA and CEE, in that order.

Recreation quality is affected by the potential for conflict with other resources. Timber management on the Inyo does not generally conflict directly with dispersed recreation use. Conflicts with summer use are minimized because most logging occurs in the winter, and conflicts with winter dispersed use can be minimized by locating nordic ski and snowmobile trails as needed to avoid those areas being harvested.

The two areas most susceptible to new or increased motorized use resulting from timber road access are the unroaded forested lands east of San Joaquin Ridge and the Monache area of the Kern Plateau. Neither area is harvested in AMN and PRF; only the San Joaquin area is harvested in AMB. Both areas are harvested under the other alternatives.

Fishing opportunities outside of hatchery-stocked fisheries are related to the productivity of resident trout fisheries, which is affected in turn by the amount of stream habitat and watershed improvement under an alternative. There is little difference between the alternatives for fishing opportunities. Opportunities to increase habitat capacity are limited.

Big game hunting opportunities are related to the number of deer on the Forest. Deer populations may decline under the impacts of facility development, improved access, and increased livestock on winter range. They may increase with habitat improvement and reduced competition with livestock on key deer range. The ranking of alternatives according to hunting opportunities lists AMN, AMB and PRF at the high end, CUR in the middle, and RPA and CEE at the low end.

TIMBER

The alternatives differ in the amount of acreage determined suitable for timber management, as compared with the acres considered tentatively suitable for planning purposes. The final calculation of suitable acres (those that will actually be managed for timber production under an alternative) was derived from the tentatively suitable land base. Subtracted from this were timberlands in recommended wilderness, concentrated recreation areas, alpine ski areas, and areas managed with an amenity emphasis under an alternative. The largest suitable timber acreage is found in RPA. Acreage figures decline from RPA to CEE, to CUR, to PRF, to AMB, to AMN at the low end of the scale. The suitable timber in RPA represents 90 percent of tentatively suitable timber; AMN represents 56 percent.

The alternatives also differ in timber outputs, but the difference is not directly proportional to suitable timber acreage under each alternative. The reason for this lack of proportionality is the fact that suitable acreage may be managed under one of several sets of management strategies. High level timber management will produce more board feet per acre than moderate level management. Timber outputs in the fifth decade range from 19.8 MMBF for RPA to 6.5 MMBF for AMN, representing a range from 2,000 to 1,000 board-feet produced (on the average) per acre of suitable timber.

Fuelwood resulting from logging debris is roughly proportional to overall timber outputs. Additional fuelwood may be made available as part of the programmed harvest if needed to respond to demand.

WILDERNESS

Alternatives differ in the total acreage recommended for wilderness. RPA represents the low end of the scale, with no wilderness recommendations; AMN represents the high end of the scale, with 510,800 acres in twelve areas

recommended for wilderness. The other alternatives in increasing order of acres recommended, are: PRF, CUR, AMB, and CEE.

Recreation use is not proportional to quantity of acres recommended. The Further Planning Areas on the Forest, as a group, have fewer wilderness attributes than designated wilderness. Although natural integrity and opportunities for solitude tend to be high, natural appearance and opportunities for primitive recreation tend to be low. The latter is true Primarily because many Further Planning Areas have primitive roads, accessible by four-wheel drive vehicles, and lack the available water sources that will facilitate non-motorized recreation.

The amount of wilderness recreation use projected for an alternative reflects the availability of primitive recreation opportunities in the areas recommended for wilderness under that alternative. AMN, for example, which has the largest recommended wilderness acreage, includes considerable acreage in Further Planning Areas with moderate to low wilderness quality and low projected levels of wilderness recreation use. CUR recommends only that part of the White and Inyo Mountains with outstanding ecological features such as desert springs and alpine tundra. PRF, CEE, AMN and AMB include additional acreage without such features.

WILDLIFE AND FISH

The majority of direction for wildlife and fish habitat is found in the Forest-wide Standards and Guidelines common to all alternatives; such direction is intended to meet Minimum Management Requirements (MMRs) for native verterbrate species. In only the following cases does direction exceed the MMRs and, therefore, vary by alternative.

Mule deer. PRF, CUR, and CEE give priority to mule deer over cattle for any increases in forage production on key deer winter range; AMN and AMB remove cattle from key winter range; RPA gives priority to cattle on winter range. AMN and AMB call for delayed livestock grazing in key deer fawning areas; PRF and CUR also emphasize fawning areas, but leave the details to allotment management plans; RPA and CEE place no special emphasis on fawning areas. AMN, AMB, and PRF emphasize the integrity of mule deer migration routes; the other do not address migration routes.

Peregrine falcon. PRF, CUR, RPA, and CEE provide for the reintroduction of two nesting pairs; AMN and AMB provide for four.

Goshawk. PRF, CUR, AMN, and AMB maintain fifteen (all existing) goshawk territories in suitable timber; RPA and CEE will allow a reduction in the number of such territories, maintaining only nine (the number needed to meet minimum management requirements). PRF, AMN, and AMB provide one hundred acres per goshawk territory; the remaining provide only the minimum management level, fifty acres per territory.

Sierra Nevada mountain sheep. RPA and CEE provide for no additional reintroduced herds; PRF and CUR provide for at least one additional herd; AMN and AMB provide for seven additional herds.

Riparian area dependent species. All alternatives call for negotiating with utility companies to rewater selected reaches of stream and reestablishment of streamside riparian vegetation. Wet meadows represent more than two-thirds of the riparian vegetation on the Forest. Of the 26,000 acres of wet meadow on the Forest, 23,500 acres have been identified for watershed restoration. CEE, AMN, and AMB call for full watershed restoration in wet meadows over fifty years; PRF calls for 17,100 acres of watershed work; RPA for 9,900 acres; and CUR for 2,000 acres.

Older seral stage dependent species. The alternatives vary in the amount of suitable timber maintained in older seral stages. CUR, RPA, and CEE maintain only the amount needed for goshawk nesting territories (see above). PRF maintains 5.4 percent of suitable timber in older seral stages, AMN 30 percent, and AMB 20 percent.

Snag dependent species. PRF, CUR, RPA, and CEE will apply only the Minimum Management requirements for snags (maintain at least 40 percent of natural potential). AMN and AMB call for maintaining 100 percent of natural potential snag-dependent wildlife density.

Fish. There is limited potential to increase fish habitat capability on the Forest. More than 90 percent of resident trout are found in lakes, where habitat condition is generally good and there are no identified opportunities to enhance or increase habitat. The majority of both lake and stream habitat is in wilderness, where habitat is also generally good and any potential for enhancement will be limited by wilderness management.

Of the stream acreage identified as suitable and available for habitat improvement, CEE implements the full program; PRF, RPA, AMN, and AMB represent high levels of improvement; CUR represents a moderately high level. Additional fish habitat improvement is induced from watershed improvement, discussed above under riparian area-dependent species.

Threatened trout habitat is managed only for species recovery under PRF, CUR, RPA, and CEE; AMN and AMB call for increasing threatened trout habitat above recovery levels.

ECONOMICS AND TRADEOFF ANALYSIS

The major economic tradeoffs between the alternatives are projected economic effects; costs and values of priced and non-priced resources and benefits; and the level of national and regional issue resolution. Economic indicators are of concern to the federal taxpayer, as they measure alternatives in terms of their responsiveness to economic efficiency in government.

Total public benefits from the Inyo National Forest increase over the next fifty years primarily in response to the amount of dispersed and developed recreation, and (to a much lesser degree) in response to wildlife, watershed, timber, and range outputs. Increases in total benefits for the studied in detail range from 20 percent to 107 percent above the 1982 base level.

The lowest economic benefit levels are found in those alternatives in which developed recreation or ski area expansion is limited by budget or other

resource considerations. Non-cash benefits, derived primarily from recreation use, comprise 94 percent to 97 percent of total Forest benefits in the first decade. Cash returns increase over the planning horizon in direct proportion to the size of the developed recreation, timber, and range programs. CUR provides the least impressive gains in cash benefits.

Total costs increase from 7 percent to 35 percent above the 1982 base year level in the first decade. These cost increases primarily reflect increases in capital investments, which range from a 28 percent reduction to a greater than 600 percent increase over the 1982 base year level. Recreation facility, trail, and timber road construction vary with the size of the recreation program, the amount of wilderness proposed, and the quantity of timber harvested.

Employment and income opportunities are drawn primarily from developed recreation, alpine skiing, timber harvest, and livestock grazing. Related support businesses provide considerably smaller proportions of the available jobs. Changes in local employment opportunity range from zero to an increase of more than 36 percent.

A comparison of Present Net Value (PNV) between key benchmarks and alternatives illustrates the economic and resource opportunity costs of the Minimum Management Requirements, Timber Policy Requirements, and Minimum Implementation Requirements. The basis of the Present Net Value comparison is the most economically efficient, unconstrained benchmark (FLW).

The Minimum Management Requirements and Timber Policy Requirements represent the first set of objectives added to FLW, resulting in the MMR Benchmark. These requirements include goshawk nesting territories, riparian area protection, maintenance of soil and water productivity, and minimum diversity of vegetative seral stages. On the Inyo National Forest, only goshawk territories and riparian area protection were applied as constraints on the resource allocation model. Each of these requirements slightly restricted timber harvest.

The Minimum Implementation Requirements represent the second set of objectives analyzed. They were added to the MMR benchmark, resulting in the CEE Alternative. On the Inyo National Forest, maintenance of visual quality along state-designated scenic highways was the only Minimum Implementation Requirement applied to the analysis. The only effect was a slight additional restriction on timber harvest.

The Minimum Management Requirements, Timber Policy Requirements and Minimum Implementation Requirements collectively represent a reduction in Present Net Value (PNV) of $0.3 million, less than 0.01 percent of the PNV for the FLW benchmark. This reduction in PNV results primarily from increased costs for timber production and a loss of 0.275 MMBF of timber harvest over the first five decades. The goshawk and riparian area requirements had the greatest effect on timber costs. These requirements ensure the maintenance of nine goshawk territories of fifty acres each in suitable timber and the protection of riparian area-dependent resources in suitable timber. The two requirements shared equally in reducing PNV.

The Timber Policy Requirements of harvest dispersion and non-declining yield had negligible effects on PNV due to the low relative value of timber on the Inyo National Forest and the interaction of stand growth, discounting of costs and benefits, and price trends. These factors combined to reduce the harvest in earlier decades with the trend steadily climbing and stabilizing in later decades. Allowing for harvest to decline in the later decades had no appreciable effect on PNV, due mainly to the discounting factor.

The Management Implementation Requirement for visual quality protection resulted in a very slight drop of $0.1 million in PNV due to restrictions on timber harvest techniques and limitations on the size of openings.

The total cost of constraints added to benchmarks to develop the CEE Alternative are insignificant in terms of reduced PNV or reduced resource production capability. The impact of the Minimum Management Requirements, Timber Policy Requirements, and Management Implementation Requirements was felt exclusively on timber benefits, which at most provide less than 3 percent of the total discounted benefits on the Forest. The distribution of benefits within the recreation program varied on the basis of facility maintenance levels, wilderness recommendations, and the extent of alpine ski area development. Timber, range, and other resource benefits and costs were far less significant than recreation in determining the relative PNV of the alternatives.

The CUR Alternative ranks lowest in PNV, primarily because budget constraints in the FORPLAN model limited opportunities to contribute to PNV.

An examination of net cash flow for the alternatives indicates that expenditures are greater than returns to the Treasury in all alternatives for both the first and fifth decades.

Cash receipts will be derived mainly from developed recreation and timber production, with livestock grazing and geothermal energy resources representing 3 to 8 percent of the total. Gross receipts for all alternatives will be higher than the 1982 base level of $2.2 million. Receipts will be expected to nearly double between the first and fifth decades in all alternatives except CUR, which increases the least because of budget limitations. Even with substantial increases in returns to the treasury, negative net cash flow increases in all alternatives except CUR, AMN, and AMB, which have the lowest total federal costs. This relationship is due primarily to the need for substantial investment in order to realize major benefits in the recreation and timber programs.

A large part of the total benefits derived from Inyo National Forest lands represents the estimated amount that consumers will be willing to pay for Forest outputs such as recreation. These values do not reflect the amount that they actually pay for those outputs and are termed "willingness-to-pay assigned values." Consequently, the actual cash received by the U.S. Government is not proportional to total benefits generated by Forest management programs.

The ranking of alternatives by net cash flow is inversely proportional to costs in the first decade. Generally, those alternatives that move up in the ranking between the first and the fifth decade are those that recommend large

acreages for wilderness and that have reduced timber and developed recreation production. This relationship results from the high initial costs of wilderness designation (trail and trailhead construction) versus the moderate costs and high-level benefits of wilderness management over the long term.

The most economically efficient alternative, CEE, falls near the middle of the first-decade ranking according to net cash flow. The CUR and RPA Alternatives rank above CEE, as they emphasize resources producing income to the treasury, primarily developed recreation and timber production. AMN and AMB incur large first decade capital-investment costs to accommodate large acreages of proposed wilderness. By the fifth decade, their costs are reduced substantially because neither alternative supports a large timber or developed recreation program. CEE ranks lowest in the fifth decade, primarily because it provides only the most economically efficient timber harvest levels (lower than CUR or RPA) in combination with a substantial recreation program which provides little in terms of actual income to the treasury.

In general, Alternatives CUR, AMN, and AMB (with budget limitations, major initial investments for wilderness, and/or with long-term low-profile timber and recreation programs) provide fewer non-cash benefits than other alternatives. Alternatives RPA, CEE, and PRF (which strive to meet projected public needs through increased developed recreation programs) incur high costs, provide the highest returns to the treasury, and offer the highest non-cash benefits.

That portion of the economic benefits that will not be collected as cash receipts varies considerably across the alternatives. These benefits are based primarily on recreation, wildlife, and range outputs, which provide upwards of 90 percent of the total PNV. For this reason, there is not a large range of net cash flow among the alternatives (except CUR, which is considerably lower because of budgetary restrictions).

It is important to note that all projections beyond ten years are highly speculative, as both natural resource and socio-economic data is extremely variable.

III. AFFECTED ENVIRONMENT

GENERAL DESCRIPTION OF THE FOREST

The Inyo National Forest consists of four Ranger Districts with offices in Lee Vining, Mammoth Lakes, Bishop, and Lone Pine. The Forest Supervisor's office is in Bishop.

The Forest contains 1,931,115 acres, encompassing large parts of the Sierra Nevada, Glass, White, and Inyo Mountains. Most Forest lands drain into the Mono Basin or Owens River. Smaller portions drain westward into the San Joaquin or Kern Rivers, or eastward into the Great Basin. The Forest is long and narrow, extending 165 miles from north to south, and varying in width from four to sixty miles. It straddles the boundary between the southern

Sierra Nevada and southern Basin and Range Physiographic and Geologic Provinces.

The natural environment of the Inyo is noteworthy for its contrasts. Elevations range from 3,680 feet near Owens Dry Lake to the peak of Mt. Whitney at 14,495 feet. Plant and animal habitats include such contrasting elements as desert and wet meadow, forest and alpine tundra. Rugged, barren escarpments stand above forested hills, sagebrush flats, and grassy plateaus.

The climate on the Forest is as diverse as its topography. The higher elevations in the Sierra Nevada receive high levels of precipitation. Mammoth Pass, for example, receives an average of 45 inches a year, most of which falls as snow between November and March. The eastern portions and lower elevations of the Forest are quite arid. The community of Bishop, located at 4,000 feet and about midway between the eastern and western Forest boundaries, records an average of six inches of annual rainfall, most of which occurs during the winter months.

Many outstanding natural features are included within the Forest boundary:

- Mt. Whitney is the highest peak in the 48 contiguous states.

- The Ancient Bristlecone Pine Forest includes both the Methuselah tree (the world's oldest known living tree) and the Patriarch (the largest known bristlecone pine).

- Mono Lake is a large inland sea that supports a unique biological community including brine shrimp, brine flies, nesting California gulls, and several million migratory birds.

- The Mono Craters are "textbook examples" of volcanic geology visited annually by students and scientists from across the nation.

- The Mono Craters and Mono Lake are two of many unique features in the Mono Basin National Forest Scenic Area designated by Congress in 1984.

- The Devils Postpile National Monument, administrered by the National Park Service, lies within the Forest boundary. The Devils Postpile itself is an outstanding volcanic feature.

- The Owens Valley is one of the deepest valleys in the world. The floor of the valley is at 4,000 feet. The mountains on either side are 14,000 feet high.

- The Palisades Glacier is the southernmost glacier in the northern hemisphere.

- The Inyo has the largest continguous pure Jeffrey pine forest in the world.

- White Mountain Peak (14,246 feet) is the highest peak in the Great Basin.

- The native range of golden trout (the California State Fish) lies partly on the Inyo.

- The White Mountain Research Station is the highest site in the U.S. that is occupied year-round.

The scenic appeal and recreational attractions provided by the natural environment and the proximity of the Forest to urban Southern California result in high levels of recreation use. The Inyo National Forest ranks fifth in recreation visitation among National Forests in the nation and second in California. Mammoth Mountain Ski Area receives more skier-days of use per year than any other ski area in the United States. The John Muir Wilderness is the most heavily used in the nation.

The Inyo ranks first in coldwater fishing and second in overall angling recreation among the National Forests in California. Developed-site campground use leads the nation. Summer dispersed camping, mule deer hunting, and four-wheel drive recreation are also popular.

SOCIAL AND ECONOMIC ENVIRONMENT

SPHERE OF ECONOMIC INFLUENCE

The Inyo National Forest contains 2,046,346 acres. 1,931,115 are in National Forest System ownership. These lands are located in seven counties. Five counties are in California, two in Nevada.

The primary zone of economic influence for the Inyo National Forest is in California's Inyo and Mono Counties. Nearly 85 percent of the Forest lies within those counties, and more than 95 percent of the Forest lies within the State of California. Ninety percent of Inyo County, the second largest county in the state, and more than 75 percent of Mono County are administered by the federal government. Currently, all timber harvesting conducted by the Inyo National Forest and more than 90 percent of recreational activity take place in these two counties. Recreational activities on the Forest are closely linked to the tourist economy of these counties.

In contrast, the Forest has a relatively limited economic impact on the California counties of Tulare, Madera, and Fresno and on the Nevada counties of Mineral and Esmeralda. This economic situation is not expected to change in the foreseeable future.

Residents of Southern California, primarily those from San Diego, Los Angeles, Orange, Ventura, Riverside, and San Bernardino Counties, make heavy use of the Forest's numerous recreational facilities and resources, such as alpine ski areas, campgrounds, and wilderness. The demand for recreational opportunities by Southern Californians has an economic impact on the Forest and on many of the communities near the Forest. The impact of the Inyo National Forest on Southern California is, however, negligible.

POPULATION

Population growth in Inyo and Mono Counties during the past two decades has been substantial. Mono County grew by more than 113 percent between 1970 and 1980. This ranked the county second among the fastest growing counties in the state. This rapid growth rate can be attributed to the recreational importance of the Mammoth Lakes area.

During the same decade, the Inyo County population grew 15 percent, lower than the state average of 18 percent. Most of this growth took place in and around the community of Bishop, which serves as a service center for the two-county area. Major employers in the area are local, state, and federal governments.

EMPLOYMENT

The economy of the area reflects the importance of recreation, tourism, and the public sector. The three employment categories of services, retail sales, and government together accounted for nearly three quarters of the total wages and salary for workers in 1980. The employment base has grown by nearly 75 percent in the past decade. The services and retail sales categories have enjoyed healthy employment gains, while government employment levels have tapered off and recently recorded some declines.

The high unemployment rates commonly found in tourist-oriented economies are found in the Inyo-Mono area. Rapid population growth, a broadening of the work force, the lack of diversification in the rural economy, and the seasonal nature of the tourist industry have resulted in unemployment rates generally higher than the state average.

ROLE OF THE INYO NATIONAL FOREST

The Forest makes a direct contribution to the area economy through expenditures in the private sector, the generation of jobs, recreational opportunities, and payments into county revenues. Forest expenditures for payroll and procurements in Fiscal Year 1982 were $8.55 million.

Payments into county revenues are from two sources: Payment in Lieu of Taxes and Receipts Act payments. Payment in Lieu of Taxes payments compensate counties for the loss of property tax revenues represented by nontaxable federal land within the county. In 1980, the total Payment in Lieu of Taxes payment to counties by the Inyo National Forest was $165,180.

Receipts Act payments are based on fees collected for use of Forest lands and resources. Twenty-five percent of dollars received by the federal treasury from such activities as timber sales, special use permits, and campground fees are distributed through the Forest Service to the counties to offset school and road costs. Total Inyo National Forest Receipts Act payments for Fiscal Year 1980 amounted to $385,003.

The Forest also provides indirect economic benefits to the public by supplying certain goods and services at prices below established or estimated

market values. Examples include outdoor recreation opportunities and Forest lands for the use of commercial enterprises such as livestock production, apiaries, mineral and energy exploration and development, and water production.

FUTURE TRENDS

Economic growth in the area is expected to continue much as it did in the 1970s, increasing overall. As economic growth continues, the resident population and the pressure for more services will increase. An increased local population could stabilize the fluctuating tourism economy of the 1970s. However, unless the different communities actively seek economic diversity by attracting manufacturing industries to the area, little change is foreseen.

The economic foundation of the area will remain closely tied to increased recreation use and tourism. An increased demand for all Forest resources and services, especially those related to recreation, can be expected. The greatest impacts on Forest management are likely to be found in the areas of landownership adjustments and land uses, scenic quality, and the Forest's role in providing a variety of recreational opportunities. The demand for energy production and water yield are also likely to increase with increases in population, both locally and elsewhere in California.

ECONOMICS IN FOREST PLANNING

National Forest land is public land, and its value accrues to the public. The value of Forest land and resources is of two kinds; products with economic value and those that do not lend themselves to economic quantification, such as the conservation and enjoyment of our natural heritage. The need to manage Forest lands and resources in a way that will provide the greatest net public benefit, taking both kinds of values into consideration, is both a public issue and management concern.

Economic efficiency analysis determines the effects of different management strategies on the economic values of Forest resources, using the measure of Present Net Value (PNV). The benefit components of PNV are the commodity values of recreation (including wildlife and fish-related recreation), water, energy, timber, fuelwood, and grazing. The cost components of PNV include such factors as Forest management expenditures, resource losses, and the opportunity costs of producing non-priced benefits. PNV plus all non-priced benefits represent net public benefit.

SPHERE OF SOCIAL INFLUENCE

Inyo and Mono Counties comprise the primary zone of social influence for the Forest. The lifestyles, quality of life, and social values of the individuals in this area are to varying degrees dependent upon Forest resources and facilities.

The median age for the two-county area is about 34.5 years, well above the 30.8-year median age for the state. This fact is due, in part, to the area's recreational opportunities which attract retiring senior citizens. Personal income averages about $14,300. The area is over 90 percent White (of which 5.6 percent is of Hispanic background), and 7.3 percent American Indian, with Black, Asian, and other races together making up less than 2 percent of the total population of the area.

Paramount to the quality of life is the sense of open space, rugged terrain, scenic qualities, clean air and water, and the abundant recreational opportunities which the Forest provides. The natural resource attributes of the area are coupled with the social attributes of low population density, slow growth, simple lifestyles, small communities, limited services, and a prevailing feeling of self-sufficiency and individualism.

As the primary zone of Forest influence, the Inyo-Mono area is expected to receive direct, identifiable, and measurable benefits and impacts from the Forest's management and policies. The two counties have important ties to the Forest through landownership patterns, land uses, energy production, grazing, fuelwood supplies, fire protection, timber production, and recreational opportunities.

Southern California is a secondary zone of social influence for the Forest. Southern California's demand for recreation affects the Forest and many of the communities in the primary zone of influence. The social impact of the Forest on Southern California may be important but is lost in that area's large size, huge metropolitan population, and broadly diverse social structure.

SOCIAL GROUPS

Management direction and resource outputs of the Inyo National Forest affect several local social groups, each of which places different demands and values on Forest resources. Six major social groups have been identified within the primary zone of influence. Those groups are: long-time residents, regional recreationists, seasonal employees, special use permittees, American Indians, and retirees.

Long-time Residents. Long-time residents are a diverse group of people identified primarily as having lived in the area for ten years or longer. This large group is found working in every sector of the local economy including mining, retail sales, ranching, logging, recreation, and services.

Regional Recreationists. Regional recreationists are attracted to the area to enjoy a recreation- oriented lifestyle. This group includes second-home owners and those who enjoy the area for summer vacations and weekend winter skiing. The latter group is particularly important to the economy of the area.

Seasonal Employees. Seasonal employees who reside in the area are typically young individuals with a primary goal of pursuing an outdoor lifestyle. Earning a living is often a secondary goal. If they are not able to obtain

full-time employment, they are dependent upon the large seasonal employment market in the area.

Special Use Permittees. There are currently 972 special use permits on the Inyo National Forest, governing lands uses on 34,960 acres of Forest land. Special use permits are issued for a variety of purposes, including agricultural, industrial, recreational, research, transportation, and water uses. Special use permittees are especially important to communities such as Mammoth and June Lake, both of which have alpine ski areas on Forest land under special use permit. In 1980, the 546 recreation special use permits contributed more than $1.29 million to the federal treasury, 25 percent of which was returned to local county governments. The Forest ranks first in the nation in revenues received from recreation special use permits.

American Indians. Nearly 2,000 Paiute-Shoshone Indians live on reservations in the Big Pine, Lone Pine, and Bishop areas of Inyo County. The Indian way of life, beliefs, and values are interwoven with nature, the environment, and the mountains of the area. Many Indian religious sites, spiritual areas, and traditional food-gathering areas are located on National Forest land.

Retirees. Senior citizens, a segment of the population whose numbers are increasing, are attracted to the area because of its recreational opportunities, relaxed pace of life, and rural environment. Many retirees come to the area from Southern California.

RESOURCE ENVIRONMENT

AIR QUALITY

Air quality on Inyo National Forest lands meets or exceeds state air basin objectives more than 99 percent of the time.

CULTURAL RESOURCES

Current research indicates that eastern California and western Nevada have been occupied for at least the past 10,000 years. The density of cultural sites on the Inyo National Forest averages 1 per 59 acres (contrasted with 1 per 105 acres on the Angeles National Forest and 1 per 245 acres on the Tahoe). It is estimated that the Forest contains 35,000 or more sites.

DIVERSITY

Vegetative diversity on the Inyo National Forest has been changed from natural levels primarily through water diversion, affecting the extent of riparian areas; past overgrazing, affecting the condition of riparian areas and wet meadows; fire suppression, reducing the seral stage diversity of brush and allowing woody vegetation to encroach on meadows by preventing natural fire-caused rejuvenation; and commercial timber management, reducing the extent of older seral stages of coniferous forests.

ENERGY

Hydroelectric. The Inyo National Forest has a significant potential small hydroelectric resource, including the two major components of perennial water flow and rapid change in elevation. Six small hydroelectric projects are currently operating and fifteen additional applications have been submitted for fifteen streams on the Forest. Major hydroelectric projects affect four streams on the Forest.

Wind Power. The suitability of Inyo National Forest land for wind power is not well known. Preliminary studies indicate, however, that wind patterns on the Inyo may not be suitable for power generation.

FACILITIES

The Forest has eighty-six buildings at seven administrative locations. Of these, all but one are federally owned (the Forest Supervisor's office in Bishop is leased from a private party). There are eighteen dams on Forest land: three are owned by the Forest Service; fifteen by utility companies. Although one of the proposed small hydroelectric projects could include a small dam, most will divert water rather than impounding it. No new sites for major dams have been identified on the Forest.

There is one major mass transit system on the Forest; several smaller ones; and thirteen roads that have been designated as Forest Highways. The Forest has 32 miles of arterial roads, 201 miles of collector roads, 741 miles of local roads, and an estimated 300 miles of uninventoried roads. These roads are used primarily for public recreation access, administration, fire protection, and commercial timber transport.

FISH

Inyo National Forest fish habitat includes about 1,100 miles of stream and several hundred lakes. Habitat condition in most streams is rated medium to high. Lake fish habitat quality is generally high. More than 90 percent of resident fish on the Forest are found in lakes.

Waters on National Forest land contain rainbow trout, brook trout, brown trout, Colorado cutthroat trout, Lahontan cutthroat trout, Paiute cutthroat trout, golden trout, western sucker, and Owens sucker. The golden trout, western and Owens suckers and rainbow trout in the Kern River are the only native species known to reside on the Forest. Reproducing brown, brook, and rainbow trout are common.

FURTHER PLANNING AREAS

The Inyo National Forest has 1,008,282 acres of land that were inventoried as roadless by the Roadless Area Review and Evaluation (RARE II) study. Of those acres, 46,146 acres were designated wilderness by the California Wilderness Act; 338,319 acres made available by that Act for non-wilderness

management; and 576,517 acres remained in the Further Planning category. In addition we have 47,300 acres of inventoried roadless areas in Nevada.

Most Further Planning Areas on the Forest are substantially lower in user capacity and recreational attractions than existing wilderness. A few Further Planning Areas contain unique or outstanding geological or ecological features.

GEOLOGY

Slope instability processes (including those triggered by earthquakes) are the most important geologic events on the Forest in terms of risk, primarily because of their relative frequency. Volcanic events are the least important due to their low frequency, despite the size of their potential impacts.

The extent and quality of groundwater on the Forest are not known. Small-scale wells have been developed to serve campgrounds, administrative sites, fire suppression units, and livestock and wildlife needs. Those uses currently total 43 acre-feet. Additional groundwater, amounting to 300 acre-feet, is used to supply Mammoth Mountain Ski Area. There is no current community use of groundwater from on-Forest sources.

LANDS

There are approximately 1,181 miles of property lines on the Forest, of which thirty-one have been surveyed and posted to standard. The Forest currently resolves an average of five occupancy trespass cases per year. Approximately 1,911 miles of utility, transportation, and water transmission lines lines cross the Forest under special use permit. However, no utility corridors have been designated to date.

Withdrawals on the Inyo National Forest total 757,516 acres, representing actions initiated by the Forest Service, by Congress, or by other federal agencies. 565,142 of these acres are in wilderness. The Forest Service is currently reviewing the withdrawals it has initiated. If the needed objectives can be met by a less restrictive management option than withdrawal, some withdrawals may be modified or revoked.

The Inyo National Forest boundary includes 2,046,346 acres, of which 116,591 are in non-federal ownership. In Inyo and Mono Counties, which contain most of the Forest land, only seven percent of land within the Forest boundary is in other ownership (more than half of that belongs to the state of California or the City of Los Angeles and lies within the recently legislated Mono Basin National Forest Scenic Area).

There are currently 977 non-recreational special use permits covering 34,960 acres and 1,911 miles.

MINERALS

Leasable (Geothermal Energy). Geothermal energy is a resource found on the Inyo National Forest. Approximately 260,000 acres of the 460,000 acre Mono-Long Valley Known Geothermal Resource Area are on National Forest land. Approximately 38,900 acres are currently under lease by six separate entities.

Locatable. The Inyo National Forest has a long, active history of mining. The Bureau of Mines lists twenty commodities in 513 mineral prospects on the Forest. More than 3,000 mining, mill site, and tunnel site claims are recorded for Forest lands, but only eleven are currently in production on the Forest. The most significant of these are the Umetco Pine Creek Mine in Pine Creek and the U.S. Pumice mine in the Mono Craters. The latter produces more than 10,000 tons of block pumice each year.

A mineral potential rating of "high" has been applied to 133,860 non-wilderness acres on the Forest, and a rating of "medium" has been applied to 209,021 acres. The remaining 1,021,732 acres have been rated "low". The largest acreage in the high and medium categories is located in the Inyo Mountains and the lower elevations of the White Mountains.

Materials. Of the fifty material sources inventoried in the area, twenty-eight are on National Forest lands.

MONO BASIN NATIONAL FOREST SCENIC AREA

The Mono Basin National Forest Scenic Area encompasses 116,000 acres, of which 45,832 are National Forest land. The remaining acres include the lake surface itself and relicted lands (lakeshore created by the lowering of the lake level during forty years of water diversion) owned by the state, and additional City of Los Angeles and privately-owned lands.

PEST MANAGEMENT

Pest proliferation on the Forest is not a serious concern. Pest problems are typically localized and fall within acceptable levels.

PROTECTION (FIRE MANAGEMENT)

From 1972 to 1982, the Inyo National Forest had 491 man-caused fires, (burning a total of 5,616 acres) and 715 lightning-caused fires (burning 2,496 acres). The Inyo is typical of many Forests in California, having many small fires and an occasional large, damaging fire.

The risk of wildland fire ignition on the Inyo is rising due to increasing development of intermingled and neighboring private lands. This growth is especially significant around June Lake, Mammoth Lakes, and Crowley Lake.

Prescribed fire has been used on the Inyo National Forest for the past several years, primarily for timber site preparation. There are additional

opportunities for prescribed burning to benefit wildlife habitat and domestic livestock range. Prescribed fire has not been used to reduce fuels for fire management purposes because fuels accumulation is not a serious problem on the Inyo.

RANGE

The current grazing program supplies 41,400 Animal Unit Months per year of forage for domestic livestock and wild horses and burros, and an unknown amount for wildlife.

The White Mountain Wild Horse Territory (70 horses) and the Saline Valley and Lee Flat Burro Territory (112 burros) populations are within established management levels. The Montgomery Pass Wild Horse Territory has more animals than the range can support in the long term.

RECREATION

Developed. The Inyo National Forest supplied 1,848,500 Recreation Visitor Days (RVDs) of developed recreation use in 1982. The current capacity of non-alpine developed sites is 25,479 Persons At One Time (PAOT). About 98 percent of recreational developments lie in concentrated recreation areas. These areas cover 47,529 acres (two percent of the Forest land base).

Alpine Skiing. The Inyo National Forest has two alpine ski areas--Mammoth Mountain and June Mountain--with a combined capacity of 22,000 Skiers At One Time (SAOT). They provided 1.6 million skier visits during the 1981-82 season. The approved development plan for Mammoth Mountain and the June Mountain development plan, if implemented, would increase their capacity to approximately 29,000 to 31,000 SAOT.

Dispersed. Dispersed recreation in 1982 amounted to a total of 1,909,200 Recreation Visitor Days (RVDs). Of this total, 540,000 RVDs represented wilderness use; 340,000 represented fishing, 25,200 represented deer hunting; and 25,800 represented other wildlife-related recreation. The remaining 1,004,000 RVDs represented such activities as driving for pleasure, hiking, riding, dispersed camping, and boating.

Recreation Opportunity Spectrum. The Recreation Opportunity Spectrum classifies the Forest in terms of the types of recreational opportunities that would be appropriate in each class. The acreage classifications on the Forest are: Primitive (870,600 acres); Semi-Primitive Non-Motorized (392,600); Semi-Primitive Motorized (189,200); Roaded Natural (383,600); Roaded Modified (35,100); Rural (11,600); and Urban (2,000).

RESEARCH NATURAL AREAS

The Inyo National Forest has five established and two candidate Research Natural Areas. Existing Research Natural Areas meet established targets for Jeffrey pine (Indiana Summit), lodgepole pine (Sentinel Meadow), foxtail pine (Last Chance Meadow), bristlecone pine (White Mountain), and unique

ecosystems (Harvey Monroe Hall). Candidate Research Natural Areas meet the target for pinyon pine (Whippoorwill Flat) and alpine fellfields (McAfee Meadow). The target for limber pine is met by stands in the Sentinel and Whippoorwill areas.

RIPARIAN AREAS

There are approximately 37,000 acres of riparian vegetation (including wet meadows) on the Forest. That figure represents less than two percent of the total land base.

SENSITIVE PLANTS

There are twenty-two sensitive plant species on the Forest. Eight of these species are endemic to Inyo National Forest lands. Although none of the twenty-two species is federally listed as threatened or endangered, two species are proposed for federal listing and eight others are categorized by the U.S. Fish and Wildlife Service as needing further study. Although the condition of sensitive plant habitat varies by species and population, it is generally fair to excellent Forest-wide.

SPECIAL INTEREST AREAS

The Ancient Bristlecone Pine Forest encompasses 28,887 acres in the White Mountains. The primary attraction of the area is a stand of exceptionally old bristlecone pine trees, including the world's oldest known living tree. The Botanical Area is internationally known and has been the site of significant dendrochronological (tree-ring dating) research.

The following candidate geological interest areas were selected from a list of sixty interesting geologic features on or near the Forest: the Papoose Flat granitic intrusion; granitic domes in the Buttermilk area and Egypt Creek; Hot Creek; Starkweather Lake glacial polish; Tioga Tarns; the Inyo Craters area (including Inyo Craters, Deadman glass flow, Obsidian Dome, and Devils Punchbowl); Earthquake Fault; and Convict Lake/lower Convict Creek, including the moraines.

TIMBER

The current timber harvest on the Forest is approximately 10.5 MMBF per year. The demand for sawtimber for the Forest cannot be predicted from historical sales trends. Since all the timber offered for sale on the Forest during the past decade has been sold, it can be assumed that supply has not exceeded demand. In addition, there is relatively little uncut volume under contract (less than two years sell volume), and no sales have been turned back. Recently, bid prices for timber have been three to four times greater than advertised rates. Sawmills in both Nevada and California depend upon logs from the Inyo National Forest. There are, however, no local sawmills or communities that rely on Forest timber outputs for economic stability.

Local communities are almost entirely dependent on the Forest as a source of commercial and personal-use fuelwood. The Inyo currently sells approximately 4,000 cords of fuelwood per year to commercial operators and 6,000 cords per year to the public.

VISUAL RESOURCES

The Inyo National Forest has an extraordinary visual resource. Forty-four percent of the Forest falls in the "distinctive" variety class and 76 percent falls in the highest sensitivity level (how many people see it, what is seen and how close it is).

Visual Quality Objectives (VQOs) describe the degree to which the natural landscape can acceptably be modified, based on a combination of variety class and sensitivity level. The VQO of Preservation (no modification) applies to all Wildernesses and Research Natural Areas, or 31 percent of the Forest. The Retention VQO (modifications must not be visually evident) applies to 17 percent. Partial Retention (modifications must be visually subordinate to the natural landscape) applies to 34 percent.

Seventy-six percent of the natural landscape of the forest is rated as "untouched". Sixteen percent of the Forest has a high capacity to screen disturbances from view and 39 percent has a moderate capacity. This does not include wilderness. The current visual condition of the Forest is extremely high.

WATERSHED

Soils. Most soils on the Forest are coarse-textured. The most common parent material is granitic; the second-most common is pumiceous. Most are in optimal or near-optimal condition. These soils typically suffer little or no accelerated erosion, are stable, and each soil type is producing vegetation at its optimal level. However, wet meadows grazed by livestock and alpine ski areas are especially susceptible to soil erosion, due to both soil characteristics and to the management activities that occur there.

Water. Water quality on the Inyo is good overall. Established water basin objectives are met by more than 97 percent of the water coming off the Forest. As bacterial, nutrient, and chemical problems are small and localized, the main threat to clean water is sedimentation. The major existing sources of sediment are eroded wet meadows (damaged by poor range management in the past) and alpine ski areas.

The Forest holds adequate water rights to meet its current and foreseeable consumptive needs. Water flowing off the Forest amounts to an average of 1,093,000 acre-feet per year.

WILD AND SCENIC RIVERS

The Inyo has one candidate wild and scenic river: the Middle Fork of the San Joaquin. The South Fork of the Kern and the North Fork of the Kern have recently been designated as Wild and Scenic Rivers by Congress.

WILDERNESS

The Inyo National Forest has 565,142 acres of designated wilderness; approximately 30 percent of the Forest land base. The Plan recommends that 172,600 additional acres be added to the wilderness system. Wilderness recreation on the Forest amounted to 540,000 RVDs in 1982. There are 584.6 miles of wilderness trail currently maintained to Class I standards and 29 trailheads with a capacity of 2,212 PAOTs.

WILDLIFE

Management Indicator Species on the Forest, by category, are:

Harvest	Mule deer, Blue grouse, Sage grouse.
Endangered	Bald eagle, Peregrine falcon.
Sensitive	Goshawk, Sierra Nevada red fox, Goshawk, Pine marten, Spotted owl, Great gray owl, Sierra Nevada mountain sheep, Wolverine.
Special interest	Golden eagle, Tule elk, Prairie falcon, Nelson mountain sheep.
Dependent on riparian area	Yellow warbler.
Dependent on snags	Hairy woodpecker, Williamson sapsucker.
Dependent on early-middle seral stages of brush	Sage grouse.
Dependent on older seral stage of coniferous forest	Goshawk.

Mule deer: The current population of mule deer that relies on the Forest for summer range, winter range, and/or migratory access is estimated at 20,200 animals. Those deer that summer and/or winter on Forest lands are estimated at 12,000 with a maximum potential population estimated at 16,000. Although the deer population has remained fairly constant over the past ten years, declines are perceptible over the past twenty to thirty years.

Deer rely most heavily on Forest lands for winter range. Most spend the summer at higher elevations and many of the northern herds summer west of the Forest boundary. The Inyo has 112,119 acres of key deer winter range, most of it between 4,500 and 6,000 feet elevation on the east slope of the Sierra Nevada.

Bald eagle: The Inyo has a small amount of bald eagle wintering habitat. Approximately 20 to 30 birds winter on or near National Forest land. Current information does not indicate whether the number is increasing or decreasing.

Peregrine falcon: Although peregrine falcons existed on the Forest in earlier times, the nearest active nesting pairs are now found in Yosemite Valley and

Hetch Hetchy Canyon. Eight fledglings were reintroduced on the Forest in 1983 and 1984. There is potential nesting habitat for four nesting pairs.

Goshawk: Goshawk surveys have located approximately twenty-five active nest sites on the Forest, fifteen of these in suitable timber. Most surveys have been conducted in areas managed for timber. It is estimated that an additional twenty-five pairs have nest sites in wilderness or non-commercial timber areas. There is insufficient data to determine whether the goshawk population on the Forest is changing.

Blue grouse: Blue grouse is a harvest species found at higher elevations on the Forest, in steep and inaccessible terrain. There is no estimate of the blue grouse population, trend, or potential on the Forest. There are no apparent conflicts between the needs of this species and the management of other resources. Most blue grouse habitat is in wilderness.

Sage grouse: The population of sage grouse on the Forest is declining. The reason for this decline is not known. The current population of birds is estimated at 500 individuals, located primarily in the Lake Crowley basin and the northern White Mountains. The maximum habitat capacity of the Forest for sage grouse is estimated at 1,500 birds.

Spotted owl and Great gray owl: There is little data on the occurrence of these species on the Forest.

Although two spotted owl sightings have been documented on the Forest, there have been no documentations of nest territories.

Great gray owl sightings on the Forest have not been verified. There are few potential conflicts between the habitat needs of that species and other resource management because most of the suitable habitat is in wilderness.

Nelson (desert) mountain sheep: Nelson mountain sheep are found in both the White and Inyo Mountains. It is estimated that there are approximately one hundred sheep in the White Mountains, and the population appears to be increasing. Little is known about the Inyo herd, but the population has been estimated at thirty.

Sierra Nevada mountain sheep: Virtually all of the Sierra Nevada mountain sheep in California are found on the Inyo National Forest. There are five populations on the Forest. Two populations represent natural distributions; the remaining three have been reintroduced into historic range. There is additional potential for reintroduction, as the Baxter herd is healthy and growing, and there is still suitable unoccupied habitat on the Forest. The total existing population includes approximately three hundred animals. If all identified suitable habitat on the Forest were occupied, it could support as many as one thousand animals.

Riparian area-dependent species: Riparian vegetation covers approximately two percent of the Inyo National Forest; the remaining lands are, for the most part, arid and sparsely vegetated. The population and trend of riparian-area dependent wildlife species has not been studied. The amount and condition of riparian habitat is vulnerable to the impacts of ground disturbance, vegetation manipulation, and/or streamflow reduction.

Snag-dependent species: Snag densities on the Inyo are low, due both to the slow rate of natural snag recruitment and the amount of illegal public snag cutting for fuelwood. Snag-dependent species are dependent on both standing dead trees (snags) and down and dead logs. Dead and down wood is legally available to woodcutters and declines rapidly wherever it is accessible by vehicle.

Approximately 20 percent of historic stream habitat in the Mono and Owens Basins has been eliminated by water removal, irrigation, and recreational activities. Eighty-eight percent of all existing streams have been diverted to some extent.

Species dependent on early-middle seral stages of brush: See sage grouse.

Species dependent on older seral stages of coniferous forest: See goshawk.

IV. ENVIRONMENTAL CONSEQUENCES

This chapter describes the environmental consequences of implementing the various altenatives. None of these consequences is severe because the only alternatives considered were those that will maintain the long-term productivity of the land and be acceptable to the public. Minimum Management Requirements and Forest-wide Standards and Guidelines common to all alternatives ensure that the minimum acceptable and implementable levels of management for the various Forest resources are inherent in all alternatives.

Environmental consequences are described in terms of changes from the Base Year 1982 situation unless otherwise indicated. Although this planning period covers only ten to fifteen years, the analysis of environmental consequences is projected over fifty years to assess the long-term implications of the various alternatives. This information is for comparison purposes only, as natural resource and social conditions are extremely difficult to predict over time.

Key environmental consequences are displayed comparatively in the following tables. Only those resources for which consequences differed substantially between alternatives are summarized here. The consequences for all resources are displayed in Chapter IV.

Table 1

Comparison of Key Environmental Consequences

RESOURCE	Alternatives					
	PRF	CUR	RPA	CEE	AMN	AMB
ECONOMIC ENVIRONMENT	The economic environment varies by alternative in terms of the Forest budget, area employment, and Receipts Act Payments Average annual figures for budget and Receipts Act payments for the fifth decade are displayed below, employment figures are projected for the first decade.					
	Forest Budget 12 5 million	Forest Budget 10 0 million	Forest Budget 20 6 million	Forest budget 17 1 million	Forest budget 13 1 million	Forest budget 15 1 million
	Receipts Act pmts $1 8 MM	Receipts Act pmts $1 1 MM	Receipts Act pmts $3 3 MM	Receipts Act pmts $2 1 MM	Receipts Act pmts $1 4 MM	Receipts Act pmts $1 7 MM
	Employment 1,300 person-years	Employment 1,100 person-years	Employment 1,400 person-years	Employment 1,500 person years	Employment 1,100 person-years	Employment 1,100 person-years
SOCIAL ENVIRONMENT	Generally benefits all affected social groups	Benefits groups linked with economic outputs, reduces the facility-related benefits to recreationists	Benefits groups linked with economic outputs, reduces amenity benefits to recreationists	Benefits all recreationists	Benefits preservationists and wilderness advocates	Benefits most of the affected groups in the short term, negatively affects groups linked with economic outputs in the long run
CULTURAL RESOURCES	A rating system has been designed to indicate the relative potential threat to cultural resources posed by different combinations of land-disturbing management activities and land allocation decisions Cumulative relative threat factors, representing the net effect of direct disturbance, indirect disturbance, and beneficial impacts are displayed below					
	Relative threat factor moderate	Relative threat factor low	Relative threat factor high	Relative threat factor moderate	Relative threat factor low	Relative threat factor low

Table 1 (continued)
Comparison of Key Environmental Consequences

RESOURCE	Alternatives					
	PRF	CUR	RPA	CEE	AMN	AMB
FISH	Fish habitat capability changes by alternative in response to the relative amounts of stream habitat improvement and watershed improvement The total acres of stream fish habitat improved (both by direct habitat improvement and induced by watershed improvement) and percent change in Forest-wide stream habitat capability, relative to 1982, by the end of the fifth decade are shown below Lake habitat capability is common to all alternatives					
	Stream acres Improved 470	Stream acres Improved 205	Stream acres Improved 417	Stream acres Improved 621	Stream acres Improved 561	Stream acres Improved 583
	Hab capability change from 1982· +32%	Hab capability change from 1982 +15	Hab capability change from 1982 +31%	Hab capability change from 1982 +44%	Hab capability change from 1982 +36%	Hab capability change from 1982 +39%
FURTHER PLANNING AREAS	The consequences of alternatives on further planning areas differ in terms of the management prescriptions (Rx) applied to those areas Management prescriptions have been grouped for this analysis into wilderness Rx, amenity-emphasis Rx, commodity-emphasis Rx, and concentrated recreation use Rx No further planning acreage on the Forest was allocated to concentrated recreation use Rxs under any alternative					
	Percent of total further planning acres by Rx type	Percent of total further planning acres by Rx type	Percent of total further planning acres by Rx type	Percent of total further planning acres by Rx type	Percent of total further planning acres by Rx type	Percent of total further planning acres by Rx type
	28% wilderness	17% wilderness	0 wilderness	54% wilderness	82% wilderness	36% wilderness
	52% amenity	37% amenity	15% amenity	5% amenity	8% amenity	61% amenity
	20% commodity	46% commodity	85% commodity	41% commodity	0 commodity	3% commodity
MINERALS	The consequences of alternatives on opportunities for mineral exploration and development are determined by the acres of Forest land with high or moderate mineral potential available for mineral activities The majority of lands withdrawn from mineral entry under the alternatives are in recommended wilderness					

Table 1 (continued)
Comparison of Key Environmental Consequences

RESOURCE	Alternatives					
	PRF	CUR	RPA	CEE	AMN	AMB
	Acres of hi/mod mineral potential available for mineral activity 282,800	Acres of hi/mod mineral potential available for mineral activity 284,200	Acres of hi/mod mineral potential available for mineral activity· 314,400	Acres of hi/mod mineral potential available for mineral activity 214,600	Acres of hi/mod. mineral potential available for mineral activity. 135,500	Acres of hi/mod mineral potential available for mineral activity. 237,400
	Mineral opportunity high	Mineral opportunity high	Mineral opportunity highest	Mineral opportunity moderate	Mineral opportunity low	Mineral opportunity moderate
PROTECTION	The consequences of the alternatives on fire management are expressed in terms of wildfire acres burned That acreage is a function of the selected fire organization, suppression strategies used, and the risk of fire starts represented by the amount of recreation on the Forest The total estimated acreage burned by wildfire by the end of the fifth decade is displayed below					
	Total wildfire acres 53,190	Total wildfire acres 52,870	Total wildfire acres 53,190	Total wildfire acres 64,520	Total wildfire acres. 48,150	Total wildfire acres. 51,390
RANGE	The consequences of alternatives on the domestic livestock grazing program are measure in terms of fifth decade grazing outputs, percent change relative to 1982, and range condition and trend.					
	41 4 M AUMs total outputs	39 1 M AUMs total outputs	55 6 M AUMs total outputs	46 5 M AUMs total outputs	35 1 M AUMs total outputs	39 4 M AUMs total outputs
	No increase from 1982	6% reduction from 1982	34% increase from 1982	12% reduction from 1982	15% reduction from 1982	5% reduction from 1982
	Range condition improved on 69 1 M acres stable to declining elsewhere	Range condition in gradual decline	Range condition improved on 95 6 M acres stable to declining elsewhere	Range condition improved on 98 5 M acres, stable to declining elsewhere	Range condition improved on 66 6 M acres stable to declining elsewhere	Range condition improved on 73 8 M acres, stable to declining elsewhere

Table 1 (continued)
Comparison of Key Environmental Consequences

RESOURCE	Alternatives					
	PRF	CUR	RPA	CEE	AMN	AMB
RECREATION	The consequences of alternatives on recreation are measured in terms of the amount of use, the quality of the recreational experience, and the relative emphasis on different types of recreation The following is an overview of recreational quality and relative emphasis					
	Developed site quality high	Developed site quality low	Developed site quality high	Developed site quality high	Developed site quality high	Developed site quality high
	Dispersed recreation quality moderate	Dispersed recreation quality low	Dispersed recreaction quality moderate	Dispersed recreation quality moderate	Dispersed recreation quality high	Dispersed recreation quality high moderate
	Emphasis on developed sites high, on alpine skiing moderate, on wilderness moderate, on dispersed recreation moderate	Emphasis on developed sites low, on alpine skiing moderate, on wilderness moderate, on dispersed recreation high	Emphasis on developed sites high, on alpine skiing moderate, on wilderness low, on dispersed recreation high	Emphasis on developed sites high, on alpine skiing high, on wilderness high moderate, on dispersed recreation moderate	Emphasis on developed sites low, on alpine skiing low, on wilderness high, on dispersed recreation low	Emphasis on developed sites mod , on alpine skiing moderate, on wilderness high moderate, on dispersed recreation moderate
TIMBER	The consequences of alternatives on the timber management program vary in terms of total acres managed for timber production and acres actually harvested within a given time period (including both regeneration harvest and intermediate harvest) The following harvest figures are totals for the fifth decade					
	Total timber production 75,233 acres	Total timber production 89,100 acres	Total timber production 99,200 acres	Total timber Production 97,600 acres	Total timber production 61,800 acres	Total timber production 69,900 acres
	Clearcut harvest 3,617 acres	Regeneration harvest 8,570 acres	Regeneration harvest 14,100 acres	Regeneration harvest 5,580 acres	Uneven-aged mgmt harvest 3,320 acres	Regeneration harvest 4,210 acres

Table 1 (continued)
Comparison of Key Environmental Consequences

RESOURCE	Alternatives					
	PRF	CUR	RPA	CEE	AMN	AMB
	Intermediate harvest 20,052 acres	Intermediate harvest 29,100 acres	Intermediate harvest 18,600 acres	Intermediate harvest 19,500 acres	Intermediate harvest 17,600 acres	Intermediate harvest 21,600 acres
	Uneven-aged mgmt harvest 8,678 acres					
VISUAL RESOURCES	The consequences of alternatives on visual resources are measured in terms of change in visual condition, the following figures indicate what percent of the total Forest lands would have improvements and reductions in visual condition by the fifth decade, net change in visual condition is also displayed					
	Improved visual condition 3 3%	Improved visual condition 2 4%	Improved visual condition 0 3%	Improved visual condition 2 0%	Improved visual condition 6 9%	Improved visual condition 4 7%
	Reduced visual condition 0 9%	Reduced visual condition 1 2%	Reduced visual condition 2 1%	Reduced visual condition 1 8%	Reduced visual condition 0 6%	Reduced visual condition 0 8%
	Net change in condition +2 2%	Net change in condition +1 2%	Net change in condition -1 8%	Net change in condition +0 2%	Net change in condition +6 3%	Net change in condition +3 9%
WATERSHED	The consequences of alternatives on soil stability and water quality vary by the amount of land disturbed for other resource management and by the amount of watershed restoration scheduled The relative potential for adverse effects on soil and water are shown by alternative below					
	low	moderate	high	moderate	low	low

Table 1 (continued)
Comparison of Key Environmental Consequences

RESOURCE	Alternatives					
	PRF	CUR	RPA	CEE	AMN	AMB
WILDERNESS	The consequences of alternatives on wilderness are measured primarily in terms of acres of new wilderness.					
	172,600 acres new wilderness	107 600 acres new wilderness	0 acres new wilderness	339,800 acres new wilderness	510,800 acres new wilderness	222,700 acres new wilderness
	38 percent of Forest in wilderness	35 percent of Forest in wilderness	30 percent of Forest in wilderness	47 percent of Forest in wilderness	56 percent of Forest in wilderness	41 percent of Forest in wilderness
WILDLIFE	The consequences of alternatives on wildlife are assessed in terms of habitat capability Changes in the following habitat capability factors are displayed below mule deer habitat, older seral stages of coniferous forest (species such as goshawk), early and mid-successional brush (species such as sage grouse), snags and other habitat for cavity-nesting birds (species such as hairy woodpeckers), and habitat for riparian area-dependent species in wet meadows (such as yellow warblers) Changes are expressed in terms of percent increase or decrease relative to 1982					
	Mule deer habitat -2%	Mule deer habitat -4%	Mule deer habitat -47%	Mule deer habitat -14%	Mule deer habitat +20%	Mule deer habitat +18%
	Existing old growth in tentatively suitable timber base -27%	Existing old growth in tentatively suitable timber base -91%	Existing old growth in tentatively suitable timber base -92%	Existing old growth in tentatively suitable timber base -86%	Existing old growth in tentatively suitable timber base -38%	Existing old growth in tentatively suitable timaber base -59%

Table 1 (continued)
Comparison of Key Environmental Consequences

RESOURCE	Alternatives					
	PRP	CUR	RPA	CEE	AMN	AMB
	Early-mid succ brush -69%	Early-mid succ brush -42%	Early-mid succ brush -31%	Early-mid succ brush -24%	Early-mid succ brush -36%	Early-mid succ brush -36%
	Snags 0	Snags 0	Snags 0	Snags 0	Snags +30%	Snags +30%
	Wet meadows 0	Wet meadows -58%	Wet meadows -35%	Wet meadows 0	Wet meadows 0	Wet meadows 0

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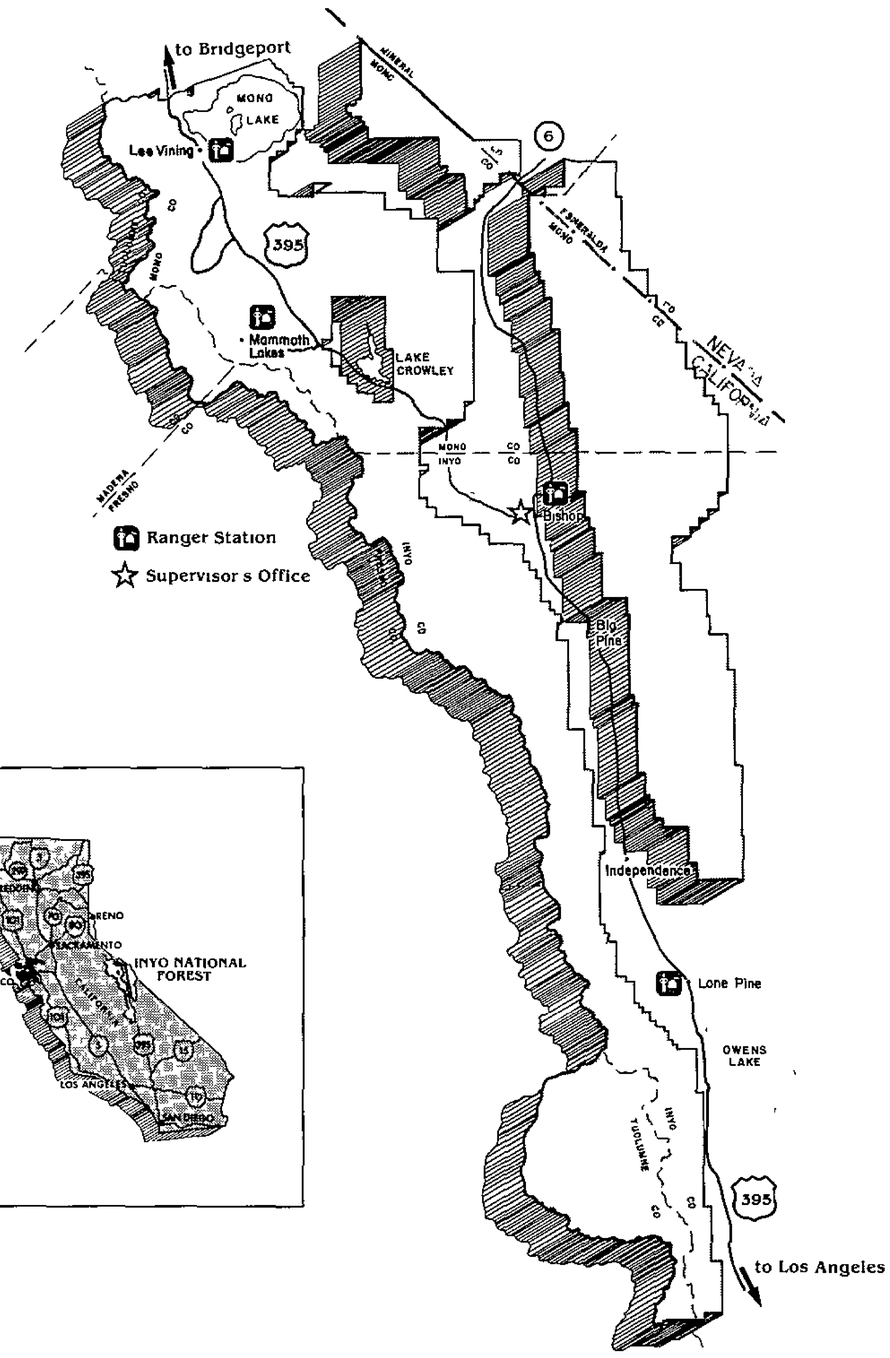
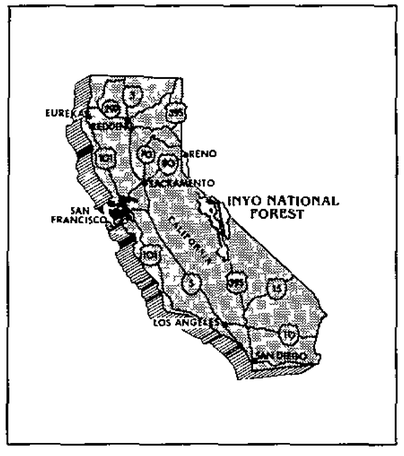
PURPOSE OF AND NEED FOR ACTION

VICINITY MAP
Inyo National Forest