COMPARISON OF ALTERNATIVES

INTRODUCTION

The alternatives can be compared and contrasted in terms of many factors: outputs, costs, environmental effects, and response to issues and concerns. The comparison of alternatives in this section summarizes material addressed in more detail elsewhere in Chapter II and in Chapter IV.

This section includes: (1) a comparative overview of alternatives; (2) figures displaying comparative data for the alternatives; (3) narrative and tabular comparisons of economic factors; and (4) tables comparing alternatives in terms of their key environmental consequences and response to issues and concerns.

COMPARATIVE OVERVIEW OF ALTERNATIVES

The following discussion compares the six alternatives studied in detail in terms of major resources on the Forest. The discussion under each heading addresses issues and concerns, quality and quantity of outputs, and/or environmental consequences.

Range

The primary issues and concerns for domestic livestock grazing are the needs to maintain or increase range outputs and to coordinate the grazing program with competing or conflicting resources and activities. The majority of perceived conflicts between grazing and other resources, such as water quality, soil stability, and riparian area condition, are addressed in the direction common to all alternatives.

The competition between domestic livestock and mule deer is addressed differently by 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 by alternative: cattle grazing is allowed to decline from current levels in suitable timber under all alternatives except AMB, in which current levels are maintained.

Range outputs are increased in RPA by 34 percent; in CEE by 12 percent. The remaining alternatives propose reductions in range outputs over time with CUR and PRF recommending current outputs for the planning period.

Recreation

The primary issues and concerns in recreation deal with the quantity, quality, and type of outdoor recreation opportunities available to the public

on the Inyo National Forest. The quantity of use, quality of recreational experiences, and type of recreational opportunities differ considerably by alternative. It is essential to note, however, that most of that difference occurs on a limited number of acres:

1. 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.

2. The greatest differences in quantity of dispersed recreation use occur in concentrated recreation areas in association with the quantity of developed site use. Differences in the type of dispersed use are found primarily where new roads could be built to facilitate timber management and/or geothermal development.

The differences highlighted above tend to be concentrated on lands in the area from Mammoth to Lee Vining (timber, geothermal, alpine skiing, and developed site potential), the major Sierra Nevada drainages from Convict Lake to Horseshoe Meadow (developed site potential,) and the Monache area of the Kern Plateau (timber potential). The following discussion is based on the assumption that, other than a moderate trend toward more dispersed use, recreation on most other 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 of 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 by the fifth decade. Increases will occur primarily in the public sector. The identified potential for increased private sector (other than ski area) development is negligible.

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.

Dispersed Recreation: The quantity of dispersed recreation is assumed to increase in general proportion to public developed site capacity and use because a large part of non-wilderness dispersed summer use on the Forest is generated in concentrated recreation areas by people staying in campgrounds. 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; this reduction is offset, however, by 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.

The type of dispersed recreation can vary from primitive (no facilities, no vehicles, few people), through semi-primitive, to intensively developed (many facilities, many vehicles, many people). Dispersed recreation opportunities 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.

Recreation quality for other visitors is represented by freedom from conflict with other Forest activities. 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 major impact of timber on recreation is indirect. When new roads for timber harvest are built into an unroaded area, the type of dispersed use shifts. Where access was previously possible only by foot, horseback, or four-wheel drive vehicle, conventional vehicles can now enter the area. As the type of use changes, the amount typically increases. 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.

Alpine skiing represents a localized conflict because alpine ski areas represent exclusive use of lands otherwise suitable for dispersed summer and winter recreation.

The quality of dispersed recreation is also affected by fishing and hunting opportunities. 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.

The greatest resident stream fish productivity is found in CEE, followed by AMB, AMN, PRF, RPA, and CUR. The overall difference between the most productive and the least productive alternatives is, however, relatively small. This relationship reflects the good overall condition of fish habitat on the Forest, the large amount of fish habitat in wilderness, and consequent limitations on opportunities to increase habitat capacity. In no case, however, can the projected demand for fishing be met by increases in resident trout habitat.

Big game hunting opportunities are related to the number of deer on the Forest. Deer populations decline under the impacts of facility development, improved access, and increased livestock on winter range; they increase with habitat improvement and reduced competition with livestock on key deer range. The ranking of alternatives according to hunting opportunities will

list AMN and AMB at the high end, PRF and CUR in the middle, and RPA and CEE at the low end.

Timber

The primary issues and concerns related to timber management include the desirability of establishing the size of the suitable timber base in coordination with other potential land uses, establishing a regulated forest on all suitable acres, and producing fuelwood for public use.

The alternatives differ in the amount of acreage determined suitable for timber management, as compared with the acres considered tentatively suitable for Forest planning purposes. The final calculation of suitable acres (those that will actually be managed for timber production under an alternative) was derived from tentatively suitable acres by the subtraction of timber 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 the 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 uneven-aged 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

The primary issues and concerns related to wilderness focus on the need to make well-considered decisions between wilderness and non-wilderness for each Further Planning Area on the Forest.

Alternatives differ in the number of Further Planning Areas and 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.

The quality of proposed wilderness, in terms of wilderness characteristics, and the quantity of wilderness recreation use are not directly proportional to quantity of acres recommended, however. The Further Planning Areas on the Forest, as a group, tend to rank much lower in overall wilderness characteristics 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 are intruded by primitive roads, accessible by four-wheel drive vehicle, and lacking in the available water sources that will facilitate nonmotorized 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. Total acres of recommended wilderness and recreation use are not directly proportional. 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 (e.g. desert springs, alpine tundra). PRF, CEE, AMN and AMB include additional acreage without such features.

Wildlife and Fish

The primary issues and concerns related to wildlife and fish habitat address the quantity and quality of habitat, with special emphasis on harvest species; threatened, endangered, sensitive, and special interest species; and those species dependent on riparian areas, older seral stages of timber, and snags.

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 vertebrate 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 alternatives 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 100 acres per goshawk territory; the remaining alternatives provide only the minimum management level, 50 acres per territory.

Sierra Nevada mountain sheep: RPA and CEE provide for no additional reintroduced herds; PRF and CUR provide for at least one herd based on additional environmental analyses; 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. Alternatives PRF, CEE, AMN, and AMB call for full watershed restoration in wet meadows over 50 years; RPA for 9,900 acres; and CUR for 2,000 acres.

Species dependent on snags: PRF, CUR, RPA, and CEE will apply only the minimum management requirement 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.

Species dependent on older seral stages of timber: The alternatives vary in the amount of timber maintained in older seral stages. CUR, RPA, and CEE maintain only the amount needed for goshawk nesting territories (see above). PRF maintains 10 percent of the timber base in older seral stages, AMN 30 percent, and AMB 20 percent.

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.

Table 16
Acreage Allocations by Prescription and Alternative (M Acres)

Management Prescription	Alternatives PRF	CUR	RPA	CEE	AMN	AMB
1. Designated Wilderness	565.1	565.1	565.1	565.1	565.1	565.1
2. Proposed Wilderness	172.6	107.6	0	339.8	510.8	222.7
3. Mountain Sheep	35.0	35.0	4.8	4.9	4.9	32.0
4. Mule Deer	118.8	0	7.4	108.1	117.6	118.3
5. Research Natural Area*	14.9 (0.7)	14.9 (0.7)	14.9 (0.7)	6.3 (9.3)	3.0 (12.6)	11.6 (4.0)
6. Mono Basin NF Scenic Area*	45.8	45.0	45.0	40.2 (4.8)	40.2 (4.8)	40.2 (4.8)
7. Ancient Bristlecone Pine Forest*	28.9	27.5	27.5	21.5 (6.0)	21.5 (6.0)	27.5
8. Wild and Scenic River*	2.6 (15.8)	4.3 (19.4)	4.3 (19.4)	4.3 (19.4)	4.3 (19.4)	4.3 (19.4)
9 Uneven-aged Timber Mgmt.	10.5	0	0	0	0	2.9
10. High Level Timber Mgmt.	74.5	109.8	119.8	97.7	97.3	86.7
11. Range	138.5	178.3	228.1	144.4	95.8	101.4
12. Concentrated Recreation Area	52.5	44.6	44.1	44.1	48.2	46.1
13. Alpine Ski Area, Existing and Under Study	9.6	6.2	10.2	21.8	6.2	14.6
14. Potential Alpine Ski Area	14.2	6.6	0	0	0	0
15. Developed Recreation Site	2.2	1.4	2.1	2.1	1.4	1.9
16. Semi-Primitive Recreation	8.6	0	0	0	0	6.8
17. Dispersed Recreation	437.8	364.4	204.4	68.0	387.0	589.4
18. Multiple Resource Area	199.1	419.0	652.0	461.4	26.4	58.2

* Acres with dual designation (existing or proposed wilderness and RNA, Scenic Area, etc.) are displayed in the acreage total for Prescriptions 1 or 2 and indicated in parentheses under the applicable prescription.

Table 17
Comparison of Average Yearly Outputs
for the Planning Period by Alternative

Resource Elements	Base Year	80 RPA		Alternatives PRF	CUR	RPA	CEE	AMN	AMB
FACILITIES									
Administrative Sites									
-Forest Service owned (no.)	6	-	-	8	8	8	8	8	8
-leased (no.)	1	-	-	0	0	0	0	0	0
Dams and Reservoirs									
-Forest Service (no.)	3	-	-	3	3	3	3	3	3
-State/local (no.)	4	-	-	4	4	4	4	4	4
-private (no.)	11	-	-	11	11	11	11	11	11
Roads (miles)									
Construction (tot.)	0	-	-	2.5	3.1	0.6	0.6	1.4	0
-timber	0	-	-	0	0.6	0.6	0.6	0	0
-recreation	0	-	-	2.5	2.5	0	0	1.4	0
Reconstruction (tot.)	20	-	-	15	15	20	21	13	17
-timber	15	-	-	5	15	18	16	11	14
-recreation	5	-	-	10	0	2	5	2	3
Maintenance (tot.)	974	-	-	977	977	977	977	981	974
Trails (miles)									
Construction (tot.)	0	-	-	24.3	9.0	27.0	26.3	19.0	20.5
-existing wilderness	0	-	-	0.7	0.7	0.7	0.7	0.7	0.7
-recommended wilderness	-	-	-	1.8	0.8	0	3.0	3.3	2.8
-concentrated rec. areas	0	-	-	9.0	0	9.0	9.0	4.0	6.0
-open NF	0	-	-	1.0	0	1.0	1.0	1.0	1.0
-OHV	0	-	-	1.8	0	2.5	2.6	0	0
-nordic	0	-	-	10.0	7.5	13.8	10.0	10.0	10.0
Reconstruction (tot.)	10.8	-	-	39.7	37.9	38.4	36.3	34.9	37.5
-existing wilderness	9.0	-	-	12.6	12.6	12.6	12.6	12.6	12.6
-recommended wilderness	-	-	-	1.3	1.3	0	0.6	1.9	1.8
-concentrated rec. areas	1.8	-	-	4.2	4.2	4.2	4.2	4.2	4.2
-OHV	0	-	-	16.2	14.4	16.2	13.5	10.8	13.5
-open NF	0	-	-	2.2	2.2	2.2	2.2	2.2	2.2
-nordic	0	-	-	3.2	3.2	3.2	3.2	3.2	3.2

Table 17 (continued)
Comparison of Average Yearly Outputs
for the Planning Period by Alternative

Resource Elements	Base Year	80 RPA		Alternatives PRF	CUR	RPA	CEE	AMN	AMB
Trails (cont'd)									
Maintenance total	1236	-	-	1489	1361	1506	1517	1489	1498
LANDS AND MINERALS									
Land acquired (ac.)	60	0	0	54	54	54	54	54	54
Leasable minerals (tot. power plants)	0	-	-	1	1	1	1	1	1
Locatable minerals (operating plans)	67	320	408	50	60	67	46	29	50
PROTECTION									
Fuel Treatment (acres)									
-total	18	500	400	243	923	1312	1412	1461	1521
-fire related	0	-	-	0	0	0	0	0	0
-timber related	18	-	-	93	163	143	61	6	19
-range related	0	-	-	50	324	356	316	202	290
-wildlife related	0	-	-	100	436	813	1035	1253	1212
Expected Wildfire (acres)									
-total	747	-	-	918	1011	918	1134	927	918
-intensity level 1	13	-	-	9	10	9	9	9	9
-intensity level 2	34	-	-	55	128	55	124	57	55
-intensity level 3	53	-	-	64	57	64	70	65	64
-intensity level 4	647	-	-	239	209	239	313	241	239
-intensity level 5	0	-	-	551	607	551	618	556	551
RANGE									
Grazing (M AUMs)	41.4	42.2	44.5	41.4	38.1	52.7	48.6	35.6	37.3
RECREATION USE (M RVDs)									
Developed Public	1201	3510	5100	1578	1293	1674	1772	1293	1448
Developed Private	1635	-	-	1914	1914	1914	1914	1914	1914
Dispersed	1004	2490	3120	1191	1238	1191	1190	899	1189
Wilderness	540	-	-	644	639	637	667	680	675
Visual Quality Index	142.07	-		-142.15	142.13	142.15	142.10	142.34	142.20

Table 17 (continued)
Comparison of Average Yearly Outputs
for the Planning Period by Alternative

Resource Elements	Base Year	80 RPA		Alternatives PRF	CUR	RPA	CEE	AMN	AMB
TIMBER									
ASQ (MMBF)	10.5	16.8	19.8	7.1	11.4	16.9	8.3	2.7	5.1
Fuelwood (M cords)	10.0	-	-	10.6	10.6	16.1	7.2	4.2	11.9
Long Term Sustained Yield (MMBF)	-	-	-	14.5	24.7	29.9	24.7	15.6	18.9
Reforestation (acres)	300	614	718	465	817	714	307	32	96
Timber Stand Improvement (acres)	328	900	918	374	40	113	578	539	558
WATER									
Improvement (acres)	100	180	200	350	40	186	500	500	500
Quality (M acre-ft.)	1047	476	481	1050	1047	1052	1051	1052	1052
Increased Quantity (M acre-feet)	0	-	-	7.0	11.0	15.0	7.0	0	1.7
WILDLIFE AND FISH									
Mule Deer									
(M animals total)	20.2	+20 %		20.2	20.2	18.0	20.0	20.7	20.2
(M animals on Inyo)	12.0			12.0	12.0	11.2	11.9	12.5	12.0
Bald Eagle** (winter roosting areas)	1	-	-	1	1	1	1	1	1
Peregrine Falcon** (no. of pairs)	0	-	-	2	2	2	2	2	2
Goshawks (pairs in suitable timber)	15	-	-	15	15	14	14	15	15
Nelson Mountain Sheep (no. of animals)	130	-	-	140	140	130	130	140	140
Sierra Nevada Mountain Sheep (no. of animals)	300	-	-	350	350	330	330	350	350

Table 17 (continued)
Comparison of Average Yearly Outputs
for the Planning Period by Alternative

Resource Elements	Base Year	80 RPA		Alternatives PRF	CUR	RPA	CEE	AMN	AMB
WILDLIFE AND FISH (cont'd)									
Lahontan CT Trout* (acres of habitat)	1	-	-	.3	.3	.3	.3	.3	.3
Paiute CT Trout* (acres of habitat)	3	-	-	1.3	1.3	1.3	1.3	1.3	1.3
Resident trout (M pounds)	1632	+20%		1640	1635	1640	1643	1641	1642
Wildlife and Fish User Days (M WFUDs)									
	391.0	-	-	393.8	392.9	392.1	394.3	395.0	394.2
-mule deer	25.2	-	-	25.2	25.2	23.5	25.0	26.2	25.2
-resident trout	340.0	-	-	341.7	340.8	341.7	342.4	341.9	342.1
-other	25.8	-	-	26.9	26.9	26.9	26.9	26.9	26.9
Derived from Direct Habitat Improvement									
-mule deer	0.1	-	-	0.2	<0.1	0.1	0.2	0.2	0.2
-resident trout	0	-	-	1.1	0.7	1.3	1.5	1.0	1.2
-other	0	-	-	0.4	0.5	0.4	0.3	0.6	0.4
Derived from Induced Habitat Improvement									
-mule deer	0	-	-	0	0	0	0	0	0
-resident trout	0.1	-	-	0.6	0.1	0.4	0.9	0.9	0.9
-other	0.1	-	-	0.3	0.1	<0.1	0.1	0.3	0.3
Units of Direct Habitat Improvement									
-mule deer (M acres)	0.5	-	-	0.2	0	1.0	1.5	1.8	1.7
-resident trout (ac.)	0	-	-	0.4	3.1	5.3	5.9	4.4	4.8
-other (M acres)	0	-	-	0.3	4.1	3.0	2.8	3.4	3.8
HUMAN RESOURCES									
Programs (enrollees)	39	14	14	39	39	39	39	39	39
TOTAL BUDGET (MM$)	**9.9**	**11.1**	**12.2**	**12.1**	**10.0**	**12.0**	**11.9**	**12.9**	**12.6**
TOTAL COST (MM$)	**10.3**	-	-	**13.5**	**11.0**	**13.4**	**12.8**	**13.9**	**13.6**

*Threatened, **Endangered

Table 18
Additional Key Comparisons
by Alternative

	Alternatives					
	PRF	**CUR**	**RPA**	**CEE**	**AMN**	**AMB**
LANDS AVAILABLE FOR MINERAL ENTRY (M acres)						
-Mineral potential high	108.2	107.5	110.4	84.3	28.1	62.6
-Mineral potential medium	174.5	176.6	204.1	130.3	107.4	174.8
-Mineral potential low	885.8	888.4	965.8	731.6	631.6	825.9
Total	**1168.5**	**1172.5**	**1288.3**	**964.2**	**775.2**	**1063.3**
LANDS WITHDRAWN FROM MINERAL ENTRY (M acres)						
-Mineral potential high	26.6	26.3	23.5	50.6	10.7	72.3
-Mineral potential medium	34.5	32.4	5.0	78.7	101.6	34.2
-Mineral potential low	135.0	132.3	55.0	289.1	381.0	194.9
-Existing wilderness*	565.1	565.1	565.1	565.1	565.1	565.1
Total	**761.2**	**756.2**	**648.6**	**983.5**	**1058.4**	**866.5**
RECREATION OPPORTUNITIES BY ROS CLASS (excluding the Mono Basin NF Scenic Area)						
Area (M acres-decade 5)						
-Primitive	867.1	867.1	836.2	865.7	869.8	867.8
-Semi-Primitive Non-Motorized	404.9	402.7	380.6	418.9	490.4	442.2
-Semi-Primitive Motorized	215.4	238.1	230.7	183.8	152.7	195.9
-Roaded Natural	335.6	319.1	381.0	343.1	325.7	308.5
-Roaded Modified	47.0	43.3	39.8	48.1	36.6	51.5
-Rural	13.1	13.0	14.3	22.0	10.2	16.5
-Urban*	1.6	1.4	2.1	3.1	1.3	2.3
Projected Use (M RVDs-decade 5)						
-Primitive	781.2	781.2	752.4	779.4	783.0	781.2
-Semi-Primitive Non-Motorized	226.8	225.79	213.4	234.6	274.4	247.5
-Semi-Primitive Motorized	257.7	284.2	275.6	219.3	182.6	233.8
-Roaded Natural	2225.0	2115.8	2526.0	2274.9	2159.4	2045.6
-Roaded Modified	4542.1	4184.3	3846.4	4648.3	3537.3	4977.3
-Rural	2432.0	2413.3	2654.6	4084.1	1893.3	3063.3
-Urban	0	0	0	0	0	0

*Mineral potential ratings are not available for existing wilderness.

Table 18 (continued)
Additional Key Comparisons
by Alternative

	Alternatives					
	PRF	CUR	RPA	CEE	AMN	AMB
RECREATION (cont'd)						
Capacity (M PAOT-decade 5)						
-Primitive	4.34	4.34	4.18	4.33	4.35	4.34
-Semi-Primitive Non-Motorized	4.05	4.03	3.81	4.19	4.90	4.42
-Semi-Primitive Motorized	3.02	3.33	3.23	2.57	2.14	2.74
-Roaded Natural	57.1	54.3	64.8	58.3	55.4	52.5
-Roaded Modified	71.0	65.4	60.1	72.6	55.3	77.8
-Rural	46.8	46.4	51.1	78.5	36.4	58.9
-Urban	0	0	0	0	0	0
RESEARCH NATURAL AREAS Number/(M acres)	7(15.6)	7(15.6)	7(15.6)	7(15.6)	7(15.6)	7(15.6)
LAND CLASSIFICATION FOR TIMBER (M acres)						
Non-Forested Land (including water)	978.7	978.7	978.7	978.7	978.7	978.7
Forested Land	952.5	951.1	951.1	951.1	951.1	951.1
Withdrawn from timber production*	328.8	326.4	326.4	326.4	326.4	326.4
Not capable of industrial wood production	483.1	483.1	483.1	483.1	483.1	483.1
Unregenerable within five years of harvest	29.9	29.9	29.9	29.9	29.9	29.9
Tentatively Suitable Timber Base	110.7	110.7	110.7	110.7	110.7	110.7
Not suitable for timber under the alternative	35.5	21.6	11.5	13.1	48.9	40.9
Total Unsuitable Forested Acres	877.3	862.0	851.9	853.5	889.3	881.3
Total Suitable Forested Acres	75.2	89.1	99.2	97.6	61.8	69.8

Table 18
Additional Key Comparisons
by Alternative

			Alternatives					
			PRF	CUR	RPA	CEE	AMN	AMB
VISUAL QUALITY OBJECTIVES (M acres, excluding the Mono Basin NF Scenic Area)								
-Preservation			692.6	687.6	580.0	911.2	1078.9	799.4
-Retention			660.9	471.8	332.8	325.0	504.3	684.2
-Partial Retention			428.2	623.7	815.3	416.0	269.7	349.7
-Modification			103.1	98.8	153.8	226.9	29.9	49.3
-Maximum Modification			0	2.8	2.9	5.6	1.9	2.0
WILD & SCENIC RIVERS (miles)			18.0	18.0	18.0	18.0	18.0	18.0
Recommended Wild								
Segment 1			6.0	6.0	6.0	6.0	6.0	6.0
Segment 4			5.0	5.0	5.0	5.0	5.0	5.0
Recommended Scenic								
Segment 3			2.5	2.5	2.5	2.5	2.5	2.5
Recommended Recreation								
Segment 2			4.5	4.5	4.5	4.5	4.5	4.5
WILDERNESS (M acres)			**737.7**	**672.7**	**565.1**	**904.9**	**1075.9**	**787.8**
Further Planning Area	**Area No.**	**Net(M) Acres**						
Coyote SE	5033	55.6	-	-	-	55.6	55.6	11.8
Table Mtn.	5035	4.1	4.1	-	-	-	4.1	-
Buttermilk	5038	0.9	-	-	-	-	0.9	-
Wheeler Ridge	5040	16.2	-	-	-	-	16.2	-
Laurel-McGee	5045	9.1	-	-	-	9.1	9.1	9.1
Horse Meadow	5049	5.6	-	-	-	-	5.6	-
Tioga Lake	5050	0.9	0.9	-	-	0.9	0.9	0.9
Hall Natural	5051	5.2	-	-	-	5.2	5.2	-
Log Cabin-Saddlebag	5052	17.1	-	-	-	17.1	17.1	17.7
Benton Range*	5056	10.5	-	-	-	-	-	-
White Mts.	5058	251.9	113.2	53.2	-	251.9	251.9	53.2
Blanco Mt.	5059	16.3	-	-	-	-	-	-
Birch Creek	5060	32.7	-	-	-	-	-	-
Black Canyon	5061	34.8	-	-	-	-	-	-
Andrews Mt.	5063	13.6	-	-	-	-	13.6	-
Paiute-Mazourka	5064	130.6	54.4	54.4	-	-	130.6	130.6
Sugarloaf	5296	10.7	-	-	-	-	-	-
Excelsior	5989	8.0	-	-	-	-	-	-
Total		623.8	**172.6**	**107.6**	**0**	**339.8**	**510.8**	**222.7**
TOTAL NATIONAL FOREST ACRES			1931.1					

ECONOMICS AND TRADEOFF ANALYSIS

The major economic benefits and tradeoffs between the alternatives are presented comparatively in the following tables. These comparisons are based on 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 such as Present Net Value (PNV) and net cash flow are of concern to the federal taxpayer, as they measure alternatives in terms of their responsiveness to economic efficiency in government.

Table 19, the Summary Comparison of Economic Effects, displays in detail the total cost, cash and non-cash economic benefits, capital investment costs, operation and maintenance costs, and national, regional, and local benefits and costs of each alternative. 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 alternatives studied in detail range from 20 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 are limited by budget or other resource considerations. Non-cash benefits, derived primarily from recreation use, comprise 94 to 97 percent of total Forest benefits in the first decade. Cash returns increase over the fifty-year 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 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 more 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 ranged from zero to an increase of more than 36 percent.

Table 20, Present Net Value Comparison-Marginal Cost of Constraints, presents the economic and resource opportunity costs of the Minimum Management Requirements (MMRs), Timber Policy Requirements (TPRs), and Minimum Implementation Requirements (MIRs). (See Appendix B for a detailed explanation of these 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 only $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 Minimum 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 marginal costs of constraints added to benchmarks to develop the CEE alternative were insignificant in terms of reduced PNV or reduced resource production capability. The impact of the Minimum Management Requirements, Timber Policy Requirements, and Minimum Implementation Requirements was felt exclusively on timber benefits, which at most provide less than three percent of the total Forest PNV.

Table 21, Present Net Value Comparison of Alternatives, presents the total PNV and the costs and benefits of the major contributing resources for each of the alternatives studied in detail.

Recreation accounts for 81 to 88 percent of the total discounted benefits in the Forest alternatives. 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 ranked lowest in PNV, primarily because budget constraints limited opportunities to contribute to PNV.

Table 22, Average Annual Cash Flows and Non-Cash Benefits, presents the total costs, benefits, and net cash flow by alternative for decades one and five. 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 three to eight 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 (not the amount that they actually pay for those outputs). 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. Alternatives 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 both less negative net cash flow and 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, offer the highest non-cash benefits, and higher negative cash flows.

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).

Table 23, Indicators of Responsiveness to Major National and Regional Issues displays the relationships among key economic values, community effects, and the differing responses among alternatives to selected issues and concerns. The purpose is to highlight major differences and similarities among alternatives in terms of tradeoffs among key objectives, responses to public issues, management concerns, and resource use and development opportunities. However, a complete understanding of the differences among alternatives requires a thorough reading of Chapters II and IV of this document.

Table 19
Summary Comparison of Economic Effects

	Alternatives					
	PRF	CUR	RPA	CEE	AMN	AMB
	(millions of 1982 dollars per year)					
1. Total Benefits						
Base Year	9.5	9.5	9.5	9.5	9.5	9.5
Decade 1	9.7	9.4	10.0	10.2	9.3	9.6
Decade 2	12.6	10.7	13.0	14.0	11.9	12.1
Decade 3	13.6	11.2	14.5	15.3	12.5	13.1
Decade 4	14.3	11.3	15.3	16.5	13.1	13.8
Decade 5	14.5	11.4	19.6	16.6	13.2	14.3
2. Returns to the U.S. Treasury						
Base Year	2.2	2.2	2.2	2.2	2.2	2.2
Decade 1	3.8	3.9	5.5	4.0	2.7	3.5
Decade 2	5.0	4.2	7.5	5.3	3.4	4.2
Decade 3	5.6	4.5	8.7	7.0	3.6	4.8
Decade 4	6.5	4.4	11.0	8.0	4.4	5.4
Decade 5	7.5	4.4	13.0	8.5	5.4	6.7
3. Non-cash benefits						
Base Year	9.3	9.3	9.3	9.3	9.3	9.3
Decade 1	9.4	9.0	9.5	9.8	9.0	9.3
Decade 2	12.2	10.3	12.3	13.5	11.6	11.6
Decade 3	13.0	10.7	13.6	14.5	12.1	12.7
Decade 4	13.7	10.9	14.2	15.7	12.6	13.3
Decade 5	13.7	11.0	18.4	15.8	12.6	13.6
4. Total Costs						
Base Year	10.3	10.3	10.3	10.3	10.3	10.3
Decade 1	13.5	11.0	13.4	12.8	13.9	13.6
Decade 2	13.7	10.9	14.7	14.3	10.9	11.3
Decade 3	17.0	11.0	15.8	14.4	11.4	13.6
Decade 4	17.1	11.0	18.2	15.2	12.6	14.0
Decade 5	17.7	11.0	21.6	18.0	14.1	16.1

1. Total benefits include both cash returns to the U.S. Treasury and non-cash benefits. Total benefits are the estimated total amount that consumers will be willing to pay for Forest outputs, whether or not this amount is actually collected by the U.S. government.

2. Returns to the U.S. Treasury are the estimated payments by consumers of Forest outputs collected by the federal government.

3. Non-cash benefits are the difference between the total estimated amount that consumers will be willing to pay and actual collections by the federal government. At present it is national policy to provide most Forest outputs either at no charge to consumers or at a charge lower than the total willingness-to-pay value. (See Appendix B for specific values).

4. Total costs include the federal and non-federal costs needed to produce Forest outputs.

Table 19 (continued)
Summary Comparison of Economic Effects

	Alternatives					
	PRF	CUR	RPA	CEE	AMN	AMB
	(millions of 1982 dollars per year)					
5. Non-federal Cost						
Base Year	0.2	0.2	0.2	0.2	0.2	0.2
Decade 1	0.2	0.2	0.2	0.2	0.2	0.2
Decade 2	0.2	0.2	0.2	0.2	0.2	0.2
Decade 3	0.2	0.2	0.2	0.2	0.2	0.2
Decade 4	0.2	0.2	0.2	0.2	0.2	0.2
Decade 5	0.2	0.2	0.2	0.2	0.2	0.2
6. Federal Cost						
Base Year	10.1	10.1	10.1	10.1	10.1	10.1
Decade 1	13.3	10.8	13.2	12.6	13.7	13.4
Decade 2	13.5	10.7	14.5	14.1	10.7	11.1
Decade 3	16.8	10.8	15.6	14.2	11.2	13.4
Decade 4	16.9	10.8	18.0	15.0	12.4	13.8
Decade 5	17.5	10.8	21.4	17.8	13.9	15.9
7. Total Budget						
Base Year	9.9	9.9	9.9	9.9	9.9	9.9
Decade 1	12.5	10.0	12.4	11.9	12.9	12.6
Decade 2	12.7	9.9	13.7	13.4	9.9	10.3
Decade 3	16.0	10.0	15.8	13.5	10.4	12.6
Decade 4	16.1	10.0	17.2	14.3	11.6	13.0
Decade 5	16.7	10.0	21.6	17.1	13.1	15.1
8. Operation and Maintenance Cost						
Base Year	9.2	9.2	9.2	9.2	9.2	9.2
Decade 1	9.9	10.2	8.9	8.3	7.0	8.7
Decade 2	10.4	9.8	9.9	8.9	8.0	9.1
Decade 3	12.9	10.2	9.5	9.5	8.4	11.4
Decade 4	12.6	10.5	12.9	10.9	9.2	10.2
Decade 5	12.0	10.5	16.1	12.8	9.9	11.5

5. Non-federal costs include all costs paid by non-federal cooperators (examples include State Fish and Game habitat improvement expenditures, capital investments made by range permittees, etc.)

6. Federal costs are all costs borne by the federal government, including costs paid from general tax receipts, costs paid from funds set aside from payments (such as K-V), and costs paid by accepting in-kind payments in lieu of cash (such as purchaser road credits). Federal cost also equals total cost less non-federal cooperator cost.

7. Total budget is equal to federal cost less the cost of fighting forest fires (FFF).

8. Operation and maintenance costs include the cost of administration, management, and protection of existing resources and capital assets. Operation and maintenance cost equals total cost less capital investment.

Table 19 (continued)
Summary Comparison of Economic Effects

	Alternatives					
	PRF	CUR	RPA	CEE	AMN	AMB
	(millions of 1982 dollars per year)					
9. Capital Investment Cost						
Base Year	1.1	1.1	1.1	1.1	1.1	1.1
Decade 1	3.7	0.8	4.5	4.5	6.9	4.9
Decade 2	3.3	1.1	4.8	5.4	2.9	2.2
Decade 3	4.1	0.8	6.3	4.9	3.0	3.4
Decade 4	4.5	0.5	5.3	5.1	3.4	3.8
Decade 5	5.7	0.5	5.5	5.2	4.2	4.6
10. Recreation Construction						
Base Year	0.8	0.8	0.8	0.8	0.8	0.8
Decade 1	3.2	0.5	2.8	3.5	6.5	4.1
Decade 2	2.3	0.7	2.8	3.6	2.4	1.0
Decade 3	2.6	0.4	3.1	2.8	2.5	2.4
Decade 4	3.1	0.2	2.7	3.1	3.0	2.3
Decade 5	2.7	0.2	2.7	3.0	2.9	3.0
11. Other Capital Investment						
Base Year	0.3	0.3	0.3	0.3	0.3	0.3
Decade 1	0.5	0.3	1.7	1.0	0.4	1.2
Decade 2	1.0	0.4	2.0	1.8	0.5	1.2
Decade 3	1.5	0.4	3.2	2.1	0.5	1.0
Decade 4	1.4	0.3	2.6	2.0	0.4	1.5
Decade 5	3.0	0.3	2.8	2.0	1.3	1.6
12. 25-percent Receipt Shares						
Base Year	0.5	0.5	0.5	0.5	0.5	0.5
Decade 1	1.0	1.0	1.4	1.0	0.7	0.9
Decade 2	1.3	1.0	1.9	1.3	0.9	1.0
Decade 3	1.5	1.1	2.2	1.8	0.9	1.2
Decade 4	1.7	1.1	2.8	2.0	1.1	1.4
Decade 5	1.9	1.1	3.3	2.1	1.4	1.7

9. Capital investment costs are the costs of creating or enhancing capital assets. Costs of treatments or activities that generate outputs or benefits over more than one period are capital investment costs.

10. Recreation construction to meet projected recreation demand.

11. Other capital investment is all investment cost other than recreation construction.

12. Twenty-five percent of returns to the U.S. Treasury are distributed to the Counties in proportion to Inyo National Forest acreage in each County.

Table 19 (continued)
Summary Comparison of Economic Effects

	Alternatives					
	PRF	CUR	RPA	CEE	AMN	AMB
	(millions of 1982 dollars per year)					
13. County Yield Tax Revenues						
Base Year	0.01	0.01	0.01	0.01	0.01	0.01
Decade 1	0.03	0.04	0.05	0.02	0.01	0.02
Decade 2	0.04	0.04	0.10	0.04	0.02	0.03
Decade 3	0.05	0.03	0.10	0.05	0.02	0.03
Decade 4	0.10	0.03	0.16	0.10	0.04	0.05
Decade 5	0.10	0.03	0.22	0.10	0.10	0.10
14. Income, first decade (MM 1982 $/year)	31.8	26.4	33.3	35.8	26.1	26.6
15. Employment, first decade (M person-years)	1.3	1.1	1.4	1.5	1.1	1.1
16. Discounted Benefits (MM 1982 $)	1847.0	1151.8	2017.8	2166.6	1550.7	1740.4
17. Discounted Costs (MM 1982 $)	280.9	197.6	312.2	287.6	233.4	261.5
18. Present Net Value (MM 1982$)	1566.1	954.2	1705.6	1879.0	1317.3	1478.9
19. Benefit/cost ratio	6.6	6.0	6.5	7.5	6.6	6.7

13. Under California law, a yield tax currently equal to three percent of timber harvest value is levied on timber operators.

14. Total personal income, including wages, salaries, proprietors' income, and rents was estimated for the Forest's zone of influence. See Appendix B for a description of the methodology used to make estimates.

15. Employment generated by the Forest in the zone of influence was estimated.

16. Discounted benefits over the planning period. Background benefits are not included.

17. Discounted costs over the planning period. Background costs are not included.

18. Discounted benefits less total discounted costs. Background Present Net Value is not included.

19. Discounted benefits divided by total discounted costs.

TABLE 20
Present Net Value Comparison
Marginal Costs of Constraints
(Millions of 1982 Dollars)

I.D Code Name	PNV	Change In PNV 1/	Discounted Cost	Change In Disc. Cost 1/	Discounted Benefits	Change In Disc. Benefits 1/	Discounted Benefits By Resource					Discounted Costs By Resource				
							Dev. Rec.	Disp. Rec.	Timber	Range	Other 2/	Dev. Rec.	Disp. Rec.	Timber	Roads	Other 3/
FLW (PNV w/o MMRs)	1879 4	N/A	288 8	N/A	2168 2	N/A	1271 0	633 7	49 8	13 0	200 7	151.0	76 0	31 1	3 2	27 5
MMR (PNV w/MMRs) 4/	1879 1	-0 3	288 9	0 1	2168 0	-0 2	1271 0	633 7	49 8	13 0	200 5	151.0	76 0	31 6	3 1	27 2
CEE (Constrained Economic Efficiency w/MIRs) 5/	1879 0	-0 1	287 6	-1 3	2166 6	-1 4	1271 0	633 7	48 5	13 0	200 4	151 0	76 0	30 4	3 0	27 2
MLV (Minimum Level Management) 6/	1605.1	N/A	81 1	N/A	1686 2	N/A	0	65 4	0	1 0	1619 8	0	3	0	0	79 8

1/ All changes are measured incrememtally from the FLW benchamrk (maximum PNV wihtout MMRs)
2/ Other discounted benefits include water, fire, geothermal, and fuelwood
3/ Other discounted costs include fire, sediment, fuelwood, range and wildlife
4/ Viable population and riparian constraints account for the difference between FLW and MMR
5/ Visual corridor MIRs account for the difference between MMR and CEE
6/ The minimum level benchmark shows naturally occurring background benefits and fixed costs associated with maintaining the National Forest in Federal ownership In order to display incremental tradeoffs in this table, these background benefits and fixed costs have been subtracted from the other benchmarks and alternatives

TABLE 21
Present Net Value Comparison
Marginal Costs of Constraints
(Millions of 1982 Dollars)

I D Code Name	PNV	Change In PNV 1/	Dis-counted Cost	Change In Disc. Cost 1/	Dis-counted Benefits	Change In Disc. Benefits 1/	Discounted Benefits By Resource					Discounted Costs By Resource				
							Dev. Rec.	Disp. Rec.	Tim-ber	Range	Other 2/	Dev. Rec.	Disp. Rec.	Tim-ber	Roads	Other 3/
The follow ng alternatives are listed in order of declining PNV																
CEE	1879 0	N/A	287 6	N/A	2166.6	N/A	1271 0	633 7	48 5	13 0	200 4	151 0	76 0	30 4	3 0	27.2
RPA	1705 6	-173 4	312 2	24 6	2017 8	148 8	1098 9	621.8	76 5	14 8	205 8	134 5	73 0	62 0	3 8	38 9
PRP	1566 1	-312 9	280 9	-6 7	1847 0	319.6	983 8	610 1	44 4	10 1	198 6	123 9	82 2	40 9	2 7	31.2
AMB	1478 9	-400 1	261 5	-26 1	1740 4	-426 2	910 7	579.6	40 7	10 2	199 2	104 0	96 7	24 3	2 5	34.0
AMN	1317 3	-561 7	233 4	-54 2	1550 7	-615 9	806 0	508 8	31 9	9 3	194 7	95 0	84 4	21 6	1 9	30.5
CDR	954 2	-924 8	197 6	-90 0	1151 8	-1014 8	603 8	311 0	28.3	10 4	198 3	69 4	67 2	28 7	2 3	30.7
MLV 4/	1605 1	N/A	81 1	N/A	1686 2	N/A	0	65 4	0	1 0	1619 8	0	3	0	0	79 8

1/ All changes in PNV are measured from the CEE (constrained economic efficiency) alternative
2/ Other discounted benefits include water, geothermal, fire, fuelwood, and wildlife
3/ Other discounted costs include fire, fuelwood, sediment, range, and wildlife
4/ The minimum level benchmark (HLV) shows the naturally occurring background benefits and fixed costs associated with maintaining the Inyo National Forest in Federal ownership In order to display incremental tradeoffs, the background benefits and fixed costs have been subtracted from the PNV of other alternatives in this table

TABLE 22

Average Annual Cash Flows and Non-Cash Benefits

(millions of undiscounted dollars per year)

	Decade 1				Decade 5			
	Net Cash Flow	Total Federal Cost	Returns to Treasury	Non-Cash 1/ Benefits	Net Cash Flow	Total Federal Cost	Returns to Treasury	Non-Cash 1/ Benefits
Alternative								
CUR	-6 9	10 8	3 9	90 1	-6 4	10 8	4.4	109 9
RPA	-7 8	13.3	5 5	94.9	-9.3	22 3	13.0	183 5
CEE	-8 6	12.6	4 0	97 6	-9 5	18 0	8.5	157 9
PRF	-9 4	13 3	3 8	93 5	-9 7	17 2	7.5	138 0
AMB	-9 9	13.4	3 5	92 7	-8 4	15 1	6 7	135 9
AMN	-11 0	13 7	2 7	89 8	-9 2	14 6	5 4	126 4

1/ See Appendix B for detailed listing cash and non-cash benefits

TABLE 23

Indicators of Responsiveness to Major National and Regional Issues

	Decades 1/5		Timber Issues		Local County Issues (Decade 1)			Wilderness Issue	Recreation Issues			Range Issue
	Net Cash	Non-Cash	Decades 1/5		Receipts to	Jobs	Local	Recommended	Decades 1/5			Decades 1/5
	Flow	Benefits	Harvest	Fuelwood	Counties	Available	Income	Wilderness	Ski Use	Dev Rec.	Disp Rec.	Livestock
PNV 1/	$Million/Yr.		MMBF/Yr.	M Cords/Yr	$Million/Yr.	Person Yrs	$Million/Yr.	M Acres	MM RVDs	MM RVDs 2/	MM RVDs	M AUMs
The following alternatives are listed in order of declining PNV												
CEE 1879 0	-8 6/-9.5	97 6/157 9	8 3/10 1	7 2/5 0	1 0	1 5	35 8	339 8	1 3/3 4	3 7/6 3	1 9/3 3	48 6/46 5
RPA 1705 6	-7 8/-9 3	94 9/183 5	16 9/19 8	16 1/7 2	1 4	1 4	33 3	0	1 3/2 8	3 6/5 7	1 8/3 2	52 7/55 6
PRF 1571 9	-9 3/-10 3	94 0/137 2	7 1/7 1	7 0/2 8	1 0	1 3	31 8	172 6	1 3/2 2	3 5/5 1	1 8/3 2	41 4/41 4
AMB 1478 9	-9 9/-8 4	92 7/135 9	5 1/9 2	11 9/4 7	0 9	1 1	26 6	222 7	1 3/2 2	3 4/4.9	1 9/3 1	37 3/39 4
AMN 1317 3	-11 0/-9 2	89 8/126 4	2 9/6 3	9 2/3 0	0 7	1 1	26 1	510 8	1 3/1 7	3 2/3 6	1 8/2 6	35 6/35 1
CUR 954 2	-6 9/-5 6	90 1/109 9	11 513 0	13 2/6 2	1 0	1 1	26 4	107 6	1 3/2 2	3 2/4 1	1 8/2 3	38 1/39 1

1/ All PNV values shown in this table are incremental above the PNV that represents minimum level fixed costs and values

2/ Developed recreation RVDs include apline skiing

Table 24
Summary Listing of Reasons for Changes in the Present Net Value of Alternatives Studied in Detail as Compared with the Constrained Economic Efficiency Alternative

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CEE - Maximize Cost-Efficiency

PNV = 1,879.0 million
Fifth Period Net Cash Flow = -$9.5 million/yr.

This is the most economically efficient alternative, as it produces the highest PNV of any alternative. The high PNV is obtained through a large recreation program, providing developments in response to projected recreation demand. All recreation facilities are maintained at standard levels, with concentrated recreation areas and potential alpine ski areas fully developed over the next fifty years.

Timber, range, and wildlife outputs are provided at cost-efficient levels. Range and wildlife outputs will increase slightly over base-year levels. Watershed improvement will increase and improve riparian area-dependent resources.

Regional publics, primarily recreation users from Southern California, will find increased opportunity for both summer and winter recreation. However, with the emphasis on PNV, the quality of their experience will be compromised, primarily because timber harvest will take place in concentrated recreation use areas.

Local publics, primarily those viewing the Forest as a source of employment and income, will find increased opportunity due to expanded ski areas and developed summer recreation programs. Land use and community stability and cohesiveness will be strained with the projected population increases needed to support proposed ski area development. The intensive land-use emphasis in ski areas and other developed recreation sites will be countered by the large acreage in wilderness for those publics who see preservation as an appropriate management theme.

RPA - 1980 RPA Program

PNV = $1,705.6 million
Fifth Period Net Cash Flow = -$9.3 million/yr.

Management to meet 1980 RPA resource goals and targets represent a variety of opportunities for Forest users. The PNV of this alternative will, however, be reduced for many reasons.

Timber harvest will increase considerably from the 1982 base year. The higher timber harvest costs and displacement of other resource opportunities will contribute significantly to the loss of PNV. Loss of dispersed recreation will occur because no additional wilderness areas are proposed. Developed recreation opportunities will be limited because timber will be

harvested in some concentrated recreation areas and on potential alpine ski areas.

This level of production provides increased opportunities for local employment and income. In addition, the alternative provides the largest returns to the Treasury. Regional publics (primarily recreation users) will experience reduced recreation quality due to the intensive timber harvest. The large acreage available for regeneration harvest will be quite evident in areas within and adjacent to important recreation areas. The land-use emphasis will be contrary to the view of those publics who see preservation and wilderness as important management themes.

PRF - Preferred

PNV = $1,566.1 million
Fifth Period Net Cash Flow = -$9.7 million/yr.

This alternative is most similar to CEE, but three important factors contribute to reduced PNV. Alpine ski area development will be limited to provide only the amount of ski area development commensurate with identified community ability to support more skiing. While this scenario will increase local opportunities for jobs and income, limitations on skiing are the largest reason for the PNV drop from CEE. PNV will also decline due to restrictions on the size of the managed timber base and increased costs of production. Goshawk territories and vegetative diversity (old growth) requirements will be higher than CEE; potential ski areas will receive only modified timber management; and timber in the Monache area and the red fir belt of the San Joaquin Ridge will not be harvested. The implementation of uneven-aged management timber harvesting practices will be costly. The third factor will be a limitation on range AUMs to reduce conflicts with deer on key winter range.

This alternative will benefit all groups. Local interests will be met through a moderate increase in jobs and income opportunities. Regional publics will find increased recreational opportunities with a high level of visual quality. Timber harvest will affect only 68 percent of the total suitable timber lands, reducing conflict with a high-quality recreational experience over much of the Forest.

AMB - Emphasize Wildlife and Recreation

PNV = $1,478.9 million
Fifth Period Net Cash Flow = -$8.4 million

This alternative places primary emphasis on the quality and quantity of wildlife habitat, with a secondary emphasis on expansion of the developed recreation program. The reasons for the reduced PNV are discussed below.

The acreage managed for vegetative diversity (old growth) and goshawk nesting territories is increased about 44-fold over the Minimum Management Requirement level, and no timber harvest is allowed on those acres in order to provide maximum protection level for wildlife. Ski area development and

timber harvest in the San Joaquin area will be limited in order to protect key deer migration corridors. Timber will not be harvested in the Monache area so that impacts on wildlife and visual quality will be minimized. Domestic livestock grazing will be eliminated on deer winter range and delayed in key fawning habitat. Local publics will lose some opportunities for growth in employment and income due to these restrictions.

The reduced timber and range programs, coupled with a moderate recreation program, will reduce costs and maintain adequate benefits to allow this alternative to have the second lowest fifth-period net cash-flow deficit.

Those regional publics interested in wilderness and/or skiing will benefit from this alternative; local publics will experience increased jobs and income levels in response to increased skiing. Overall recreation quality will increase in this alternative. In later decades, while regional publics could find more congestion in developed recreation sites, ample opportunities for dispersed recreational uses will still be available.

AMN - Maximize all Amenities

PNV = $1,317.3 million
Fifth period Net Cash Flow = -$9.2 million

This alternative emphasizes production of non-cash and non-market benefits. The loss in PNV is significant, nearly 30 percent below CEE. The following factors explain much of the drop in PNV.

Vegetative diversity (old growth) and goshawk nesting territories will be 66 times as large as in the Minimum Management Requirements. No timber harvest will be allowed on these areas; the Monache and San Joaquin areas will not be harvested. Ski development will be restricted to increases on existing ski areas. Very little new recreation facility construction will occur, while dispersed recreational opportunities will increase primarily from a greatly expanded wilderness base. Timber management uses uneven-aged management techniques only and will meet the Retention Visual Quality Objective in the foreground zone of all Sensitivity Level 1 travel routes and Partial retention on all other lands. Domestic livestock grazing rill be eliminated from key mule deer winter range, and grazing on key fawning areas will be delayed.

Few groups will gain from this alternative. Local publics will find little change in jobs or income, primarily because increases in ski areas and developed sites are limited. Regional publics will find restricted developed opportunities and vehicle access; recreation demand will not generally be met. Publics with an interest in natural resource preservation will benefit from the large wilderness acreage and low overall level of environmental disturbance. National economic interests will not be met, as seen by the large PNV reduction and low returns to the Treasury. This alternative has the largest first decade average negative net cash flow.

CUR - Current 1982 Program - No Action

PNV = $954.2 million
Fifth Period Net Cash Flow = -$6.4 million

The CUR alternative portrays long-range management as limited by 1982 funding. This alternative projects the lowest PNV of all alternatives studied in detail. This PNV drop is directly associated with the budget restriction. The shortage of funding primarily affects the recreation, range, and wildlife programs.

Recreation programs will be managed at low-standard levels, reducing the quality of the recreation experience, the public benefits provided, and the PNV. The range, fish, and wildlife programs will be unable to expand or intensify under current funding.

Timber harvest will be maintained above economically efficient levels through the planning horizon, with loss of potential downhill ski areas. Costs associated with maintaining the current harvest level further reduce PNV.

No groups will gain by this alternative. Regional publics will find a low quality of recreation and increased use and congestion of concentrated recreation areas. Local publics will find the same general opportunities for jobs and income as they presently do; the only increases will be associated with ski area growth. These factors add up to a large reduction in PNV (43 percent below CEE), the lowest return to the Treasury, and the lowest total budget of any alternative.

Table 25

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 25 (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 25 (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 25 (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* recreation 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 25 (continued)
Comparison of Key Environmental Consequences

RESOURCE	Alternatives					
	PRF	CUR	RPA	CEE	AMN	AMB
	Intermediate harvest 20,052 acres Uneven-aged mgmt harvest 8,678 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
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% Reduced visual condition 0 9% Net change in condition +2.2%	Improved visual condition 2 4% Reduced visual condition 1 2% Net change in condition +1.2%	Improved visual condition 0 3% Reduced visual condition 2 1% Net change in condition -1 8%	Improved visual condition 2 0% Reduced visual condition 1 8% Net change in condition +0 2%	Improved visual condition 6 9% Reduced visual condition 0.6% Net change in condition +6 3%	Improved visual condition 4 7% Reduced visual condition 0 8% 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 25 (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 25 (continued)
Comparison of Key Environmental Consequences

RESOURCE	Alternatives					
	PRF	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

TABLE 26

Comparison of Response to Issues and Concerns

RESOURCE	Alternatives					
Issue/Concern	PRF	CUR	RPA	CEE	AMN	AMB
ECONOMIC ENVIRONMENT						
How can the Forest produce services to maximize economic efficiency?	Present net value (PNV), or the sum of resource benefits minus management costs, is a measure of economic goods and					
	PNV=3170 8	PNV=2559.3	PNV=3310 7	PNV=3484 1	PNV=2922 4	PNV=3084 0
SOCIAL ENVIRONMENT						
How does the management of the Inyo National Forest influence the local social environment and lifestyle?	Generally benefits all affected social groups	Benefits groups linked with economic outputs; reduces facilities for recreationists	Benefits groups linked with economic outputs, reduces amenities for recreationists	Benefits all recreationists	Benefits preservationists and wilderness advocates	Benefits most of the affected groups in the short term, negatively affects economic outputs in the long run
AIR QUALITY						
What can the Forest do to influence air quality?	The Forest will coordinate its activities with the Great Basin Unified Air Pollution Control District and will ensure that all Forest Activities meet or exceed State and Federal standards Class 1 areas will receive the highest level of protection AQRVs, AQRV indicators, and smoke management plans will be developed					
CULTURAL RESOURCES						
How should the Forest manage cultural resources and provide for the use of Forest land by American Indians for traditional practices	Inventory and evaluate 45 M acres per year	Inventory and evaluate 12 M acres per year	Inventory and evaluate 180 M acres per year	Inventory and evaluate 12 M acres per year	Inventory and evaluate 45 M acres per year	Inventory and evaluate 45 M acres per year
	Emphasize balanced program of protection and interpretation	Emphasize project-related survey work	Use both project-related and formal survey work to meet RPA goal	Emphasize project-related survey work	Emphasize formal survey program and interpretation	Emphasize formal survey program and interpretation
	Coordinate with American Indian groups to ensure reasonable access for traditional practices					

TABLE 26 (continued)
Comparison of Response to Issues and Concerns

RESOURCE	Alternatives					
Issue/Concern	*PRP*	*CUR*	*RPA*	*CEE*	*AMN*	*AMB*
DIVERSITY						
What is a desirable level of vegetative diversity for the Inyo, and what should the Forest do to maintain or achieve that level?	The optimal level of diversity is one in which the distribution of vegetative types and seral stages best approximates a natural distribution A desirable diversity level would maintain optimal diversity as a goal while taking multiple-resource management and logistical concerns into account. Diversity levels vary by alternative in response to various alternative themes The diversity elements most likely to be affected by resource management practices are older seral stages of coniferous forest and early seral stages of shrub-type vegetation					
	10 percent of tentatively suitable timber managed for older seral stages (moderate)	0 percent of tentatively suitable timber managed for older seral stages (low)	0 percent of tentatively suitable timber managed for older seral stages (low)	0 percent of tentatively suitable timber managed for older seral stages (low)	30 percent of tentatively suitable timber manged for older seral stages (very high)	20 percent of tentatively suitable timber managed for older seral stages (high)
	33 0 M acres existing old growth in tentatively suitable timber base by 5th decade	5.0 M acres existing old growth in tentatively suitable timber base by 5th decade	4 2 M acres existing old growth in tentatively suitable timber base by 5th decade	7 6 M acres existing old growth in tentatively suitable timber base by 5th decade	33 2 M acres existing old growth in tentatively suitable timber base by 5th decade	22 1 M acres existing old growth in tentatively suitable timber base by 5th decade
	11 5 M acres total shrub treatment *(high)*	86 M acres total shrub treatment *(low)*	119 M acres total shrub treatment *(high)*	117 M acres total shrub treatment *(high)*	111 M acres total shrub treatment (moderate)	109 M acres total shrub treatment (moderate)
	75% in oldest seral stage by 5th decade	80% in oldest seral stage by 5th decade	74% in oldest seral stage by 5th decade	73% in oldest seral stage by 5th decade	76% in oldest seral stage by 5th decade	76% in oldest seral stage by 5th decade

TABLE 26 (continued)
Comparison of Response to Issues and Concerns

RESOURCE Issue/Concern	Alternatives PRF	CUR	RPA	CEE	AMN	AMB
ENERGY How does energy development fit in with the overall resource management program on the Forest?	Energy development on the Inyo National Forest is encouraged commensurate with the other resource values and management direction that apply to the lands proposed for development Specific energy development proposals will be evaluated on a case-by case basis					
FACILITIES What level of facility construction and maintenance is needed to support Forest management objectives?	The existing number of administrative sites, plus a visitor center for the Mono Basin National Forest Scenic Area, is considered adequate for Forest management under all alternatives The overall miles of road and trail, however, vary by alternative in response to the objectives of the alternative The need to maintain facilities to assigned maintenance levels is acknowledged under all alternatives, the ability of the Forest to meet those levels is limited only in Alternative CUR, which has specified budget limitations Direction to develop a materials management plan, to inventory uninventoried roads, and to consider mass transit options is common to all alternatives.					
	Total road construction in 5 decades 87 miles Total trail construction in 5 decades 535 miles	Total road construction in 5 decades 46 miles Total trail construction in 5 decades 178 miles	Total road construction in 5 decades 103 miles Total trail construction in 5 decades 538 miles	Total road construction in 5 decades 65 miles Total trail construction in 5 decades: 725 miles	Total road construction in 5 decades 14 miles Total trail construction in 5 decades. 429 miles	Total road construction in 5 decades 38 miles Total trail construction in 5 decades 509 miles
FISH How should fish habitat on the Inyo National Forest be managed?	Fish habitat capability changes by alternative in response to the relative amount of direct fish habitat improvement and the habitat improvement induced by watershed improvement work Pounds of fish is a measure of resident fish (other then threatened trout) habitat capability on the Forest Threatened trouts on the Forest are the Lahontan cutthroat and Paiute cutthroat trout Habitat for threatened trouts is measured in total acres of stream habitat.					

TABLE 26 (continued)
Comparison of Response to Issues and Concerns

RESOURCE	Alternatives					
Issue/Concern	PRP	CUR	RPA	CEE	AMN	AMB
FISH (con't)	1674 M pounds of fish 23 acres for threatened trout	1651 M pounds of fish 23 acres for threatened trout	1673 M pounds of fish 23 acres for threatened trout	1689 M pounds of fish 23 acres for threatened trout	1679 M pounds of fish 40 acres for threatened trout	1632 M pounds of fish 40 acres for threatened trout
FURTHER PLANNING AREAS						
How should roadless areas in further planning status be managed?	173 M acres in 4 areas recommended for wilderness	108 M acres in 2 areas recommended for wilderness	0 acres/areas recommended for for wilderness	340 M acres in 6 areas recommended for wilderness	511 M acres in 12 areas recommended for wilderness	223 M acres in 6 areas recommended for wilderness
GEOLOGY						
What is the role of geologic resources and services in the overall Forest management program?	The risk to proposed projects posed by geologic processes such as earthquakes, soil movements, and volcanic events will be taken into account when facilities are constructed and projects are planned A list of outstanding geologic features has been identified; these features will be evaluated for possible special interest are or research natural area designation The need to tap groundwater for Forest or municipal use will be addressed on a case-by-case basis.					
LANDS						
What land use and landownerhsip adjustment policies and procedures are needed?	Land use and landownership adjustment policies and priorities are the same for all alternatives, the emphasis, however, varies somewhat The emphasis on responding to community needs for additional land and special uses is directly related to the projected ski area capacity The land acquisition emphasis also varies					
	Moderate demand by communities for Forest land Acquire land for summer recreation	Moderate demand by communities for Forest land No special acquisition emphasis	Moderate demand by communities for Forest land Acquire land for summer recreation	Moderate demand by communities for Forest land Acquire land for summer recreation	Moderate demand by communities for Forest land Acquire land for key wildlife habitat	Moderate demand by communities for Forest land Acquire land for key wildlife habitat

TABLE 26 (continued)

Comparison of Response to Issues and Concerns

RESOURCE Issue/Concern	Alternatives PRF	CUR	RPA	CEE	AMN	AMB
MINERALS						
How can the Forest best encourage mineral (including geothermal) *exploration and development* in coordination with surface resource values and land uses?	The Forest can encourage mineral exploration and development by making those lands with moderate to high mineral potential ratings available for mineral entry Wilderness, research natural areas, and some types of *special interest areas* are withdrawn from mineral entry					
	282 8 M acres of *moderate or high* potential available for entry	284 2 M acres of *moderate or high* potential available for entry	314 4 M acres of moderate or high potential available for entry	214 6 M acres of moderate or high potential available for entry	135 5 M acres of moderate or high potential available for entry	237 4 M acres of moderate or high potential available for entry
	Mineral opportunity high	Mineral opportunity high	Mineral opportunity highest	Mineral opportunity moderate	Mineral opportunity low	Mineral opportunity moderate
PEST MANAGEMENT						
What is the appropriate pest management strategy for the Inyo?	The Inyo National Forest will apply the integrated pest management (IPM), approach to all appropriate activities, a full range of pest management alternatives will be considered on a project-level basis The selection of a treatment method will be based on a site-specific analysis of relative effectiveness, environmental effects, and costs					
PROTECTION						
What is the appropriate fire management strategy for the Inyo?	Prevention 17% suppression 83% Staffing per Workforce Plan	Prevention 24% suppression 76% 1982 staffing	Prevention 17% suppression 33% 1982 staffing	Prevention 17% *suppression* 83% 1982 staffing	Prevention 17% *suppression* 83% 1982 staffing	Prevention 17% suppression 83% 1982 staffing
	53 M ac wildfire	53 M ac wildfire	53 M ac wildfire	65 M ac wildfire	43 M ac wildfire	51 M ac wildfire

TABLE 26 (continued)
Comparison of Response to Issues and Concerns

RESOURCE	Alternatives					
Issue/Concern	PRF	CUR	RPA	CEE	AMN	AMB
RANGE						
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.	Directions for the integration of range management with other resources is found in the Forest-wide Standards and guidelines and the management prescriptions applied to all alternatives. Wild horses and burros are managed under territory management plans in all alternatives. Fifth-decade grazing outputs and trade-offs between livestock and other resources differ by alternative					
	41.4 M AUMS	39.1 M AUMS	55.6 M AUMS	46 5 M AUMS	35.1 M AUMS	39 4 M AUMS
	Cattle decline in suitable timber	Cattle decline in suitable timber	Cattle decline in suitable timber	Cattle decline suitable timber	Cattle decline in suitable timber	Cattle unchanged in suitable timber
	Mule deer priority on key winter range	Mule deer priority on key winter range	Cattle priority on key deer winter range	Mule deer priority on key winter range	Cattle removed from key deer winter range	Cattle removed from key deer winter range
RECREATION						
What is the best recreation opportunity program for the Inyo NF (considering supply, demand, other resource management and development opportunities, and environmental protection needs)?	Directions that ensure environmental protection applies equally to all alternatives The alternatives do differ in terms of the degree to which the demand for recreation in each subcategory is met by the fifth decade, maximum ski area capacity, and wwhich ski areas are developed					
	Dispersed use: 76% of demand	Dispersed use 43% of demand	Dispersed use 76% of demand	Dispersed use. 77% of demand	Dispersed use 54% of demand	Dispersed use 70% of demand
	Developed summer. 81% of demand	Developed summer· 50% of demand	Developed summer 81% of demand	Developed summer 81% of demand	Developed Summer 53% of demand	Developed Summer 74% of demand
	Alpine Skiing 40% of demand	Alpine Skiing 52% of demand	Alpine Skiing 67% of demand	Alpine Skiing 80% of demand	Alpine Skiing 40% of demand	Alpine Skiing 53% of demand

TABLE 26 (continued)
Comparison of Response to Issues and Concerns

RESOURCE	Alternatives					
Issue/Concern	PRF	CUR	RPA	CEE	AMN	AMB
RECREATION (con't)						
	31,000 SAOT	39,000 SAOT	46,000 SAOT	61,000 SAOT	31,000 SAOT	43,000 SAOT
	Mammoth & June	Mammoth & June, Sherwin, Summit, &/or Knolls	Mammoth, June, Sherwin & Summit	Mammoth, June, Sherwin, Summit *San Joaquin*, White Wing & Knolls	Mammoth & June	Mammoth, June, Summit, Knolls, & White Wing
RESEARCH NATURAL AREAS What contibutions should the Inyo make to the national and Regional Systems of research natural areas (RNAs)?	The Forest has five established research natural areas and is recommending two addtitional RNAs for establisment under all alternatives. These seven RNAs meet all botanical RNA Targets assigned to the Inyo National Forest Potential geologic RNAs will be considered once Regional Targets for geologic elements are established.					
RIPARIAN AREAS What is the significance of riparian areas on the Forest, and how should riparian area dependent resources be maintained enhanced, and/or restored?	The direction under all alternatives recognizes the significance of riparian areas on the Forest by prohibiting new activities in riparian areas that would have unacceptable long-term effects on water quality, *fish (or other* aquatic fauna) or water-dependent plant life. In addition, those alternatives with more work and fish habitat improvement would represent enhancement for riparian areas					
	243 ac fish habitat improvement	178 ac fish habitat improvement	286 ac fish habitat improvement	317 ac fish habitat improvement	257 ac fish habitat improvement	279 ac fish habitat improvement
	23 5 M ac watershed improvement	2 0 M ac watershed *improvement*	9 9 M ac watershed *improvement*	23 5 M ac watershed improvement	23.5 M ac watershed improvement	23 5 ac watershed improvement
	Riparian enhancement moderate	Riparian enhancement low	Riparian enhancement low	Riparian enhancement high	Riparian enhancement high	Riparian enhancement high

TABLE 26 (continued)
Comparison of Response to Issues and Concerns

RESOURCE Issue/Concern	Alternatives PRF	CUR	RPA	CEE	AMN	AMB
SENSITIVE PLANTS						
How should the Forest manage habitat for sensitive plant species?	Direction common to all alternatives calls for managing sensitive plant habitat to maintain population viability.					
SPECIAL INTEREST AREAS						
Should the Forest consider establishing any additional special interest areas?	No additional special interest areas are recommended in the Forest plan. However, a list of potential geologic special interest areas has been identified, those areas will be evaluated, and recommendations for establishment will be made by 1990					
TIMBER						
What is the best balance between timber (including fuelwood) production, other resource management and development opportunities, and environmental protection needs?	Timber management practices are integrated with other resources and environmental protection needs under all alternatives, the number of acres managed primarily for timber production varies Although the amount of fuelwood available from logging residue varies, the Forest will consider responding to the demand for fuelwood by making part of the programmed harvest available for sale as fuelwood if the amount from logging residue is insufficient.					
	Acres managed 75,233	Acres managed 89,100	Acres managed· 99,200	Acres managed: 97,600	Acres managed 61,800	Acres managed 69,800
VISUAL RESOURCES						
What role does visual quality play in the overall resource management and how can that quality be protected and enhanced?	The highest levels of visual protection are presented by the visual quality objectives of preservation (which applies only to wilderness and research natural areas) and retention (maximum protection outside such designations) program					
	M acres Preservation 693 Retention 661	M acres Preservation 688 Retention 472	M acres Preservation 580 Retention 333	M acres Preservation911 Retention 325	M acres Preservation 1079 Retention 504	M acres Preservation 799 Retention 684

TABLE 26 (continued)
Comparison of Response to Issues and Concerns

RESOURCE Issue/Concern	Alternatives PRP	CUR	RPA	CEE	AMN	AMB
VISUAL RESOURCES (con't)	Percent of Forest in P or R 70%	Percent of Forest in P or R 60%	Percent of Forest in P or R 47%	Percent of Forest in P or R 64%	Percent of Forest in P or R 82%	Percent of Forest in P or R 77%
WATERSHED						
How should the Forest respond to the needs for water quality, increased water yields, water rights for Forest resource management, and healthy watershed condition?	Direction to protect water quality, acquire water rights, work with communities to imporve water availability, and maintain good watershed condition apply equally to all alternatives The total watershed restoration work completed over 50 years varies					
	17,100 acres of restoration	2,000 acres of restoration	9,860 acres of restoration	23,500 acres of restoration	23,500 acres of restoration	23,500 acres of restoration
WILD AND SCENIC RIVERS						
What recommendations should the Forest make for management of the candidate wild and scenic river?	The candidate wild and scenic river on the Forest is recommended for designation as wild, scenic, or recreation These recommendations are common to all alternatives					
WILDERNESS						
Is there a need for change in the management of designated wilderness on the Forest?	Existing wilderness management plans are incorporated with direction to review and update as needed under all alternatives, the need to develop management plans for recommended wilderness is also addressed					
WILDLIFE						
How, where, and to what degree should wildlife habitat be maintained and enhanced, and how should wildlife needs be coordinated with other resources management and development opportunities on the Forest?	Direction to meet minimum management requirements for wildlife apply equally to all alternatives. The alternatives differ, for some species, in the degree to which a species is managed to exceed those requirements. Coordination with other resources is handled primarily in the Standards and Guidelines that apply to all alternatives					
	Deer priority on key winter range	Deer priority on key winter range	Cattle priority on key deer winter range	Deer priority on key winter range	Cattle removed from key deer winter range	Cattle removed from key deer winter range

TABLE 26 (continued)
Comparison of Response to Issues and Concerns

RESOURCE	Alternatives					
Issue/Concern	PRF	CUR	RPA	CEE	AMN	AMB
WILDLIFE (con't)						
	Manage grazing to protect key fawning areas	Manage grazing to protect key fawning areas	No special management of fawning areas	No special management of fawning areas	Delay grazing on key fawning areas -July 15 or later	Delay grazing on key fawning areas -July 15 or later
	Protect migration routes	Does not address migration routes	Does not address migration routes	Doesn't address migration	Protect migration routes	Protect migration routes
	Peregrine falcon 2 nesting pairs	Peregrine falcon 2 nesting pairs	Peregrine falcon 2 nesting pairs	Peregrine falcon 2 nesting pairs	Peregrine falcon 4 nesting pairs	Peregrine falcon 4 nesting pairs
	15 goshawk territories in suitable timber	15 goshawk territories in suitable timber	9 goshawk territories in suitable timber	9 goshawk territories in suitable timber	15 goshawk territories in suitable timber	15 goshawk territories in suitable timber
	1 Sierra Nevada mountain sheep reintroduction	1 Sierra Nevada mountain sheep reintroduction	0 Sierra Nevada mountain sheep reintroduction	0 Sierra Nevada mountain sheep reintroduction	7 Sierra Nevada mountain sheep reintroduction	7 Sierra Nevada mountain sheep reintroduction
	1 Nelson mountain sheep reintroduction	*1 Nelson mountain* sheep reintroduction	*0 Nelson mountain* sheep reintroduction	*0* Nelson mountain sheep reintroduction	*1* Nelson mountain sheep reintroduction	*1 Nelson mountain* sheep reintroduction

TABLE 26 (continued)
Comparison of Response to Issues and Concerns

RESOURCE	Alternatives					
Issue/Concern	PRF	CUR	RPA	CEE	AMN	AMB
WILDLIFE (con't)						
	See "Diversity" for old growth	See "Diversity" for old growth	See "Diversity" for old growth	See "Diversity" for old growth	See "Diversity" for old growth	See "Diversity" for old growth
	Maintain/create snags to meet 40% of potential	Maintain/create snags to meet 40% of potential	Maintain/create snags to meet 40% of potential	Maintain/create snags to meet 40% of potential	Maintain/create snags to meet 100% of potential	Maintain/create snags to meet 100% of potential
	74 M acres total shrub treatment for wildlife	65 M acres total shrub treatment for wildlife	48 M acres total shrub treatment for wildlife	85 M acres total shrub treatment for wildlife	78 M acres total shrub treatment for wildlife	102 M acres total shrub treatment for wildlife