

V. EFFECTS OF IMPLEMENTATION

Effects of implementing various alternative approaches must be explored primarily from the standpoint of wilderness versus nonwilderness allocations. If a roadless area is recommended for wilderness, the wilderness values will be preserved at the expense of other, usually consumptive resource values that won't be realized. If an area is allocated to nonwilderness uses, some or many wilderness values may be foregone. This is the most direct way of exploring primary tradeoffs involved in allocation of RARE II roadless areas.

A simple statement of retaining or foregoing wilderness values does not adequately evaluate the allocation of roadless areas. The allocation process must explore potential resource outputs that will be given up if an area is recommended for wilderness. Likewise, irretrievable wilderness values that may be given up if an area is allocated to nonwilderness uses also must be analyzed. Each alternative has a primary effect on the balance of commodity and noncommodity uses that are potentially available from roadless areas. Roadless areas also may be allocated to further planning, an allocation that will delay decisions of potential use pending outcome of land management or project planning processes. When areas are allocated to further planning, issues and trade-offs identified above will be delayed until planning meeting NEPA requirements is completed.

There are secondary effects that also may result from implementation of the described alternatives. These effects normally impact the physical and biological environment and may be caused by activities permitted as a result of a planning decision. Secondary effects are much more difficult to quantify since an allocation of a roadless area to nonwilderness use does not determine how the area will be managed, only that it will not become wilderness. A wide range of possible management options exist for use of the land. Effects of some of these uses have been evaluated through prior planning efforts. As a general rule, secondary effects are greatest in roadless areas where more intensive management is permitted.

It is not possible to identify all potential impacts from management activities that could occur if a particular roadless area was allocated to nonwilderness uses. Actual use and management of each roadless area is not specifically determined by allocations made through RARE II. If and when an area is allocated to nonwilderness use, development and utilization is constrained by existing laws such as Multiple Use Sustained-Yield Act, NEPA, and the National Forest Management Act. National policies, such as found in the Code of Federal Regulations, Executive Orders, and Forest Service Manual, along with direction contained in current or future land and resource management plans will direct use of these areas. Areas are not available for uncontrolled development but will be guided by these existing laws, regulations, and policies. Existing management plans are available for review. Future land and resource management plans or project plans will quantify and evaluate environmental effects.

Effects of implementing various alternatives may be either positive, negative, or both, depending on one's point of view. Effects that are seen as beneficial to one segment of the public may be viewed as detrimental by another. This section of the environmental statement seeks to objectively describe potential outputs that could be realized and/or potential values foregone, dependent on specific roadless area allocations implemented with each alternative. Regardless of allocation, resources

will continue to be protected and their long-term productivity assured. The following discussion of alternative approaches is directed to whether a roadless area will or will not be recommended for wilderness and the effects of making that allocation. If an area is allocated to nonwilderness use, the question of type and intensity of use is not resolved by the RARE II process and will not be an analysis factor. Neither are management policies applied to National Forest System lands an issue.

This section discusses potential outputs, uses, and values realized or foregone with each alternative and displays data for analysis of the alternatives under such headings as vegetation, timber, range, recreation, economics, and social. Potential outputs and impacts of alternatives are described for both present and long-term effects. Present effects are those likely with current management intensities and technical capabilities in the short-run. Long-term effects are those likely if current management plans and techniques are fully implemented. To make these effects visible, both gross output and net effects of each alternative are shown. Gross effects are total outputs expected with the allocations proposed by each alternative. Net effects are the difference between either present or long-term outputs and increased or decreased outputs anticipated with each alternative. For example, the table on page 55 in the range section shows the present output of alternative C as 2,052.6 thousand AUM's, for a net effect or loss of 10.5 thousand AUM's (Present, 2,063.1, minus 2,052.6). Calculations are similar under each heading for all the alternatives with a display of both present and long-term effects.

Landform. Allocation of roadless areas to wilderness present an opportunity to preserve representative landform types in a natural, unaltered condition. Roadless areas allocated to nonwilderness uses will not eliminate landform type but do present potential for degrees of modification, if roads are constructed or other management modifications are permitted.

Preservation in a natural, unaltered condition of all landform types represented in RARE II roadless areas will be best achieved with implementation of alternative J. Alternative B has potential for not preserving any in a natural state. Landform type will still be present but due to potential road construction, logging, and other activities, it may not appear in its natural, unmodified state. Actual use of the areas is not decided with this allocation but may range from intensive development on one extreme to roadless, dispersed recreation on the other. Implementation of alternative A would not now produce any action. Options between these extremes, alternatives C through I, including the PA, will preserve or tend to modify the natural appearance of varying numbers and differing types of landform. Alternatives E, F, and G are designed to achieve targeted assignments of landform representations while alternatives C, D, H, I, and the PA, by their very nature of allocating some roadless areas to wilderness, will provide additional landform representations and potential for varying degrees of impact dependent on area allocations. The following table shows, for each alternative, percentage achievement of goals established for landform representation.

Alternatives	A	B	C	D	E	F	G	H	I	J	PA
LOW LEVEL	-	0	60	40	100	100	100	40	40	100	100
HIGH LEVEL	-	0	56	38	69	81	100	44	44	100	86

Vegetation. Effects of implementing the described alternatives have potential for impacting vegetation in basically two ways. First is the opportunity to preserve naturally functioning ecosystems by recommending roadless areas for wilderness and adding diversity to the NWPS. The other is potential for modification to alter species mix and/or diversity and the actual removal of vegetation (which may or may not affect diversity) if areas are allocated to nonwilderness uses. Effects must be examined from the standpoint of potential only as an act to allocate land has no direct effect on vegetation. There may be secondary impacts, however, resulting from activities permitted by the allocation.

Roadless areas allocated to further planning will have no immediate impact on vegetation, as decisions on commodity use or nonuse of an area will not be made until the land management planning process is completed. There will be no impact on threatened and endangered plant species resulting from allocation of roadless areas, for species will continue to be protected by law regardless of land allocation.

Maximum potential for preserving naturally functioning ecosystems and vegetative communities will be realized with implementation of alternative J. Alternative A will not provide a decision on which areas to preserve while alternative B will provide maximum opportunity for modification since all roadless areas are allocated to nonwilderness use. Alternatives C through I, including PA, will preserve varying numbers of ecosystems. Alternatives E, F, and G are designed to provide specific levels of ecosystem representation and alternatives C, D, H, I, and the PA, will, by allocating areas to wilderness, provide varying degrees of representation. The following table shows, for each alternative, percentage achievement of goals established for ecosystem representation.

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Alternatives	A	B	C	D	E	F	G	H	I	J	PA
LOW LEVEL	-	0	46	56	100	100	100	56	73	100	85
HIGH LEVEL	-	0	56	52	64	74	100	50	71	100	63

Potential for vegetative modification or removal is present in those roadless areas allocated to nonwilderness use. Allocation to nonwilderness does not identify an actual use of the area but it may range from undeveloped to full roading and timber harvest. Impacts upon the ecosystem and its vegetative components will vary with type and intensity of management anticipated. Alternative B has the greatest overall potential for vegetative modification, while alternative J represents an absolute minimum. Effects of implementing alternative A can only be identified as land management plans are developed that allocate roadless areas. Alternatives C through I and the PA provide for varying degrees of vegetative modification as some areas are proposed for wilderness and some for nonwilderness. Potential for modification will be higher in those alternatives allocating more roadless areas to nonwilderness use. Development, use, and management of these areas will be directed by existing land and resource management plans and within current laws and policies.

Accessibility/Distribution. Accessibility or distribution criteria for evaluation of alternative approaches identified, as a goal, an increased opportunity for wilderness experiences within a day's travel time of the Nation's population. Calculation of that opportunity is described on page 29 of this statement as it was used as a factor in generation of alternatives E, F, and G.

Implementation of 10 alternative approaches and the proposed action will provide varying degrees of accomplishment in meeting distribution goals. Maximum potential for achieving accessibility/distribution goals will be realized with alternative J as all areas would be recommended for wilderness. Alternative B will not increase opportunity for distribution within the NWPS as all areas are allocated to nonwilderness uses. Alternative A will not now provide a decision on allocation of the areas and the issue of meeting accessibility/distribution goals is not resolved. Alternative C through I, including the PA, will provide varying opportunities for meeting goals. The following table shows percentage achievement of goals established for accessibility/distribution.

Alternatives	A	B	C	D	E	F	G	H	I	J	PA
LOW LEVEL	-	0	86	68	98	100	100	96	87	100	99
MID LEVEL	-	0	83	67	78	100	100	92	85	100	88
HIGH LEVEL	-	0	80	62	58	95	100	88	83	100	78

Air. Allocation of roadless areas to either wilderness or nonwilderness will not change air quality designations under prevention of significant deterioration. They will remain as Class II, as designated since 1975 when prevention of significant deterioration regulations were first promulgated, unless redesignated by the state in which the area is located. Federal land managers have no redesignation authority. States may keep Class II designation or redesignate areas as Class I or even to Class III if the wilderness is less than 10,000 acres in size.

As mentioned in Section II of this statement, Class I areas have the smallest allowable pollution increments and Class III areas the largest increments, meaning Class I is the most restrictive and Class III the least. Measurement of air quality is indicated by the allowable increases of particulate matter and sulfur dioxide permitted. The increase in pollutant concentration (the increment) over the baseline concentration for Class I, II, and III areas is limited to the following:

<u>Pollutant</u>	<u>Maximum Allowable Increase</u> (Micrograms/Cu. Meter)
<u>CLASS I</u>	
Particulate matter:	
Annual geometric mean	5
24-hour maximum	10
Sulfur dioxide:	
Annual arithmetic mean	2
24-hour maximum	5
3-hour maximum	25
<u>CLASS II</u>	
Particulate matter	
Annual geometric mean	19
24-hour maximum	37
Sulfur dioxide:	
Annual arithmetic mean	20
24-hour maximum	91
3-hour maximum	512
<u>CLASS III</u>	
Particulate matter:	
Annual geometric mean	37
24-hour maximum	75
Sulfur dioxide:	
Annual arithmetic mean	40
24-hour maximum	182
3-hour maximum	700

Maximum allowable increases identified above may be exceeded only during one period per year at any specific location. The amount of industrial development or growth that may occur within the constraints of air classification categories is dependent upon the size of the permitted increment. Class I areas are most restrictive, Class II areas can accommodate moderate growth, and Class III areas provide for intensive development. Industrial growth in any specific area is dependent upon increase or increment available, meteorology, complexity of terrain, and types of facilities and technology applied to them.

A concern of potential wilderness designation is the effect on construction or enlargement of such facilities as power plants, papermills, and smelters. The normal effect on these facilities when built considering climatic, locational, and other air quality factors will be minimal. The Environmental Protection Agency (EPA) has stated that large sources such as power plants, pulp mills, and smelters, when well controlled, can generally locate within a Class II area without precluding future growth. It is essential to note that impacts anticipated are site specific to the geographic area of modeled air quality impacts. EPA also noted that sources of air quality contaminants that have difficulty locating in a Class II area may very well have difficulty even in a Class III area. A well controlled source in rough terrain will have problems with national ambient air quality standards if its plume impacts an adjacent hillside. The problem then is not with the Class II or III permissible increment but rather with the site specific factors of its location.

Allocation of roadless areas to nonwilderness use will not have an appreciable effect on air quality. Amount and intensity of current management practices such as slash disposal, prescribed burning, and other land and resource management tools will not necessarily increase in scope but may only be relocated on a specific National Forest. These activities are transitory in nature and normally of short duration. They will, when undertaken as a controlled management activity, be planned to take advantage of climatic and geographical factors to reduce potential for air quality degradation. The Forest Service will continue to meet site specific smoke management guidelines and air quality standards as a part of its land and resource management responsibilities.

It must also be recognized that in some large metropolitan areas such as the Los Angeles basin and in other localized situations where an industrial use is located, it may not be possible to control air degradation. Therefore, air reaching adjacent wilderness areas has been and may continue to be below acceptable standards. None of the alternative approaches will be capable of improving air quality in these situations.

In summary, implementation of alternatives A through J and the PA will not alter current air quality standards for the prevention of significant deterioration. Adjacent development will not be affected by wilderness designation since designation per se will not change air quality designations under preventing significant deterioration. Status quo will be maintained in terms of air quality standards for an area. Neither will allocation of roadless areas to nonwilderness use alter air quality within and adjacent to National Forests. Management activities that are normally short-term and transitory will continue to take place at about the same rate of intensity as has occurred in the recent past. The management activity will now, in all likelihood, be relocated into areas previously undeveloped. This action would reflect a potential only as allocation to nonwilderness uses will not prescribe types of activity permitted.

Management of these areas will be prescribed by more intensive land and resource management plans either currently in existence or to be prepared as a continuation of the National Forest System planning process.

Environmental Amenities. Implementation of any described alternative or proposed action may have a direct effect on other amenities as described in Section II of this statement. Activities permitted by allocation of roadless areas to nonwilderness uses have potential to impact these values while areas allocated to wilderness will tend to preserve amenities in a natural condition.

Effects on senses of taste and touch will not normally be altered by management of National Forest System lands. Potential impact on smell and the visual aspect of air quality have been discussed under previous headings and need not be repeated here.

Management of the visual resource is directed by current Forest Service guidelines designed to reduce the impact of management activities. Direction is applied equally to all alternative approaches with both wilderness and nonwilderness allocations so that differences in application of landscape management principles are not a factor. There is a difference in potential impacts associated with allocation of roadless areas to wilderness and nonwilderness uses. Areas recommended for wilderness will be managed in a natural state, virtually precluding potential for manmade visual impacts. Areas will be preserved with primary visual changes being a result of natural processes. Areas allocated to nonwilderness use may experience visual change as permitted activities are conducted within areas. Degree of change allowed will be dependent upon visual variety and visitor sensitivity to change as the resource is inventoried and visual quality objectives are established through implementation of the Visual Management System. Alternative J recommends all roadless areas for wilderness and will retain most natural visual appearance while alternative B recommending all for nonwilderness uses has potential to most drastically alter the visual resource. Alternatives between these extremes, including the proposed action, will preserve varying amounts of land in a natural visual state depending on number of areas recommended for wilderness.

Potential for increased noise impacts is greatest with alternative approaches allocating the most area to nonwilderness uses. Probability of additional road access, recreation site development, and other forms of resource management activities increases with these allocations, resulting in potential for increased noise impacts. By way of contrast, areas recommended for and eventually classified wilderness will reduce noise potential as motorized vehicles and other forms of management activities are prohibited. As pointed out throughout this analysis, alternatives that allocate the most area to nonwilderness use have the greatest potential while those allocating more areas to wilderness exhibit the least. Roadless areas that have effectively buffered Wildernesses, National Parks, and remote recreation areas and are now to be made available for nonwilderness use increase potential for noise impacts within these previously quiet areas.

Resource Uses. Potential resource outputs are quantifiable effects of implementing a series of alternatives. The outputs are identified both as potential opportunities that could be realized with nonwilderness allocations and potential opportunities foregone with wilderness allocations. Comparison of alternatives can be made using

resource outputs but they must be compared using similar data bases. As pointed out previously, alternatives A through J were developed utilizing a data base in existence prior to filing of the draft environmental statement. That data base has not changed for displays of A through J (DES base). Inventory changes and data updates have been made subsequent to filing of the draft, resulting in some new roadless areas and new data for present and potential resource outputs. The proposed action was developed utilizing the disabused data base (FES base). To compare the PA with alternatives A through J, a series of resource output factors needs to be applied. The following table displays the differences between the bases. Comparison may be made between the alternatives by applying the "difference" to the DES base and alternatives A through J.

	DES BASE		FES BASE		DIFFERENCE	
	Present	Potential	Present	Potential	Present	Potential
Commercial Forest Land (M acres)	26,508.1	26,508.1	26,843.9	26,843.9	+335.8	+335.8
Sawtimber (MMBF)	2,019.4	3,810.9	2,000.6	3,580.3	-18.8	-230.6
Products (MMBF)	1,055.5	2,145.5	421.5	2,005.5	-634.0	-140.0
Total	3,074.9	5,956.4	2,422.1	5,585.8	-652.8	-370.6
Developed Recreation (MRVD)	919.0	37,636.5	1,997.5	54,491.6	+1,078.5	+16,855.1
Dispersed Recreation						
- Motorized (MRVD)	1,832.4	3,768.0	2,997.5	5,876.4	+1,165.1	+2,108.4
- Nonmotorized (MRVD)	8,326.4	15,420.3	9,276.0	16,211.1	+949.6	+790.8
- Wildlife (MRVD)	7,992.7	12,423.8	18,352.2	27,196.1	+10,359.5	+14,772.3
Grazing (MAUM)	2,063.1	2,340.9	2,035.9	2,310.0	-27.2	-30.9
Number of Areas with Proven or Producing						
- Critical Minerals	137	-	48	-	-89	-
- Oil, Gas, Coal, Uran.	81	-	20	-	-61	-
Number of Areas with High Potential for						
- Critical Minerals	461	-	602	-	+141	-
- Oil, Gas, Coal, Uran.	398	-	515	-	+117	-

Recreation. Implementation of the alternatives will affect the recreation resource depending on kinds of future uses allowed under either a wilderness or nonwilderness designation. Three categories of recreation use are involved: (1) nonmotorized dispersed; (2) motorized dispersed; and (3) developed site recreation.

Wilderness use features naturalness, solitude, very limited campsite development, and few comfort and convenience facilities. Recreation use capacity is usually less for wilderness than for dispersed nonwilderness or developed site recreation use.

When necessary to protect the wilderness resource, use restrictions and even rationing of recreation use may be required. This further reduces capacity of specific areas to provide wilderness recreation opportunities.

Much current use of roadless areas is of the wilderness type. As the roadless areas allocated to nonwilderness are developed, there may be a corresponding increase in wilderness recreation pressure on both existing wilderness and roadless areas recommended for wilderness. This may ultimately impact quality of wilderness experiences by crowding or by need for more use restrictions to protect the wilderness resource.

The impact of alternatives on nonmotorized or wilderness type recreation use is approximated in the following table. It is essential to realize that nonmotorized dispersed recreation may also include uses not tied to or suitable for wilderness such as organization camping in large groups, activities surrounding hostels or hike-in lodges, etc. Present nonmotorized dispersed use of roadless areas is estimated at more than 9 million visitor days annually using the updated data base. If all areas were recommended for wilderness, as in alternative J, there would be the potential for an increase in use of 3.5 million recreation visitor days (RVD). All the alternatives show increase in nonmotorized dispersed recreation above the present use figures. This is due in part to the fact that nonmotorized use increases as motorized use decreases. There is a degree of intolerance among hikers and horseback riders when confronted with motorized recreation users.

Long-term potential for nonmotorized dispersed recreation is almost double that of present capacity although there are no additional areas to accommodate use. The increase is based on long-term ability of nonwilderness to accommodate increased user capacity if all provisions of existing management plans are implemented.

Similar use increases in wilderness areas are not realistic because overcrowding diminishes quality of the attributes essential for a wilderness recreation experience. This factor results in a long-term increased potential capacity over present outputs for every alternative except J. Nonmotorized dispersed use will remain the same for alternative J as all areas are recommended for wilderness and the realistic carrying capacity for each area is achieved.

NONMOTORIZED DISPERSED RECREATION

<u>Alternative</u>	<u>PRESENT</u>		<u>LONG-TERM</u>	
	<u>Output</u>	<u>Net Effect</u>	<u>Output</u>	<u>Net Effect</u>
	(Present = 8,326.4)		(Potential = 15,420.3)	
A	8,326.4	-	15,420.3	-
B	8,326.4	0	15,420.3	0
C	8,892.4	566.0	15,528.7	108.4
D	8,937.7	611.3	15,512.4	92.1
E	9,102.1	775.7	14,479.2	-941.1
F	9,263.1	936.7	14,387.4	-1,032.9
G	9,671.9	1,345.5	14,037.0	-1,383.3
H	9,344.1	1,017.7	13,989.5	-1,430.8
I	9,704.4	1,378.0	14,044.4	-1,375.9
J	11,864.3	3,537.9	11,864.3	-3,556.0
	(Present = 9,276.0)		(Potential = 16,211.1)	
PA	10,331.2	1,055.2	15,979.1	-232.0

Gross and net effects shown in the above table are in thousand recreation visitor days (RVD) use. The net effect represents change, by alternative, from either present or potential use. Alternatives A through J are developed with the DES data base. The proposed action (PA) uses the updated data base.

Motorized dispersed recreation includes off road vehicle (ORV) use by 4-wheel drive vehicles, growing numbers of 3-wheel vehicles, dirt bikes, snowmobiles, some use by aircraft along with dispersed camping and driving for pleasure. In total, motorized dispersed use is the most prevalent type of recreation on National Forests and Grasslands. Various alternatives affect motorized dispersed use to the extent that roadless areas are recommended for wilderness. This action eliminates existing or potential use and displaces it into a smaller, total area. Under nonwilderness allocations, some kinds of dispersed motorized recreation, such as backcountry trail biking, may be displaced if land management plans call for development of roads, allow resource uses, or provide protective measures that prohibit or restrict ORV recreation. Such losses may be offset by increased capacity of dispersed roaded recreation.

The greatest impact on motorized dispersed recreation use would occur if all roadless areas are recommended for wilderness under alternative J, eliminating all motorized use. Other alternatives have impacts on present dispersed use depending on the amount of wilderness designated by each alternative. These impacts range from a reduction of 118 thousand recreation visitor days for alternative E to 637 thousand RVD with the proposed action. It is difficult to estimate future dispersed motorized recreation under nonwilderness allocations since the actual use opportunities are not prescribed. They may range from roadless backcountry management to year-round recreation complexes and may include dispersed roaded recreation in timber harvest areas.

MOTORIZED DISPERSED RECREATION

<u>Alternative</u>	<u>PRESENT</u>		<u>LONG-TERM</u>	
	<u>Output</u>	<u>Net Effect</u>	<u>Output</u>	<u>Net Effect</u>
	(Present = 1,832.4)		(Potential = 3,768.0)	
A	1,832.4	-	3,768.0	-
B	1,832.4	0	3,768.0	0
C	1,628.4	-204.0	3,394.5	-373.5
D	1,675.3	-157.1	3,553.9	-214.1
E	1,714.2	-118.2	3,572.5	-195.5
F	1,681.1	-151.3	3,493.5	-274.5
G	1,344.4	-488.0	2,935.8	-832.2
H	1,502.2	-330.2	2,954.6	-813.4
I	1,277.9	-554.5	2,572.8	-1,195.2
J	0	-1,832.4	0	-3,768.0
	(Present = 2,997.5)		(Potential = 5,876.4)	
PA	2,360.4	-637.1	4,550.0	-1,326.4

Outputs for motorized dispersed recreation are shown in the above tables in thousand recreation visitor days (RVD) use. Net effect indicates change between gross output and either present or potential use. Alternatives A through J are based on the draft statement data base while the proposed action uses the updated data base.

Developed recreation includes many activities such as those at resort complexes, campgrounds, visitor centers, ski areas, etc. Developed recreation is currently limited on roadless areas. The greatest impacts are found with implementation of alternative J as wilderness designation would eliminate developed recreation opportunities. Impacts on potential use capacity vary according to the amount of wilderness in the alternative. It should be noted that nonwilderness areas can accommodate both developed and dispersed motorized recreation.

DEVELOPED RECREATION

<u>Alternative</u>	<u>PRESENT</u>		<u>LONG-TERM</u>	
	<u>Output</u>	<u>Net Effect</u>	<u>Output</u>	<u>Net Effect</u>
	(Present = 919.0)		(Potential = 37,636.5)	
A	919.0	-	37,636.5	-
B	919.0	0	37,636.5	0
C	890.3	-28.7	37,458.7	-177.8
D	861.3	-57.7	37,435.3	-201.2
E	836.0	-83.0	32,540.4	-5,096.1
F	748.8	-170.2	31,903.5	-5,733.0
G	630.0	-289.0	29,743.7	-7,892.8
H	663.1	-255.9	23,871.7	-13,764.8
I	532.3	-386.7	23,075.1	-14,561.4
J	0	-919.0	0	-37,636.5
	(Present = 1,997.5)		(Potential = 54,491.6)	
PA	1,584.9	-412.6	49,182.4	-5,309.2

All gross outputs and net effect are shown in thousand recreation visitor days use. Net effect represents change, by alternative, from present or potential use. Again, the data base for alternatives A through J is different than PA.

Wilderness. Section I of this environmental statement described the existing National Wilderness Preservation System and its current potential. The Forest Service manages 110 wildernesses totaling about 15.2 million acres. Seventeen Administration-endorsed areas containing about 3.3 million acres can, if classified, result in a total of 127 areas, 18.5 million acres, and almost 10 percent of the National Forest System land in wilderness. Other Federal agencies manage wilderness areas but, effects of implementing alternatives contained in this environmental statement will only be analyzed in terms of the existing and potential wilderness resource of the National Forest System.

Wilderness designation provides opportunity to retain roadless areas of the National Forest System in their natural state with some land management activities prohibited. Values of wilderness are many and in some instances, identified as vicarious benefits from the standpoint of simply knowing wild, untrammled areas still remain within the United States. These areas can be visited by anyone willing to enter them with the reward being an opportunity to return to nature in its most primitive form. Wilderness is also seen as retention of unmodified gene pools that can be utilized to maintain plant and animal stability within the environment. Wilderness may also protect soil, water, air, and visual resources as classification excludes modification, development, and intensive use of an area. Complete protection of these resources is by no means assured since overuse and abuse of even large wilderness areas by the public may degrade basic values initially preserved.

Implementation of alternative J recommends all roadless areas for wilderness, resulting in a total of 80.6 million acres of National Forest System lands in the NWPS, or about 45 percent of the National Forest System. With implementation of

alternative B, all roadless areas are allocated to nonwilderness and the amount of National Forest wilderness would remain 18.5 million acres or 10 percent of the National Forest System as described above. Alternatives C through I and the PA add varying amounts of land to the Wilderness System. Roadless areas allocated to non-wilderness uses will not be considered further for wilderness. Areas allocated to further planning retain potential for wilderness designation with decisions deferred until the land management planning process is completed.

Effects of alternatives on the wilderness resource relate to both amount of National Forest System land added to the National Wilderness Preservation System, as just described, and overall wilderness qualities of those areas. Consideration of quality of the NWPS has been a major factor in the RARE II process. A basic principle underlying formulation of alternatives and directing their analysis is to insure that in selecting areas for wilderness, qualities are present to further the purposes of the Wilderness Act. The RARE II process has been based on development of characteristics the NWPS should contain and when selecting eligible areas, insuring those qualities are considered.

Wilderness attributes of naturalness, apparent naturalness, solitude, and opportunity for primitive forms of recreation along with additional attributes such as presence of ecological, geological, or other features of scientific, educational, scenic, or historical value are a part of this analysis. Each area in the RARE II inventory received a numerical rating of these wilderness attributes. They are a factor for proposing allocations in most of the alternatives. Individual roadless area ratings and their specific allocation when implementing each alternative were analyzed in supplements to the draft environmental statement. The following table displays average wilderness attribute ratings (WARS) for areas recommended for wilderness (W) and allocated to nonwilderness (NW) or further planning (FP) for each alternative.

	A	B	C	D	E	F	G	H	I	J	PA
W	-	-	18.25	21.25	20.00	19.11	19.25	20.57	20.64	18.48	21.90
NW	-	18.48	17.95	16.51	18.40	17.04	18.32	17.97	16.01	-	18.76
FP	18.48	-	23.41	21.48	26.00	21.74	23.50	20.23	21.50	-	19.71

Data base revisions result in an average WARS rating of 19.55 as compared to an average 18.48 in draft statement alternatives A through J.

Higher wilderness attribute rating averages indicate proposed additions to the National Wilderness Preservation System are generally of high quality. Lower averages for nonwilderness indicate fewer potential high quality wilderness areas are being allocated to nonwilderness use. Allocation of further planning areas will be determined through subsequent land management or project planning processes.

Characteristics have been identified to insure increased diversity when adding areas to the Wilderness System. Suggested goals and target assignments for representations of landform, ecosystem, and adequate nationwide distribution of areas in the NWPS were identified and discussed previously. Achievement of wilderness associated wildlife targets are discussed under the wildlife heading, page 58. Percent achievement for wildlife is shown in the following tables. Goals are based on the fact that existing and probable NWPS already contain some characteristics, so target assignments consider only those gaps in representations that National Forest and Grassland roadless areas seem best suited to fill. Targets assigned have been identified only as the National Forest System share of the total Wilderness System, that is they recognize the potential contribution of other wilderness managing agencies. The following tables indicate achievement of target assignments and percent of representations provided by various alternatives.

Percent of Low Target Achievement by Alternative

Characteristic	A	B	C	D	E	F	G	H	I	J	PA
LANDFORM	-	0	60	40	100	100	100	40	40	100	100
ECOSYSTEM	-	0	46	56	100	100	100	56	73	100	85
WILDLIFE	-	0	87	93	100	100	100	100	100	100	100
ACCESS./DIST.	-	0	86	68	98	100	100	96	87	100	99

Percent of High Level Target Achievement by Alternative

Characteristic	A	B	C	D	E	F	G	H	I	J	PA
LANDFORM	-	0	56	38	69	81	100	44	44	100	86
ECOSYSTEM	-	0	56	52	64	74	100	50	71	100	63
WILDLIFE	-	0	83	81	34	44	100	59	90	100	71
ACCESS./DIST.	-	0	80	62	58	95	100	88	83	100	78

Timber. Effects on timber harvest as any alternative is implemented vary according to the amount of land each alternative proposes for wilderness classification, productive capacity of that area, and amount and productivity of land remaining for nonwilderness uses. Roadless areas proposed for wilderness classification will not be available for

timber harvest while areas allocated to nonwilderness uses will be where permitted by current land and resource management plans. Areas identified for further planning may or may not be available for timber harvest, dependent on completion of land management or project plans that will consider wilderness classification as one option for all or parts of the roadless area.

The accompanying table indicates commercial forest land acreage and timber volumes potentially available for harvest with implementation of each alternative. Volumes in million board feet are shown for both sawtimber and other forest products. Sawtimber refers to timber capable of being sawn into lumber while the term products generally refers to items smaller than sawlogs such as poles, cord wood, or timber harvest residues that may not be commercially merchantable as sawtimber. Potential effects of increased timber growth rates, better utilization, stronger markets, and improved fiber conversion technology are apparent in increases indicated between present output and long-term total output. These increased yields reflect potential gains anticipated if existing timber management plans for each roadless area were fully implemented.

It should be noted there is a potential immediate increase of almost 628 million board feet shown for alternative B as compared to alternative A. This is due to timber in existing wilderness study areas having been deferred, removing volume from the timber base utilized in developing annual allowable harvest calculations. A total of 4,983,000 commercial forest land acres of roadless areas are currently in the deferred category. They were placed in this category as a result of establishment of wilderness study areas both by the Forest Service in the original RARE process and subsequent actions and by Congress. However, long-term yields shown in the table include potential volumes from all commercial forest land, even under alternative A, since the intent of analysis is to indicate what would be possible if all provisions of available management plans were implemented.

Areas designated for wilderness will be removed from the commercial forest land base and placed in a "deferred" category. Appropriate reductions in the annual program of timber harvest will be made. Where these areas were already in a deferred category, either as a result of RARE I or subsequent Congressional action, there will be no impact on annual programmed harvest.

Areas designated for nonwilderness will remain in the commercial forest land base. If they were previously classed as "deferred," the productive lands will be returned to the commercial forest land base and the annual programmed harvest will be increased accordingly.

Areas designated for further planning will remain in the commercial forest land base. On some National Forests, administrative adjustments in sale programs may be necessary because of previous cutting patterns. There may not be sufficient areas, in some cases, to schedule the full allowable harvest because of unacceptable impacts on other resources.

Alternative J would have the greatest impact on timber harvest resulting in a present loss in programmed output of more than 3 billion board feet annually and a long-term potential loss of nearly 6 billion board feet. Other alternatives vary in their impacts and five of them, (B, C, D, E, and F) could increase present timber production from 22 to 628 million board feet. Long-term timber production

Present and Long-Term Effects of Alternatives on Available Commercial
Forest Land and Annual Timber Harvest Volumes

Alternatives

	DES BASE	A	B	C	D	E	F	G	H	I	J	PA
<u>Commercial</u>												
<u>Forest Land</u>												
Output - M Acres	26,508.1	21,525.1	26,508.1	23,270.2	22,531.6	25,085.6	24,345.1	21,016.9	20,212.8	18,485.7	0	20,808.1
Net		-4,983.0	0	-3,237.9	-3,976.5	-1,422.5	-2,163.0	-5,491.2	-6,295.3	-8,022.4	-26,508.1	-6,035.8
<u>Annual timber</u>												
<u>volumes - MMBM</u>												
Present												
Output												
Sawtimber	2,019.4	2,019.4	2,400.8	2,074.9	2,063.3	2,279.7	2,230.2	1,963.4	1,921.5	1,687.7	0	1,854.5
Products	1,055.5	1,055.5	1,302.0	1,022.5	1,159.5	1,248.0	1,202.5	1,004.5	1,044.5	951.5	0	396.0
Total	3,074.9	3,074.9	3,702.8	3,097.4	3,222.8	3,577.7	3,432.7	2,967.9	2,966.0	2,639.2	0	2,250.9
Net Effect												
Sawtimber		0	+381.4	+55.5	+43.9	+259.3	+210.8	-56.0	-97.9	-331.7	-2,019.4	-146.1
Products		0	+246.5	-33.0	+104.0	+192.5	+147.0	-51.0	-11.1	-104.0	-1,055.5	-25.5
Total		0	+627.9	+22.5	+147.9	+502.8	+357.8	-107.0	-108.9	-435.7	-3,074.9	-171.6
Long-term												
Potential												
Output												
Sawtimber	3,810.9	3,810.9	3,810.9	3,317.1	3,342.6	3,640.9	3,551.2	3,135.1	3,159.5	2,794.8	0	2,836.8
Products	2,145.5	2,145.5	2,145.5	1,657.0	1,937.5	2,040.5	1,989.5	1,629.5	1,807.0	1,581.5	0	1,505.0
Total	5,956.4	5,956.4	5,956.4	4,974.1	5,280.1	5,681.4	5,540.7	4,764.4	4,966.5	4,376.3	0	4,341.8
Net Effect												
Sawtimber		0	0	-493.8	-468.3	-170.0	-259.7	-675.8	-651.4	-1,016.1	-3,810.9	-743.5
Products		0	0	-488.5	-208.0	-105.0	-156.0	-516.0	-338.5	-564.0	-2,145.5	-500.5
Total		0	0	-982.3	-676.3	-275.0	-415.7	-1,191.8	-989.9	-1,580.1	-5,956.4	-1,244.0

NOTE: Present is the output programmed under current management intensity.
Potential is the output expected with full implementation of existing resource management plans.
Output is the total anticipated with the allocations proposed by each alternative.
Net effect is the difference between either the present or long-term outputs and the increased or decreased outputs anticipated with each alternative. Net effect of alternatives A through J is based upon the data base used in the draft environmental statement. Net effect for the proposed action is based upon the updated data base. The difference is explained on page 46.

potential could be reduced, with exception of alternative B, from 275 million board feet (alternative E) to about 1.5 billion board feet (alternative I).

Range. Effects of implementing alternatives on the range resource do not directly relate to permitting or eliminating grazing since grazing is allowed in wilderness. Impacts are more directly concerned with degree of range management improvements and intensity of grazing allowed. Generally, fewer range management improvements will be permitted in roadless areas recommended for wilderness, resulting in a reduction of potential capacity for utilization of the range resource. Areas held for further planning will not be immediately affected, but must await a wilderness or nonwilderness decision that will be made by the land management planning process.

The accompanying table shows present and long-term effects on grazing by implementing alternative approaches and the proposed action. Present effects shown are not those that would happen the day an area is classified wilderness but reflect changes that would occur as management activities permitted prior to classification would no longer be permitted. They may include spraying for brush control and use of motorized equipment for routine operation and maintenance of range facilities that would be excluded but whose residual value would remain following their prohibition. Under present management intensities, impacts (net effect) range from zero for alternative B to a reduction of 511 thousand animal unit months (AUM) for alternative J. Long-term potential shows an increase over present for all alternatives except J. Long-term net effect shows a reduction from the potential for alternatives C through PA with the greatest being 789 thousand AUM's under J as all areas are recommended for wilderness. Other alternatives have various impacts depending on amount of wilderness included in the alternative.

<u>Alternative</u>	<u>RANGE</u>		<u>LONG-TERM</u>	
	<u>Output</u>	<u>Net Effect</u>	<u>Output</u>	<u>Net Effect</u>
	(Present = 2,063.1)		(Potential = 2,340.9)	
A	2,063.1	0	2,340.9	0
B	2,063.1	0	2,340.9	0
C	2,052.6	-10.5	2,310.9	-30.0
D	2,045.7	-17.4	2,305.1	-34.9
E	2,035.7	-27.4	2,298.8	-42.1
F	2,015.1	-48.0	2,262.0	-78.9
G	1,954.1	-109.0	2,168.9	-172.0
H	1,979.8	-83.3	2,209.3	-131.6
I	1,948.7	-114.4	2,157.2	-183.7
J	1,551.9	-511.2	1,551.9	-789.0
	(Present = 2,035.9)		(Potential = 2,310.0)	
PA	1,971.7	-64.2	2,214.3	-95.7

Outputs and effects are shown as thousands of AUM's grazing use. The proposed action is compared to the updated data base.

It should be noted the decrease in AUM's under alternative J is about 30 percent under both present and potential management intensities. The next greatest effect is shown for alternative I and is closer to 10 percent. One effect of grazing under wilderness designation that needs to be pointed out is that some portion of the range capacity will probably be reserved in each area for allocation to recreation stock use, i.e., riding horses or pack stock. This same reservation will also be required in nonwilderness areas where the dominant use may be backcountry type dispersed recreation.

Water. Implementation of alternatives may affect both opportunities for water resource development and the quantity/quality characteristics of water. Wilderness designation precludes water resource development facilities within the area unless specifically authorized by Presidential order or permitted by legislation designating the wilderness. The potential for change in quantity/quality characteristics is greatest as roadless areas are allocated to nonwilderness use.

The opportunity foregone for water resource development such as hydroelectric power, municipal-industrial water supply, and irrigation water is greater in those alternatives recommending a larger number of areas for wilderness. Water resource development decisions will be deferred on those areas allocated to further planning. Alternative B will not change the opportunity as all areas remain as nonwilderness. Alternatives C through I and the proposed action provide varying degrees of opportunity for development. The opportunity foregone will be greatest with Alternative J.

Provisions for development of water resources can be written into legislation designating specific areas for wilderness. The President may also authorize development if he determines that it is in the Nation's best interest to allow the development. Water development facilities may be constructed outside an area to utilize the water resource originating within a wilderness area.

The potential for changing the quantity/quality characteristics of water is greater in those alternatives recommending a large number of areas for nonwilderness. Land management practices carried out on nonwilderness areas may increase or decrease the quantity of water originating from the areas and peak or low-flow characteristics of streams. Land management practices may also affect water quality and may actually improve water quality on those areas currently producing water of poor quality. But, management practices may adversely affect water quality as they are conducted. The potential is greatest in the RARE II alternatives with more areas allocated to nonwilderness. Wilderness designation generally protects water quality in the short term but designation does not provide as many opportunities to improve water quality.

Optimum quantity/quality characteristics of the water resource are best achieved on managed watersheds where the water resource is the primary management objective. Under this type of management, the most assurance is provided that the water quantity and quality will be maintained. Although all lands allocated to nonwilderness will not be managed primarily for the water resource, the allocation provides a greater opportunity to assure maintenance of the water resource. All nonwilderness lands are managed under a policy to control degradation of the water resource.

In the short term, retention of water quantity/quality in its present state is best assured through implementation of alternative J as all roadless areas are designated wilderness. The potential to modify water quantity and reduce water quality because of forest resource development practices is greatest with alternative B as all areas are allocated to nonwilderness. Alternative B also provides the best opportunity to "manage" the water resource. Alternatives C through I and the proposed action provide varying degrees of potential effects on water quantity/quality characteristics based on the number of areas allocated to either wilderness or nonwilderness.

Neither water quantity nor quality will be greatly altered as a result of implementing any of the alternatives. State water quality standards will continue to be met regardless of actual land use designations. The areas allocated to non-wilderness and further planning are subject to management direction contained in current or to be developed Forest Service land and resource management plans. The land management plans have or will establish criteria to accomplish land management practices that meet water resource management objectives. The land management plans are coordinated and consistent with State water quality management plans. The NEPA process is utilized throughout the land management planning process to assure adequate resource considerations are developed and made available to the concerned public. But, even though nonwilderness areas are managed to protect or improve current water quality, there always exists a certain element of risk that planned management practices will not achieve management objectives.

Pesticides. Use of herbicides and pesticides is not a factor in making allocation decisions for RARE II inventoried roadless areas. The environmental assessment for use of chemicals on National Forest System lands is evaluated in a separate environmental statement. Although pesticide use is not a part of this decisionmaking process, it should be recognized that use of chemicals is normally prohibited in wilderness areas and permitted under very rigid control standards in other parts of National Forests and Grasslands. Allocation decisions, of themselves, do not permit or restrict use of chemical herbicides.

Fire Management. Uncontrolled wildfire in the National Forest System is a management concern that must be discussed in terms of hazard and risk and the effect allocation of roadless areas to either wilderness or nonwilderness use will have upon the two factors. Fire hazard is increased by buildup of both natural and management activity created fuels while fire risk usually increases as more people or operations are permitted in Forests and Grasslands.

Classification of roadless areas as wilderness permits a buildup of natural fuels that increases fire hazard. Fire starts are usually caused by natural occurrences such as lightning but can result from careless use of fire by wilderness users. Control of fire in wildernesses is difficult due to limited access and restrictions on use of motorized equipment normally used to fight fire. Complete authority to use motorized equipment for fighting fire in wildernesses rests with the Forest Service.

Roadless areas allocated to nonwilderness uses have the potential for short-term buildups of fuel resulting from management activities permitted by this allocation. Natural fuel buildup may continue if the area remains undeveloped.

Prescribed burning and use of fire as a management tool can be effectively used to reduce fire hazard. Risk of fire can increase under these circumstances due to additional access and resource use of previously undeveloped areas. Improved access and opportunity to use mechanical equipment in nonwilderness areas does provide opportunity for more rapid control of fire starts.

Fire management is not a primary factor to be used in deciding allocation of RARE II roadless areas. Fire is both a management tool and a management problem. It takes its lead from allocations rather than dictating disposition of roadless areas. It is examined as a management factor, regardless of the allocation, at the local level of the land management planning process.

Wildlife and Fish. Wildlife and fish effects from implementing alternatives may include increased preservation of natural habitat and inclusion of some wilderness associated wildlife species through recommendations for wilderness. The following table indicates, for each alternative, percentage achievement of goals established for representation of wilderness associated wildlife species.

Alternatives	A	B	C	D	E	F	G	H	I	J	PA
LOW LEVEL	-	0	87	93	100	100	100	100	100	100	100
HIGH LEVEL	-	0	83	81	34	44	100	59	90	100	71

An increased opportunity to intensively manage, modify, and improve habitat is realized as areas are allocated to nonwilderness. Modest increases in amount and change in type of wildlife associated recreation is anticipated with nonwilderness designations where, for example, there will be more vehicle oriented hunting, fishing, and viewing. Areas allocated to further planning will continue to be managed as at present with eventual determinations of use made through the land management planning process. There is no impact anticipated on threatened and endangered wildlife and fish species resulting from allocation of roadless areas, as species will continue to be protected by law.

Preservation of wildlife habitat and fisheries resource in its natural state will best be maximized by alternative J. All roadless areas will be recommended for wilderness with vegetation evolving toward ecological climax. The rate of ecological progression will depend on success of management in allowing forces such as fire to maintain a natural diversity of habitat. This is important to many wildlife species located in wilderness. To the extent that progression toward ecological climax occurs, it will benefit species requiring this condition.

Wilderness recommendations do, however, restrict the amount of physical modification by mechanical means that can be done to improve habitat, such as removing stream blockages, stocking certain fish species, chemical or mechanical habitat treatments, etc. Alternative B provides the least natural habitat but most opportunity for

habitat manipulation to improve food, cover, and water availability. Alternative A would perpetuate current conditions pending completion of land and resource management plans. Alternatives between these extremes will provide varying amounts of natural habitat, and conversely opportunity for habitat manipulation, depending on the number of areas proposed for wilderness.

The following table shows present and long-term estimates of wildlife associated recreation use and net effect or change from either present or potential use. Data show the greatest increase in present use would occur under alternative J with other increases roughly proportionate to amount of wilderness in the alternative. Long-term use shows a different pattern, however, with maximum use under alternative B and with further reductions in gross use determined by the amount of wilderness in the alternative. This is because in the long-term, management plans provide for taking advantage of increased access opportunities under nonwilderness conditions to increase fish and wildlife and its use by recreationists including hunters, fisherman, and viewers.

WILDLIFE AND FISH

<u>Alternatives</u>	<u>PRESENT</u>		<u>LONG-TERM</u>	
	<u>Output</u>	<u>Net Effect</u>	<u>Output</u>	<u>Net Effect</u>
	(Present = 7,992.7)		(Potential = 12,423.8)	
A	7,992.7	0	12,423.8	0
B	7,992.7	0	12,423.8	0
C	8,368.6	375.9	12,260.6	-263.2
D	8,866.6	873.9	12,254.0	-169.8
E	8,161.7	169.0	12,285.3	-138.5
F	8,210.6	217.9	12,163.4	-80.4
G	8,487.4	494.7	11,836.2	-407.6
H	8,196.2	203.5	11,819.5	-424.3
I	8,939.9	947.2	11,614.9	-628.9
J	9,926.7	1,934.0	9,926.7	-2,317.7
	(Present = 18,352.2)		(Potential = 27,196.1)	
PA	18,927.0	574.8	23,813.3	-3,382.8

Wildlife and fish associated recreation use in this table is shown by thousand recreation visitor days. Present and potential use for the PA has increased due to the revised data base.

Minerals and Energy. Allocation of roadless areas through implementation of alternatives, including the proposed action, will impact mineral and energy resources. Wilderness allocations will severely restrict and/or prohibit development. Opportunities for development will be retained for roadless areas allocated to nonwilderness uses and also to further planning pending final allocation through the land management or project planning process.

The following tables indicate potential effects of implementing alternatives on the mineral and energy resource. The number of roadless areas recommended for wilderness that contain either proven or producing mineral and energy sites and the number that contain high potential for mineral and energy resources are shown for each alternative. With a wilderness recommendation, the mineral and energy resource is assumed to be foregone or at the very least, limited access will restrict development. With the DES data base, there are 137 roadless areas containing proven or producing critical hardrock minerals and 461 areas with high potential. The updated data base shows 48 areas with proven or producing and 602 with high potential. Critical hardrock minerals are those identified as minerals of compelling domestic significance by USGS and the Bureau of Mines. There are 81 roadless areas containing proven or producing oil, gas, coal, or uranium and 398 areas with high energy potential as identified in the DES data base. The revised data base lists 20 proven or producing and 515 with high potential. The total column represents the number of sites remaining nonwilderness and therefore normally available for mineral and energy utilization while the second column indicates number of areas containing specific resource values that may be affected with wilderness allocations.

MINERALS

<u>Alternatives</u>	Roadless Areas With Proven or Producing Critical Minerals		Roadless Areas With High Potential for Critical Minerals	
	<u>Total</u>	<u>Effect</u>	<u>Total</u>	<u>Effect</u>
A	137	0	461	0
B	137	0	461	0
C	130	-7	456	-5
D	111	-26	394	-67
E	126	-11	440	-21
F	111	-26	418	-43
G	101	-36	381	-80
H	118	-19	391	-70
I	128	-9	319	-142
J	0	-137	0	-461
PA	41	-7	460	-142

A revision in the data base has changed the number of roadless areas in each category. Alternatives A through J are developed from the DES data base while the proposed action has used the updated FES base. Refer to page 46 for the difference between the two.

ENERGY

Roadless Areas With Proven or Producing Oil, Gas, Coal, Uranium	Roadless Areas With High Potential for Oil, Gas, Coal, Uranium
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<u>Alternatives</u>	<u>Total</u>	<u>Effect</u>	<u>Total</u>	<u>Effect</u>
A	81	0	398	0
B	81	0	398	0
C	80	-1	382	-16
D	72	-9	360	-38
E	71	-10	371	-27
F	60	-21	354	-44
G	51	-30	321	-77
H	63	-18	346	-52
I	71	-10	276	-122
J	0	-81	0	-398
PA	17	-3	450	-65

Alternative J will affect minerals and energy resources to the greatest extent, as all roadless areas are recommended for wilderness. This does not mean that mineral and energy development will be completely eliminated since prospecting is allowed in most wilderness areas until 1984 and subsequent development of established claims after that date may occur. Under alternative J, proven or producing critical mineral sites in roadless areas would be encumbered by wilderness restrictions, as would all high potential sites for critical minerals. Similarly, presently proven or producing energy sites in roadless areas would be encumbered, as would all high potential sites for oil, gas, coal, and uranium.

By way of contrast, alternative B has the least impact as all roadless areas are allocated to nonwilderness use. Under alternative B, proven or producing critical mineral and energy sites will remain unencumbered as will all high potential mineral and energy sites. Entry into all nonwilderness areas for exploration, development, and production will be permitted as at present. Alternative A retains status quo since no roadless area allocations are made. Alternatives C through I and the proposed action provide for varying degrees of mineral and energy utilization, depending on number of areas recommended for wilderness or nonwilderness uses.

Although allocation of roadless areas to nonwilderness uses permits utilization of the mineral and energy resources, it does not provide for unrestricted use. Existing land and resource management plans may place additional restrictions on entry and use of the land base. Management and control of surface lands remains the responsibility of the Forest Service and is directed by regulations in Titles 36 and 43, Code of Federal Regulations. Potential or actual use will continue to be coordinated with protection of soil, air, and all other resources.

Roadless areas allocated to further planning will have short term effects on development of some mineral and energy resources. Generally, these areas will continue to be managed in a roadless, undeveloped condition until allocation decisions have been made through the land management planning process. While in this condition, 1872 mining laws continue to apply, and some exploration and development is expected to occur. With respect to minerals subject to mineral leasing laws, further planning status of these areas will generally require that exploration, development, and production be deferred until completion of the land management planning process. Because there are geologic indications that oil and gas resources in such areas may be so large, if found and developed, that they could significantly reduce the United

States' reliance on foreign sources, exploration for oil and gas would be permitted in some areas if certain requirements are met. Circumstances necessitating entry and stipulations for entry and development are discussed further in Section VII, pages 97 and 98.

To adequately assess oil and gas production potential, both direct and indirect exploration methods can be used. The exploration process involves several stages during which the effort takes on an increasingly sharper focus. With completion of geologic studies and seismic surveys, areas of interest shrink. At the same time, environmental impacts can change from very light to significant. The main impacts are from drilling and its associated need for access. But only a small fraction of the original area of interest is actually drilled. Areas of producible oil and gas are even smaller. Given the current odds on discovering producible amounts of oil or gas, it appears that very little of the total acreage designated for further planning would be capable of production. Where oil or gas production occurs, wilderness values may be temporarily, in some cases permanently, degraded.

Transportation corridors for movement of mineral and energy resources are an additional consideration, for they are not normally compatible with wilderness. These facilities within corridors include power transmission lines, oil and gas pipelines and other transportation modes. Alternative B provides the most unrestricted opportunity for development of these facilities and alternative J provides the least. Alternative A will produce delays in deciding what is acceptable and alternatives C through I, including the proposed action, produce varying opportunity for development depending on the number of roadless areas proposed for wilderness and for nonwilderness uses.

Cultural Resources. Effects of implementing a series of alternatives on cultural resources may be viewed in two different ways. First, reduced access affords protection to the resource when roadless areas are recommended for wilderness, and second, opportunity to find, restore, and protect cultural resources is enhanced when areas are allocated to nonwilderness uses.

Historical and archeological sites are protected by the National Historic Preservation Act of 1966 and Executive Order No. 11593 of May 13, 1971. Regulations to meet these authorities require that qualified individuals conduct reconnaissance, or more intensive surveys when necessary, before any ground-disturbing activities are initiated. This requirement mandates protection of cultural resources in both wilderness and nonwilderness areas.

Despite protection of cultural resources as a result of more limited access under wilderness designation, this classification is not conducive to extensive excavation and restoration. Accordingly, those alternatives with the most areas proposed for wilderness provide the highest degree of natural protection even though historical and archeological areas must also be protected in nonwilderness areas. The primary difference is that in nonwilderness areas, cultural sites may be excavated and restored using procedures not available under wilderness constraints. Facilities may be constructed to strengthen the site and interpretation is permitted to enhance public viewing and understanding. In this respect, alternatives allocating the most areas to nonwilderness use enhance opportunities to make the resource available for public use and enjoyment. Under such a complex and site specific situation, it is impossible to generalize as to which alternatives have the least or the most impact on cultural resources.

Resources Planning Act (RPA). Implementation of alternatives in this statement can have an effect on meeting those 1975 RPA program targets that can be directly compared with outputs from RARE II inventoried roadless areas. Allocations may also reduce the range of opportunity available with the 1980 RPA update. Comparable outputs are wilderness, timber sale offerings, developed recreation use, dispersed recreation use, and grazing. The RPA program established target outputs for the total National Forest System to meet in each of these resource areas. Targets were expressed in ranges and assigned for two different time periods - 1985 and 2015. The share of total targets that must be obtained from RARE II inventoried roadless areas has been identified based upon Regional determinations. Potential outputs of roadless areas by alternative allocations are also known. This information can be combined to permit an analysis of affects allocations might have on the RPA program. The following table displays this analysis for all alternatives. Targets for wilderness, developed and dispersed recreation, and grazing are for the year 2015. The target for timber utilizes 1985 sawtimber harvest volume figures, as short term effects on this resource are more meaningful in analyzing impacts upon the RPA program.

Implementation of alternatives C, D, G, H, I, J, and PA will be within or will exceed the RARE II share of the 2015 wilderness target. The amount to be added in reaching the target ranges from a low of 9.0 million acres with implementation of alternative C to the maximum amount possible with implementation of alternative J. Alternative B will not contribute to the target while E and F contribute lesser amounts than others and do not meet the target.

Only alternatives B and E meet 1985 programmed harvest sawtimber outputs. The range of potential output varies with amount of commercial forest land available for production within roadless areas allocated to nonwilderness uses. The target could be slightly exceeded if alternative B is implemented. A method for comparing outputs of the TPA with the 10 DES alternatives is developed at the beginning of this section.

Developed recreation use target for 2015 could be exceeded by all alternatives except J. Developed recreation sites are not permitted in wilderness areas resulting in a loss of total potential. The target range for dispersed recreation use is exceeded by all alternatives. Alternative J would produce the fewest recreation visitor days of dispersed use since motorized use would be prohibited and the amount of nonmotorized dispersed use would be managed to retain a wilderness environment.

Change in grazing use is minimal and the 2015 target is met through the range of alternatives except for alternative J. While grazing is permitted in wilderness areas, ability to intensively manage the resource is foregone. The impact of this restriction is most evident with implementation of alternative J as all areas are recommended for wilderness.

The 1975 RPA program targets utilized in this analysis will be updated as the 1980 program is submitted. It will reflect allocations made through the RARE II process and be responsive to the amount of land available for either wilderness or nonwilderness outputs. It should be remembered when analyzing effects of implementing these alternatives that entries show only what is potentially available. There is no guarantee outputs will be achieved.

COMPARISON OF 1975 RPA SELECTED PROGRAM TARGETS
AND RARE II ALTERNATIVES

Outputs and Measurements	RPA & RARE II	Year	Mid-level Program Targets for NFS	RARE II Share of Targets*	Potential Outputs by Alternatives											
					A	B	C	D	E	F	G	H	I	J	PA	
Wilderness					N											
Million Acres					O											
	2015		27.5	9.0	A	0.0	9.0	11.8	3.4	5.3	13.1	9.9	20.6	62.1	15.1	
Sawtimber Sale Offering					L											
Billion Bd. Ft.					L											
	1985		13.9	2.3	O	2.4	2.1	2.1	2.3	2.2	2.0	1.9	1.7	0.0	1.9	
Developed Recreation Use - Million RVD					A											
	2015		111.2	5.6	T											
Dispersed Recreation Use - Million RVD					I											
	2015		198.0	20.3	O	37.6	37.5	37.4	32.5	31.9	29.7	23.9	23.1	0.0	49.2	
Grazing Use					N											
Million AUM					S											
	2015		19.2	1.8	M	31.6	31.2	31.4	30.3	30.1	28.8	28.7	28.2	21.8	44.3	
					A											
					D											
					E	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.2	1.6	2.2	

RVD = Recreation Visitor Days
AUM = Animal Unit Months
* = Based on Regional Estimates

Economic. Economic analysis in the RARE II process includes an opportunity costs analysis (value of commodities foregone), an economic impact analysis (predicted changes in employment and associated indicators), and a look at selected key economic issues which may be influenced by decisions resulting from the RARE II process. By allocating roadless areas to either wilderness or nonwilderness, opportunity costs and flow of goods and services to local markets may change. As goods and services from forest lands flow to markets, people are employed and income is generated. As flows change, change also appears in level of employment and income. In order to evaluate these potential changes a "Development Opportunity Rating System" (DORS) and an economic input-output approach were utilized. A detailed discussion of DORS and the input-output models is included in appendix W.

The DORS generates relative ratings and total opportunity costs for all roadless areas in the National Forest System with the exception of Alaska. The ratings range from 0 to 15 and express relative per acre potentials for development of known nonwilderness resources, excluding potential mineral resources. These ratings are similar to a benefit-cost ratio. Ratings greater than 5 indicate total value of benefits exceeds total value of costs. Ratings less than 5 indicate estimated costs are greater than value of benefits. Opportunity costs are estimates of total present net values of nonwilderness resources foregone by wilderness classification. Opportunity costs combine available economic benefit and cost information assuming a full range of multiple uses and are based upon a continuation of present Forest Service management policy. Basic data used for the DORS analysis include: physical outputs or use levels, benefit values (regional or area specific), and direct costs of transportation construction, fire protection, and resource management. Most output information is from estimates made during the RARE II inventory. Value and cost information is taken from Forest Service planning and financial records.

The following display shows the average DORS ratings and total estimated opportunity costs by alternative for the Nation. Average ratings and total opportunity cost provide a comparison among various alternatives. Ratings and costs are shown separately for those areas allocated to wilderness, nonwilderness, and further planning for each alternative.

Alternative	Areas Allocated to:					
	Wilderness		Nonwilderness		Further Planning	
	Average DORS Rating	Total Opportunity Cost MM\$	Average DORS Rating	Total Opportunity Cost MM\$	Average DORS Rating	Total Opportunity Cost MM\$
B	0.0	0.0	6.9	6,959.6	0.0	0.0
C	6.1	824.2	7.4	4,625.8	7.1	1,509.6
D	6.3	671.9	6.8	3,312.5	7.8	2,975.2
E	6.6	502.5	6.9	6,457.1	0.0	0.0
F	6.2	577.4	7.1	4,266.4	6.7	2,115.8
G	6.4	1,126.3	7.0	5,833.2	0.0	0.0
H	6.8	738.1	6.9	5,164.2	7.0	1,057.3
I	7.2	2,195.4	6.7	2,567.1	6.5	2,197.1
J	6.9	6,936.7	0.0	0.0	0.0	0.0
PA	5.7	652.9	7.4	5,497.6	5.9	809.0

A higher average DORS rating for nonwilderness allocations in the above table indicate the most cost effective areas remain available for resource utilization. Higher total opportunity costs are ideally found with nonwilderness allocations as it permits the most economically productive areas to remain available for commodity use. Refer to appendix W for a complete explanation of DORS and opportunity costs.

Input-output models were constructed to determine economic impacts resulting from wilderness and nonwilderness allocations of roadless areas. These models were used to calculate impacts (changes) upon:

- total dollar value of output
- total income
- value added
- employment
- population (related to employment changes)

The link between land allocations and economic effects is change in production of goods and services resulting from different kinds and levels of activity permitted under wilderness, further planning, and nonwilderness management. Production or use changes result in expenditure changes within the economy. The RARE II impact models translate resource output and use changes into expenditure changes. These expenditure changes are used with the input-output models to estimate changes in output, income, value added, employment, and population. All production and use changes are net changes from present outputs and use levels. Economic effects that are estimated do not represent projections of the total economy, only changes from present situation.

Economic effects at both the local and national level have been estimated. Analysis was done using multicounty impact area input-output models and a national input-output model. Only impact on the national economy is presented here; however, results of each multicounty analysis are available at appropriate Forest Service

Regional Offices. The small area analysis was used to evaluate impacts of various alternatives upon local communities and input-output models were used as area specific. There are 167 unique small area models. These models were used primarily in conjunction with the "community stability" analysis.

The national input-output model was used to determine economic impacts for the Nation as a whole. This model considers total national economy and estimates changes resulting from implementing various RARE II alternative approaches. The national totals have been subdivided into State totals to estimate the relative "share" for individual states containing roadless areas. This information is presented in appendices A through T.

Three assumption sets are employed to illustrate economic effects. The first assumption, identified as "Potential Immediate Effect," represents economic effects of wilderness allocations. That is, roadless areas allocated to wilderness change from present to wilderness management strategy. All areas allocated to nonwilderness remain in present management. Production and utilization changes in this case are largely negative although some gains in certain recreation uses may be obtained. Also, deferred timber from areas allocated to nonwilderness may cause positive

gains in production. It should be noted that although the term "immediate" is used to describe this assumption set, it is not intended to convey the passage of time, but rather to describe wilderness allocation without compensating gains from production on nonwilderness areas.

The second assumption set, with two variations, is referred to as "Potential Long-Term Effects." Under this assumption set, areas allocated to wilderness change from present management to wilderness management. Areas allocated to nonwilderness change from present to potential management, all with attendant changes in production and utilization. Two variables reflect disposition of areas allocated to further planning. In the first case, these areas are treated as if they had been allocated to nonwilderness use and in the second case they are allocated to wilderness. These two variations show the range within which economic effects will lie dependent upon eventual allocation of areas in the further planning category to either wilderness or nonwilderness use. For any impact area, results under this assumption show the net economic effects that occur as a result of allocating all roadless areas within the impact area to either wilderness or nonwilderness use. Again, the term "long-term" does not refer specifically to the passage of time but rather to the assumption underlying the analysis.

The following tables highlight employment and other economic changes anticipated in both present and potential situations resulting from implementation of alternatives. Entries made under each heading represent potential opportunities gained or lost; gains and losses of income, output, and value added to the gross national product based on employment changes: The 1974 national private sector employment figure used in this analysis was 66,888,600. Of course, more people are affected than those indicated by changes in employment. Detailed impacts are shown in appendix W.

Present Effects

Alternative	Employment (Person Years)	Income (MM\$)	Output (MM\$)	Value Added (MM\$)
A	No change	-	-	-
B	8,195	104.2	391.1	168.1
C	-13,522	-164.2	-636.9	-280.2
D	-2,568	-24.2	-100.2	-50.0
E	6,169	78.6	297.8	128.6
F	3,807	50.8	197.1	82.8
G	-10,289	-118.9	-464.1	-211.6
H	-953	-10.9	-35.2	-15.7
I	-7,940	-96.1	-355.5	-155.8
J	-73,817	-910.7	-3,440.8	-1,498.4
PA	4,485	55.0	210.0	92.0

Potential Long-Term Effects (Further Planning areas calculated as nonwilderness)

Alternative	Employment (Person Years)	Income (MM\$)	Output (MM\$)	Value Added (MM\$)
A	Unknown	- - -	- - -	- - -
B	225,762	2,458.2	7,910.8	3,965.6
C	205,861	2,211.8	6,960.1	3,547.9
D	210,681	2,277.7	7,222.0	3,657.9
E	216,124	2,344.7	7,486.1	3,772.0
F	207,400	2,247.9	7,165.3	3,615.6
G	171,641	1,835.4	5,689.1	2,925.8
H	143,490	1,588.9	5,239.8	2,572.4
I	125,034	1,336.3	4,180.6	2,151.5
J	-73,817	-910.7	-3,440.8	-1,498.4
PA	200,816	2,232.0	7,484.0	3,635.0

Potential Long-Term Effects (Further Planning areas calculated as wilderness)

Alternative	Employment (Person Years)	Income (MM\$)	Output (MM\$)	Value Added (MM\$)
A	Unknown	- - -	- - -	- - -
B	225,762	2,458.2	7,910.8	3,965.6
C	137,765	1,446.3	4,385.5	2,308.2
D	25,461	217.8	481.3	362.2
E	216,104	2,344.4	7,485.2	3,771.6
F	45,402	446.4	1,226.6	716.6
G	171,618	1,835.1	5,688.0	2,925.3
H	112,540	1,232.3	4,020.5	1,999.3
I	-14,535	-231.7	-1,041.8	-371.0
J	-73,817	-910.7	-3,440.8	-1,498.4
PA	173,758	1,926.0	6,415.0	3,139.0

Each alternative has substantially different impacts on the national economy. Alternative J, where all areas are wilderness, would have an immediate impact of over 70,000 job opportunities. This is insignificant from a national perspective, as it only represents slightly more than .09 of one percent. The proposed action increases employment opportunities by 4,485 person years. Though this change is not significant at the National level, certain states or multicounty areas may have significant impacts. This detail is in appendices A through T.

Alternatives B, E, and F indicate positive employment effects in the short-term and all except I and J are positive in the long term. The positive impact comes from areas allocated to nonwilderness being managed for a full range of resource outputs and the nonwilderness commodities harvested and marketed. The PA shows a significant increase in employment in the long-term.

Housing Starts. Construction levels of residential housing within the United States are quite cyclic with periods of high levels of construction interspersed with downturns. Starts are dependent on both level of purchaser demand and availability and cost of mortgage money. Rising costs of materials, labor, and land are factors, but in past decades, a principle determinant has been availability of mortgage monies. Softwood lumber and plywood costs historically have averaged about 7 to 8 percent of total sale price of the average single family house. Costs may rise above these long-term averages during periods of high construction levels. Multifamily housing units use about one third less lumber and plywood in their per family unit construction than single family units.

The primary contribution of roadless areas to housing starts and material availability is softwood sawtimber volume contained within them. Volume, as discussed under the Timber heading, has the potential to be utilized in an area allocated to nonwilderness use but will be foregone if it is recommended for wilderness. The immediate effect of reducing softwood timber supply would be more extreme if it were coincidental with a period of high level national construction than if new housing starts were in a cyclic downward trend.

Alternative J is the "bench mark" in this analysis as it has the most potential to reduce softwood timber supply flow from National Forests as all the areas are allocated to wilderness. Reduction, at this extreme, could amount to about two billion board feet of softwood sawtimber annually. This withdrawal could have an effect on lumber and plywood prices and probably total price of a new home but after a period of supply adjustment, products would probably be supplied from other sources. R. W. Haynes and D. M. Adams, in a manuscript submitted to the Journal of Forestry, explored impacts of RARE II allocations on softwood sawtimber prices, consumption, and production. Their analysis found that "the bulk of the decline in National Forest softwood sawtimber harvest is offset by increases in cut on private lands and softwood lumber imports from Canada." They predicted the softwood sawtimber stumpage price would rise in the west and to a lesser extent in the south. But, the largest part of the supply adjustment would come from increased imports of Canadian softwood lumber.

Haynes and Adams found that even with adjustments in supply, there would be an accelerated price rise over existing trends in average wholesale price of both softwood lumber and plywood if alternative J were implemented. The index would be 2.8 percent higher in 1985 for softwood lumber and 0.2 higher in 1985 for plywood than would normally be anticipated without implementation of alternative J. Implementation of any of the other alternatives would have a lesser effect on softwood availability and prices as fewer areas would be allocated to wilderness. The proposed action could produce an index that would be from 0.5 to 0.8 percent higher for softwood lumber and 0.1 higher for plywood, both in 1985 using 1967 as base. The variation is dependant on roadless areas allocated to further planning and their eventual disposition.

Using assumptions of the Haynes-Adams analysis, total effect of RARE II allocations on housing starts would not be large from the standpoint of price increases. However, it could be expected there would be more severe short-term price impacts while supply adjustments were taking place. To this extent, an interruption of flow of lumber and plywood to the construction industry could be of significance. These shortfalls would be temporary with other sources expanding production to meet material needs.

The result could be a temporary reduction in number of housing starts and an overall lag in completion of houses under construction.

Inflation. Primary inflationary effects of implementing the series of alternatives described in this statement deal with potential withdrawal of softwood sawtimber volume. Effects could be realized in higher prices for softwood lumber and plywood with results about the same as discussed under Housing Starts. Price increases for new homes could reflect increased wood materials cost, but inflation affects almost all sectors of the economy. The National Association of Home Builders' data show that lumber prices increased an average of 8.6 percent annually during the period from 1973 through 1977. Some construction components have had sharper rises, such as concrete at 12.7, heating equipment at 10.5, and insulation at 15.7 annual percentage increases.

A significant withdrawal of softwood sawtimber from available timber supply would likely have an inflationary effect on sale prices of new homes. Alternative J would have potential for the most impact as all areas are recommended for wilderness. Alternative B would have the least. Effects of implementing other alternatives would vary, dependent on the number of areas proposed for wilderness and potential timber volume removed from total supply. With implementation of the proposed action, between 800 million and 1.176 billion board feet of sawtimber potential could be removed from the market. The corresponding impact on inflation is a 3.8 to 5.5 percent increase in lumber and wood product prices. The availability of softwood sawtimber is but one inflationary component that cumulatively contributes to price rises for residential construction.

Other potential resource outputs from inventoried roadless areas are not variable enough in response to their allocation to appreciably affect inflation. The one possible exception is foreclosing use of the mineral and energy resource of areas recommended for wilderness. If major energy sources were discovered but not made available for use, lack of additional supply could inflate the price of current resources. This is an unquantifiable factor for if extent of the resource is unknown, it is impossible to predict what the effect on inflation might be.

Balance of Payments. A major factor creating an unfavorable balance of payments in import-export trade originates with imports of foreign oil. Another factor, in terms of roadless areas allocation, is softwood timber products, namely lumber. Implementation of alternatives within this environmental statement can have an effect on level of softwood lumber imports as areas are either made available or removed from commodity production. Availability of softwood timber and opportunities to meet demand without a heavy reliance on imports can be quantified. But, unquantified mineral and energy sources can not now be analyzed to determine how much or how little import is needed to achieve a balance of payments.

Improvements in balance of payments can be achieved by increasing exports or decreasing imports for any trade item. Utilizing oil and gas potential to the maximum within this country reduces dependence on foreign oil. Likewise, the need for a foreign source of softwood lumber can be reduced if this country can supply more of its own demand. Roadless areas in the RARE II inventory have potential for helping somewhat to reduce dependency on foreign products. But, it is only one factor for the value of foreign currencies in exchange with the U. S. dollar, price of foreign commodities, and other commitments must also be considered when attempting to improve balance of payments situations. This balance of payments discussion cannot adequately analyze total trade flows, overseas capital investments, etc. Variables involved and unpredictable future events would make a complete analysis difficult and not appropriate for RARE II roadless area allocations.

Balance of trade of available resources contained in roadless areas can be discussed. The primary resource is softwood sawtimber. Softwood lumber and newsprint account for well over half our total wood products imports which in 1977 amounted to \$6.6 billion. The primary source of this material is from Canada. Exports of paper, board products, softwood logs, and lumber totaled nearly \$4.7 billion in 1977, mostly to Japan and Europe. In terms of balance, 1977 imports exceeded exports by nearly \$2 billion, a rather small amount when compared to a total trade deficit of nearly \$30 billion but a contributing factor to our current deficit position.

D. M. Adams and R. W. Haynes in an analysis submitted for publication to the Journal of Forestry find the primary factor that would be affected by allocation of the roadless areas is our trade in softwood lumber. In general, reduced internal supplies would lessen our ability to export to foreign markets and would increase imports of Canadian softwood lumber. The model developed by Adams and Haynes shows Canadian softwood lumber imports in the year 2000 to be 2.7 billion board feet higher with implementation of alternative J as opposed to the situation anticipated with implementation of alternative A. The proposed action could increase the need for import in a range from 450 to 610 million board feet dependent on the eventual allocation of areas in further planning. Again, alternative A is the zero base and J the extreme. In terms of 1977 average import prices, alternative J could increase the import bill for softwood lumber approximately 23 percent above the level anticipated with alternative A. Imports could be reduced if exports were diverted to domestic markets but this would tend to neutralize net trade balance.

This analysis describes extreme possibilities when comparing no action with alternative B and allocation of all roadless areas to wilderness in alternative J. Other options, including the PA would fall between these extremes and have a lesser effect on balance of payments (trade).

Returns to the Treasury. The major portion (95 percent) of National Forest Fund Receipts (\$691.5 million in 1977) is derived from sale of timber. Other resource uses such as grazing, land uses, power, mineral leases, recreation admission and user fees contribute the remaining 5 percent. Effects on returns to the Treasury and resultant payment to States will not be significant unless there is a substantial change in

timber harvest volumes and oil and gas production. Implementation of those alternatives that recommend greater numbers of areas for wilderness will produce the greatest change in timber and oil and gas output. The timber effect has been described under both the Timber and Resources Planning Act (RPA) headings in this section.

Alternative J, with its potential to reduce total outputs, would indicate a decrease of 10.7 percent in its return to the Treasury using the 1985 RPA targets but slightly less when compared to 2015 targets. Implementation of alternatives A through I will have varying effects on returns to the Treasury and distribution of receipts to States dependent on the potential products foregone with wilderness classification. The proposed action could reduce Treasury returns from National Forests by 0.8 to 2.5 percent depending on allocation of further planning areas. In dollars, it is a decrease of 8 to 30 million. This analysis is made on a national basis only and does not reflect specific impact on a local basis. A county composed of a large area of federal land, most of it in a roadless area, could feel a much larger impact, if the area was recommended for wilderness, than the national reduction of 10.7 percent shown for implementation of alternative J. Such an impact may be partially offset by payments to local governments as authorized in the Payments in Lieu of Taxes Act of 1976, Public Law 94-565.

Management Costs. Overall budget increases as a result of implementing the proposed action are likely to be about \$5 million per year for the entire National Forest System. Receipts would be slightly lower than the current level. Budget increases would include costs for eliminating or, where appropriate, mitigating some existing special uses and for occasional land acquisition which might be necessary to insure wilderness quality is maintained. Some increases in costs will be necessary to prepare substitute timber sale volume for sales partially prepared that are in areas being recommended for wilderness. Wilderness management costs would about double from the current budget level.

The magnitude of the effect on management costs can best be analyzed by examining the extremes of the displayed alternatives. If alternative J were implemented, there would be an overall decrease in budget needs estimated at between \$150-200 million. As all areas are recommended for wilderness under this alternative, there would also be a loss of receipts of about \$150 million annually. Increased costs for wilderness management, land acquisition, and costs for mitigating existing special uses would occur. Significant decreases in both the level of timber sales and required funding for timber sales related activities would result. If alternative B were implemented, there would be an overall increase in budget needs, estimated at from \$50-70 million, per year. Additional costs would basically be incurred for more intensive management of an increased land base available for multiple uses other than wilderness. Along with potential increases in receipts of about \$40 million, there would also be other economic benefits from such development. An increase in developmental activities could take place as additional areas would be utilized to help meet national demands for goods and services. Costs and receipts for the remaining alternatives lie within the estimates for alternatives B and J.

Land Acquisition. Implementation of any alternative that proposes roadless areas for wilderness raises the question of what happens to included private land. Several factors are paramount in analyzing this issue. First, non-Federal lands included within boundaries of an area classified as wilderness are not themselves classified. Second, classification of area as wilderness is not a taking of private land. Third, acquisition of private land is not essential for management of wilderness.

In all National Forest Wilderness, except 16 classified by PL 93-622, the so-called Eastern Wilderness Act, the law does not permit the Secretary of Agriculture to acquire private lands without consent of owner. The Forest Service, therefore, gives high priority to funding acquisition of lands from willing sellers. If an owner wishes to continue to keep and manage his lands as he did when the area was classified as wilderness, and that management is compatible with management of the wilderness, there is no intent on the Forest Service's part to gain ownership of that land. If an owner changes use of his land to one no longer compatible with management of surrounding wilderness, the Forest Service may take active steps to either acquire title to the land or have Congress adjust the wilderness boundary. Each situation must be considered individually, for even though an incompatible use provides a basis for land acquisition, there is no assurance or obligation on the part of the Forest Service to acquire such lands. Wilderness designation in itself imposes no restrictions on use of the private land within or adjacent to wilderness.

PL 93-622 provides that owners of private land within 16 specified wildernesses east of the 100th meridian must notify the Forest Service 60 days in advance of any change in ownership or use which would bring about significant new construction or disturbance of land surface, or use of motor vehicles, mechanized transport, or motorized equipment other than as authorized by law for ingress or egress or for agricultural activities begun before the designation date. The Forest Service must then use judgement to determine if the announced change in use would make management of the surrounding wilderness impossible. If a landowner persists in continuing an unacceptable use, the Forest Service is authorized to acquire the land by condemnation if necessary. Since the passage of this legislation in January of 1975, there has been no use of condemnation to acquire lands or interest in lands within wilderness areas by the Forest Service.

Social. Potential social effects estimated to occur from implementing a range of alternatives were analyzed and presented in the RARE II Draft Environmental Statement. These effects were determined through a social analysis system that collected and analyzed data for five social variables: 1) Population change and public feeling about that change, 2) symbolic meaning, 3) recreation use patterns, 4) impacts on special groups and minorities, and 5) estimates of public sentiment regarding specific roadless area allocation.

Where applicable, data were also collected and analyzed for ten additional (optional) social variables, including: sense of local control, community identity, community lifestyles, transportation networks, compatibility of uses, emergency services impacts, law enforcement impacts, social services, utility services, and local housing.

The social analysis presented in the draft environmental statement will not be repeated here. However, that analysis has been supplemented by information provided by the public during the public comment phase of RARE II. The original social analysis has thus been supplemented to reflect public perceptions of important social effects that might result from RARE II roadless area allocations.

Analysis of public response to the RARE II Draft Environmental Statement summarized reasons people offered to support their preference for wilderness, nonwilderness and further planning. (For a more detailed description of the public response analysis process, see appendix U.) Many reasons people offered in support of wilderness and nonwilderness directly relate to specific social variables such as recreation use patterns, symbolic meaning, community lifestyles, etc. Public response analysis summarized these reasons and tabulated the number of times they were given by people commenting on RARE II. These summaries indicate extent and magnitude of some social effects perceived by the public to result from RARE II decisions. They are used in the following analysis to supplement judgements of social effects estimated to result from implementation of the DES alternatives.

RARE II is an important public issue and, as expected, it generated sizeable public response. A total of 264,093 individual inputs with signatures of 359,414 people were received during the public comment period. Contrasting this with public response to the RARE I Draft Environmental Statement (1973) indicates increasing public interest in land classification issues on National Forests and Grasslands. The RARE I DES attracted a total of 6,843 inputs signed by 15,607 people. While the proportion of personal letters (5,301 total inputs) to form-type responses such as petitions, form letters, response forms, coupons, etc., (746 total inputs) was over seven to one in RARE I, nearly two-thirds of the RARE II input was form-type response. Thus, organized units of society, such as interest and industry groups, were relatively more involved in RARE II than in RARE I public response.

Clearly, magnitude of decisions regarding designation of over 62 million acres of forest land and continued emphasis on consensus as a criterion to guide those decisions were important factors in motivating the entire spectrum of clientele interest groups to generate campaigns designed to have greater influence over allocation decisions. This is not to suggest that "campaign" generated expressions of public response is any less valid than spontaneous input submitted by individual citizens in response to agency public involvement activities. On the contrary, existence of interest group campaigns in RARE II is important data in reflecting the increasing social concern over land allocation decisions that has emerged since RARE I.

Public comments on the RARE II DES gives some important insights into potential social effects; that is how people feel RARE II decisions will affect their lives. Generally, the social analysis contained in the draft environmental statement, with some notable local exceptions, was validated by public comment; namely, that minimal social effects would result from RARE II allocations. Public input analysis did indicate conflicting preferences among local, regional, and national populations about the optimum mix of commodity and amenity outputs desired from National Forest System roadless areas. The following discussion relates public comment to social variables and analysis of social effects contained on pages 56 through 59 of the draft environmental statement. State appendices contain more detailed analyses of social effects perceived to result from implementation of the proposed action.

POPULATION growth changes, such as increases or decreases in local communities, were rarely mentioned in the public comment, and when they were, it was discussed more in terms of negative economic impacts or community lifestyle changes resulting from potential wilderness allocations.

RECREATION USE PATTERNS, and other recreation related comments were frequently mentioned in support of both wilderness and nonwilderness preferences. The following table lists recreation-associated reasons and number of times they were offered in support of wilderness or nonwilderness for individual roadless areas. This information is taken from national summary tables of public response analysis.

<u>Recreation-Related Reasons Mentioned in Support of Wilderness</u>	<u>No. of Times Mentioned</u>	<u>Recreation-Related Reasons Mentioned in Support of Nonwilderness</u>	<u>No. of Times Mentioned</u>
Area suitable for nonmotorized land recreation	162,070	Area suitable for non-wilderness recreation	430,114
Area suitable for hunting and fishing	76,540	Area suitable for motorized recreation	247,445
Area suitable for wilderness recreation (primitive recreation)	19,600	Area suitable for hunting & fishing	21,473
Area contains favorite local recreation area	7,067	Allows ski area development	6,780
Area suitable for nonmotorized water recreation	6,878	Area suitable for intensive developed recreation	6,205
		Area contains favorite local recreation area	3,168

These data generally confirm the analysis contained in the draft. A variety of recreation activities are engaged in by different people. If areas are allocated to wilderness, preferences of people desiring motorized recreation opportunities and intensive recreation development may be restricted. On the other hand, if areas are allocated to nonwilderness, opportunity to engage in primitive, dispersed recreation may be limited. An analysis of effects of implementing alternatives, including the proposed action, on recreation use patterns was more fully discussed under the preceding recreation heading.

SYMBOLIC MEANING refers to any special significance roadless areas may have to people in terms of their emotional attachments to unique activities, places, images, memories, etc. Public comment indicated that wilderness and wilderness-associated plants and wildlife have important symbolic value to many Americans. Protection of our natural heritage surfaced as an important social concern. Preservation of areas for future generations, a reason indicative of symbolic importance to many people, was offered 80,915 times in support of wilderness designation for individual roadless areas. In addition, RARE II as "the last chance to preserve wilderness values" was mentioned 70,543 times in support of wilderness designations.

Reasons that related to a desire for wilderness preservation as a means to achieve "protection of our natural heritage" drew frequent comment. For example, "high scenic beauty" and "wilderness values" (stated 254,619 times); "unique and rare wildlife or fish" (80,785); "threatened and endangered wildlife and fish" (36,657); "unique ecosystems" (33,048); "unique flora" (30,467); "wilderness values outweigh economic values" (28,637); and "threatened or endangered flora" (6,572).

Alternatives allocating a higher percentage of areas to wilderness such as G, I, and J mitigate these social concerns better than alternatives allocating fewer areas to wilderness such as B, C, D, E, F, and H.

SPECIAL GROUPS (ELDERLY, HANDICAPPED, YOUNG, POOR, ETC.) AND MINORITIES (RACIAL, ETHNIC, RELIGIOUS, ETC.) will be affected by implementation of alternatives and the proposed action. Perceived impacts of wilderness and nonwilderness activities and values to special groups and minorities drew frequent comment.

Opposition to wilderness designation because "only a few people can use wilderness" was offered in support of nonwilderness designation 310,048 times. This perception was often discussed in terms of impacts on elderly and handicapped, many of whom might not have the physical capacity to engage in primitive recreation activities. Thus, alternatives containing the most nonwilderness are more responsive to the needs of special groups unable to use wilderness areas that would be inaccessible by motorized transportation.

Many RARE II roadless areas contain cultural, historical, and archaeological sites and areas that have religious or symbolic significance for many local minority groups, especially Native Americans. It was stated in the draft environmental statement that implementation of alternatives with the greatest number of such sites allocated to wilderness would impact these values the least. This perception was validated by public comment. The fact that an area contained cultural, historical, or archaeological sites or values was mentioned in support of wilderness designation 40,813 times. It was offered in support of nonwilderness 7,055 times. Alternatives G, I, and J afford greater wilderness status and protection of these values and are more acceptable to advocates of these values.

Another important social concern is fear that wilderness designation would result in a loss of local control. This concern surfaced in 17,548 comments against wilderness, to the effect that "Federal Government control does not represent local

interests or consider local preferences." Furthermore, 11,984 comments indicated that wilderness designation would restrict access to adjacent private land or result in condemnation of private land. Alternative H takes into consideration local and regional values and preferences and, would best mitigate social impacts related to these fears of loss of local control.

Public input analysis also identified strong social concern about preserving community identities and local lifestyles. Social impact analysis in the draft statement indicated these impacts would be relatively insignificant. But the public comment indicates it is of greater concern than anticipated.

Preservation of lifestyles was offered 39,253 times as a reason in support of individual roadless area allocations to nonwilderness. Lifestyle impacts were often discussed in terms of changes that would result from loss of employment or changes in types of employment. Public comment concerning perceived negative economic impacts helps illustrate the apprehension that people feel over adverse lifestyle-related effects resulting from RARE II decisions. The perception that wilderness designation would result in "negative economic impacts" was mentioned 595,831 times in support of nonwilderness; and "potential resource contributions to local economies" was cited in support of nonwilderness 182,294 times. Obviously, one of the most significant social concerns of people commenting on RARE II in favor of nonwilderness involves economic impacts. Economic effects resulting from RARE II alternatives, including the proposed action, are discussed at length in another section of this final statement.

In addition, perception that wilderness classification would change the character of individual local communities was offered 28,822 times in support of nonwilderness designation. People are concerned that new and different types of people such as "hippies," "tourists," "transients," "retirees," etc., will move into local communities in sufficient numbers to alter their traditional character. Alternatives B (all nonwilderness), C (commodity-driven), and H (consideration of local/regional values and needs) would have least adverse effect on these social considerations.

At a national level, public input analysis did not identify significant public concerns regarding other social variable such as social services, transportation networks, local housing, utility services, or law enforcement impacts. These were occasionally mentioned in support of both wilderness and nonwilderness but not in sufficient numbers to warrant discussion in this national overview.

It is important to note that many people commenting on RARE II were not satisfied with any of the alternatives. During the RARE II public comment period, numerous organizations and groups developed and submitted their own alternatives. According to the RARE II Public Input Analysis Report, 45 such alternatives were proposed that address specific roadless area allocations in a total of 29 states. Many personal letters, response forms, form letters, and petitions commented in support of and in some instances, opposition to the various alternatives. As noted in the public input analysis report, submission of these "citizen-generated" alternatives ranged from mimeographed, one-page flyers, to comprehensive, detailed reports.

Although new alternatives were submitted by forest industry groups (e.g., Taxpayers' Alternative T, sponsored by the Northwest Pine Association and endorsed by 385 inputs representing 387 signatures; Southern Oregon Resource Alliance Alternative, supported by 15 inputs representing 28 signatures) industry groups apparently did not feel as dissatisfied with the range of DES alternatives as did preservation/conservation groups. Coalitions of state and local conservation/preservation groups proposed their own alternative for 29 individual states and were often submitted under the designation "Citizens' Alternative W." Generally, these alternatives recommended more areas and acreage for wilderness classification than contained in DES alternative I, but less than contained in alternative J (all wilderness).

Support for these citizen-generated alternatives ranged from less than half a dozen inputs to over 2,000. The following table lists the most frequently supported alternatives by state of origin. All other alternatives received less than 200 inputs each.

<u>State</u>	<u>Name of Alternative or Sponsoring Organization(s)</u>	<u>Supporting Inputs</u>	<u>Supporting Signatures</u>
Oregon	Oregon Alternative W	2,307	2,559
Idaho	Alternative W	1,831	2,487
Colorado	Alternative W	1,170	2,684
Montana	Montana Alternative W	800	1,219
Washington	Citizens for Washington Wilderness	728	865
North Carolina	Sierra Club Alternative W	531	2,517
Wyoming	Wyoming Wilderness Coalition Alternative W	484	743
Arizona	Arizona Wilderness Coalition Alternative W	437	570
Texas	Texas Wilderness Alert	407	617
California	Citizens Wilderness Alternative W	312	354
New Mexico	Alternative W	279	421
Tennessee	Alternative W	274	1,378
Alaska	Chugach Forest Study Group Alternative W	208	232

Many reasons offered in support of specific roadless area allocations to wilderness related to the foregoing social variables. For example, alternatives developed by conservation/preservation group coalitions in every part of the country addressed the need to preserve additional areas of high scenic beauty and wilderness values (symbolic meaning of individual areas), the desire to protect areas which are adjacent to existing wilderness areas (compatibility of uses), the importance of protecting areas suitable for primitive nonmotorized recreation activities and hunting and fishing experiences (recreation use patterns), and the desire to protect through wilderness classification unique, diverse, and rare wildlife and plant species habitat, and ecosystems (symbolic meaning). Ease of access (proximity) to population centers, protection of cultural, historical, archeological values, and preservation of natural heritage for future generations were other reasons offered in more than one region but not in all of them.

Summary of Outputs and Effects. The following tables describe outputs anticipated with implementation of the alternatives. Previous headings have been combined in these tables to provide a composite analysis of alternatives. Table 1 displays present effects of implementation with a comparison against present levels of resource outputs. Table 2 shows long-term level of outputs that are anticipated if existing resource management plans are fully implemented, permitting achievement of high potential resource outputs. Roadless areas allocated to further planning have been considered the same as nonwilderness areas in tables 1 and 2 to indicate maximum resource output level that could be achieved. Alternatives A through J have been developed utilizing the data base in existence at the time of the draft environmental statement. The proposed action has used an updated data base. The difference between these bases is found on page 46.

Timber volume is displayed as million board feet (MMBF) for both sawtimber and wood products. Products normally are measured as cubic feet but a more ready comparison can be made if cubic feet volumes are converted to board feet. Conversion was made by multiplying cubic feet by 5. Entries for sawtimber and wood products include both hardwood and softwood.

Developed recreation use is the total of picnicking, camping, skiing, and water based recreation. It is reported in thousands of recreation visitor days (MRVD). Motorized and nonmotorized dispersed recreation use is shown as separate entries, again in thousands of recreation visitor days. Wildlife associated recreation includes big and small game hunting, fishing, and nonhunting use such as viewing.

Grazing is the total of cattle use, sheep use, and common use by both cattle and sheep of the range resource. It does not include wildlife grazing. The total is expressed in thousand animal unit months of use (MAUM).

The listing of proven and producing mines indicates the number of roadless areas containing critical minerals and oil, gas, uranium, and coal fields. The list of high potential areas also has two entries, roadless areas containing critical minerals and roadless areas with oil, gas, uranium, and coal. The number of roadless areas containing this mineral and energy resource where opportunity would not be encumbered by wilderness designation are shown for each alternative.

TABLE 1 - PRESENT RESOURCE OUTPUTS BY ALTERNATIVE
Further Planning Areas Treated as Nonwilderness

	Present	A	B	C	D	E	F	G	H	I	J	PA
Commercial Forest Land (M Acres)	26,508.1	21,525.1	26,508.1	23,270.2	22,531.6	25,085.6	24,345.1	21,016.9	20,212.8	18,485.7	0	20,808.1
Sawtimber - (MMBF)	2,019.4	2,019.4	2,400.8	2,074.9	2,063.3	2,279.7	2,230.2	1,963.4	1,921.5	1,687.7	0	1,854.0
Products - (MMBF)	1,055.5	1,055.5	1,302.0	1,022.5	1,159.5	1,248.0	1,202.5	1,004.5	1,044.5	951.5	0	396.0
Total	3,074.9	3,074.9	3,702.8	3,097.4	3,222.8	3,527.7	3,432.7	2,967.9	2,966.0	2,639.2	0	2,250.5
Developed Recreation (MRVD)	919.0	919.0	919.0	890.3	861.3	836.0	748.8	630.0	663.1	532.3	0	1,584.9
Dispersed Recreation												
-Motorized (MRVD)	1,832.4	1,832.4	1,832.4	1,628.4	1,675.3	1,714.2	1,681.1	1,344.4	1,502.2	1,277.9	0	2,360.4
-Nonmotorized (MRVD)	8,326.4	8,326.4	8,326.4	8,892.4	8,937.7	9,102.1	9,263.1	9,671.9	9,344.1	9,704.4	11,864.3	10,331.2
-Wildlife (MRVD)	7,992.7	7,992.7	7,992.7	8,368.6	8,866.6	8,161.7	8,210.6	8,487.4	8,196.2	8,939.9	9,926.7	18,927.0
Grazing (MAUM)	2,063.1	2,063.1	2,063.1	2,052.6	2,045.7	2,035.7	2,015.1	1,954.1	1,979.8	1,948.7	1,551.9	1,971.7
Number of Areas with Proven or Producing												
-Critical Minerals	137	137	137	130	111	126	111	101	118	128	0	41
-Oil, Gas, Coal, Uran.	81	81	81	80	72	71	60	51	63	71	0	17
Number of Areas with High Potential for												
-Critical Minerals	461	461	461	456	394	440	418	381	391	319	0	460
-Oil, Gas, Coal, Uran.	398	398	398	382	360	371	354	321	346	276	0	450

TABLE 2 - LONG-TERM RESOURCE OUTPUTS BY ALTERNATIVE
Further Planning Areas Treated as Nonwilderness

	Potential	A	B	C	D	E	F	G	H	I	J	PA
Commercial Forest Land (M Acres)	26,508.1	26,508.1	26,508.1	23,270.2	22,531.6	25,085.6	24,345.1	21,016.9	20,212.8	18,485.7	0	20,808.1
Sawtimber - (MMBM)	3,810.9	3,810.9	3,810.9	3,317.1	3,342.6	3,640.9	3,551.2	3,135.1	3,159.5	2,794.8	0	2,836.8
Products - (MMBF)	2,145.5	2,145.5	2,145.5	1,657.0	1,937.5	2,040.5	1,989.5	1,629.5	1,807.0	1,581.5	0	1,505.0
Total	5,956.4	5,956.4	5,956.4	4,974.1	5,280.1	5,681.4	5,540.7	4,764.6	4,966.5	4,376.3	0	4,341.8
Developed Recreation (MRVD)	37,636.5	37,636.5	37,636.5	37,458.7	37,435.3	32,540.4	31,903.5	29,743.7	23,871.7	23,075.1	0	49,182.4
Dispersed Recreation												
-Motorized (MRVD)	3,768.0	3,768.0	3,768.0	3,394.5	3,553.9	3,572.5	3,493.5	2,935.8	2,954.6	2,572.8	0	4,550.0
-Nonmotorized (MRVD)	15,420.3	15,420.3	15,420.3	15,528.7	15,512.4	14,479.2	14,387.4	14,037.0	13,989.5	14,044.4	11,864.3	15,979.1
-Wildlife (MVRD)	12,423.8	12,423.8	12,423.8	12,260.6	12,254.0	12,285.3	12,163.4	11,836.2	11,819.5	11,614.9	9,926.7	23,813.3
Grazing (MAUM)	2,340.9	2,340.9	2,340.9	2,310.9	2,305.1	2,298.8	2,262.0	2,168.9	2,209.3	2,157.2	1,551.9	2,214.3
Number of Areas with Proven or Producing												
-Critical Minerals	137	137	137	126	109	123	111	97	115	126	0	41
-Oil, Gas, Coal, Uran.	81	81	81	76	72	67	56	47	59	71	0	17
Number of Areas with High Potential for												
-Critical Minerals	461	461	461	456	394	440	418	381	391	319	0	460
-Oil, Gas, Coal, Uran.	398	398	398	382	360	371	354	321	346	276	0	450

The basic difference between the following two tables, tables 3 and 4, and tables 1 and 2 lies in the treatment of roadless areas allocated to further planning. They were treated the same as areas allocated to nonwilderness uses in tables 1 and 2 to indicate maximum outputs anticipated if all areas were allocated to nonwilderness. Tables 3 and 4 treat all areas allocated to further planning the same as areas proposed for wilderness to indicate the effect if they too were eventually allocated to wilderness. Table 3 shows present effects and table 4 long-term effects of implementing the alternatives. Timber volume, recreation use, grazing, and entires for the mineral and energy resource use the same measurements and consist of the same components as those described for tables 1 and 2. Comparison of the alternatives may be achieved by using the differences between data bases found on page 46.

TABLE 3 - PRESENT RESOURCE OUTPUTS BY ALTERNATIVE
Further Planning Areas Treated as Wilderness

	Present	A	B	C	D	E	F	G	H	I	J	PA
Commercial Forest Land (M Acres)	26,508.1	21,525.1	26,508.1	17,903.7	10,383.0	25,081.7	13,542.2	21,006.6	17,507.7	8,991.2	0	17,697.2
Sawtimber - (MMBF)	2,019.4	2,019.4	2,019.4	1,641.3	1,104.2	2,278.9	1,464.4	1,963.1	1,669.8	914.0	0	1,626.9
Products - (MMBF)	1,055.5	1,055.5	1,055.5	856.0	537.5	1,248.0	648.0	1,004.5	828.5	391.5	0	330.0
Total	3,074.9	3,074.9	3,074.9	2,497.3	1,641.7	3,526.9	2,112.4	2,967.6	2,498.3	1,305.5	0	1,956.9
Developed Recreation (MRVD)	919.0	919.0	919.0	755.2	488.0	836.0	526.0	630.0	562.9	292.6	0	1,439.0
Dispersed Recreation												
-Motorized (MRVD)	1,832.4	1,832.4	1,832.4	1,417.8	967.4	1,036.0	1,713.6	1,343.8	1,269.0	771.6	0	1,964.3
-Nonmotorized (MRVD)	8,326.4	3,326.4	8,326.4	9,473.6	10,090.4	9,104.4	10,409.9	9,681.6	9,719.9	10,659.1	11,881.5	10,837.7
-Wildlife (MRVD)	7,992.7	7,992.7	7,992.7	8,717.6	9,451.2	8,161.2	8,829.7	8,486.9	8,375.6	9,560.1	9,926.7	19,240.8
Grazing (MAUM)	2,063.1	2,063.1	2,063.1	2,006.3	1,852.3	2,035.7	2,002.5	2,168.8	2,144.3	1,917.6	1,551.9	1,919.3
Number of Areas with Proven or Producing												
-Critical Minerals	137	137	137	113	63	126	73	101	98	52	0	38
-Oil, Gas, Coal, Uran.	81	81	81	72	32	71	31	51	58	28	0	16
Number of Areas with High Potential for												
-Critical Minerals	461	461	461	399	242	440	260	381	350	203	0	385
-Oil, Gas, Coal, Uran.	398	398	398	345	244	370	256	319	320	201	0	397

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TABLE 4 - LONG-TERM RESOURCE OUTPUTS BY ALTERNATIVE
Further Planning Areas Treated as Wilderness

	Potential	A	B	C	D	E	F	G	H	I	J	PA
Commercial Forest												
Land (M Acres)	26,508.1	26,508.1	26,508.1	17,903.7	10,838.0	25,081.7	13,592.2	21,006.6	17,507.7	8,991.2	0	17,697.2
Sawtimber - (MMBF)	3,810.9	3,810.9	3,810.9	2,614.7	1,791.5	3,639.3	2,286.2	3,133.3	2,658.8	1,466.3	0	2,445.7
Products - (MMBF)	2,145.5	2,145.5	2,145.5	1,158.0	718.5	2,040.5	986.0	1,629.5	1,418.0	420.5	0	1,297.0
Total	5,956.4	5,956.4	5,956.4	3,772.7	2,510.0	5,679.8	3,272.2	4,762.8	4,076.8	1,886.8	0	3,742.7
Developed Recreation												
(MRVD)	37,636.5	37,636.5	37,636.5	36,760.1	36,548.8	31,648.3	31,021.1	28,860.2	22,980.2	22,187.3	0	45,003.6
Dispersed Recreation												
-Motorized (MRVD)	3,768.0	3,768.0	3,768.0	2,839.4	1,827.3	3,572.5	1,942.3	2,935.8	2,566.6	1,481.5	0	3,992.9
-Nonmotorized (MRVD)	15,420.3	15,420.3	15,420.3	15,083.4	13,918.5	14,481.3	13,058.2	14,039.5	13,699.2	12,914.2	11,881.5	15,573.4
-Wildlife (MRVD)	12,423.8	12,423.8	12,423.8	11,703.4	11,105.1	12,283.9	11,101.1	11,834.8	11,617.8	10,986.7	9,926.7	23,526.4
Grazing (MAUM)	2,340.9	2,340.9	2,340.9	2,235.4	1,962.4	2,298.8	2,002.5	2,168.8	2,144.3	1,917.6	1,551.9	2,116.3
Number of Areas with												
Proven or Producing												
-Critical Minerals	137	137	137	113	63	126	73	101	98	52	0	38
-Oil, Gas, Coal, Uran.	81	81	81	72	32	71	31	51	58	28	0	16
Number of Areas with												
High Potential for												
-Critical Minerals	461	461	461	399	242	440	260	381	350	203	0	385
-Oil, Gas, Coal, Uran.	398	398	398	345	244	370	256	319	320	201	0	397

