United States
Department of
Agriculture

Forest
Service

Final Environmental Impact Statement

for the CHALLIS NATIONAL FOREST

Land and Resource Management Plan

FINAL ENVIRONMENTAL IMPACT STATEMENT
FOR THE
CHALLIS NATIONAL FOREST
LAND AND RESOURCE MANAGEMENT PLAN

Custer, Lemhi, Butte, Valley, Blaine, and Clark Counties in Idaho

Type of Action: Administrative

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Abstract: Eleven alternatives are described and evaluated in the development of the Land and Resource Management Plan for the Challis National Forest. The Forest contains 2,534,000 acres, including 17,894 acres in State and private ownership. The Forest is located in central Idaho. The alternatives considered in the order they are addressed throughout the document are: (1) Current Program or No Action, (2) Market, (3) Non-market, (4) 1980 RPA, (5) Market and Non-market Mix, (6) Constrained Budget, (7) Current Budget, (8) Maximum Wilderness, Amenity Emphasis, (9) High Wilderness, Commodity Emphasis, (10) Current Program, Unconstrained Budget, and (11) 1980 RPA Modified Alternative 11 displayed in the FEIS is the proposed action used to develop the Forest Land and Resource Management Plan.

The Plan will guide management of the Challis National Forest and will be reviewed at least each five years. The Forest Plan will ordinarily be revised on a 10-year cycle, or at least every 15 years. It may be revised whenever the Forest Supervisor determines that the conditions or demands in the area covered have changed significantly.

Date Final Environmental Impact Statement was made available:

Last Date to Exercise Appeal Rights:

Please retain your copy of the Appendixes to the Draft Environmental Impact Statement. Inserts or corrections to update the DEIS Appencixes are included in the final document package. Copies of this Final Environmental Impact Statement were sent to those agencies and organizations listed in Chapter VI, and to those who specifically requested a copy.

SUMMARY

FINAL ENVIRONMENTAL IMPACT STATEMENT

Challis National Forest
Land and Resource Management Plan

I. PURPOSE OF AND NEED FOR PLAN

A. INTRODUCTION

The Final Environmental Impact Statement (FEIS) is a companion volume to the Forest Land and Resource Management Plan. The general purpose of the DEIS is to disclose significant physical, biological, economic, and social effects on the human environment of the Forest Service's selected alternative and a range of alternatives to the proposal.

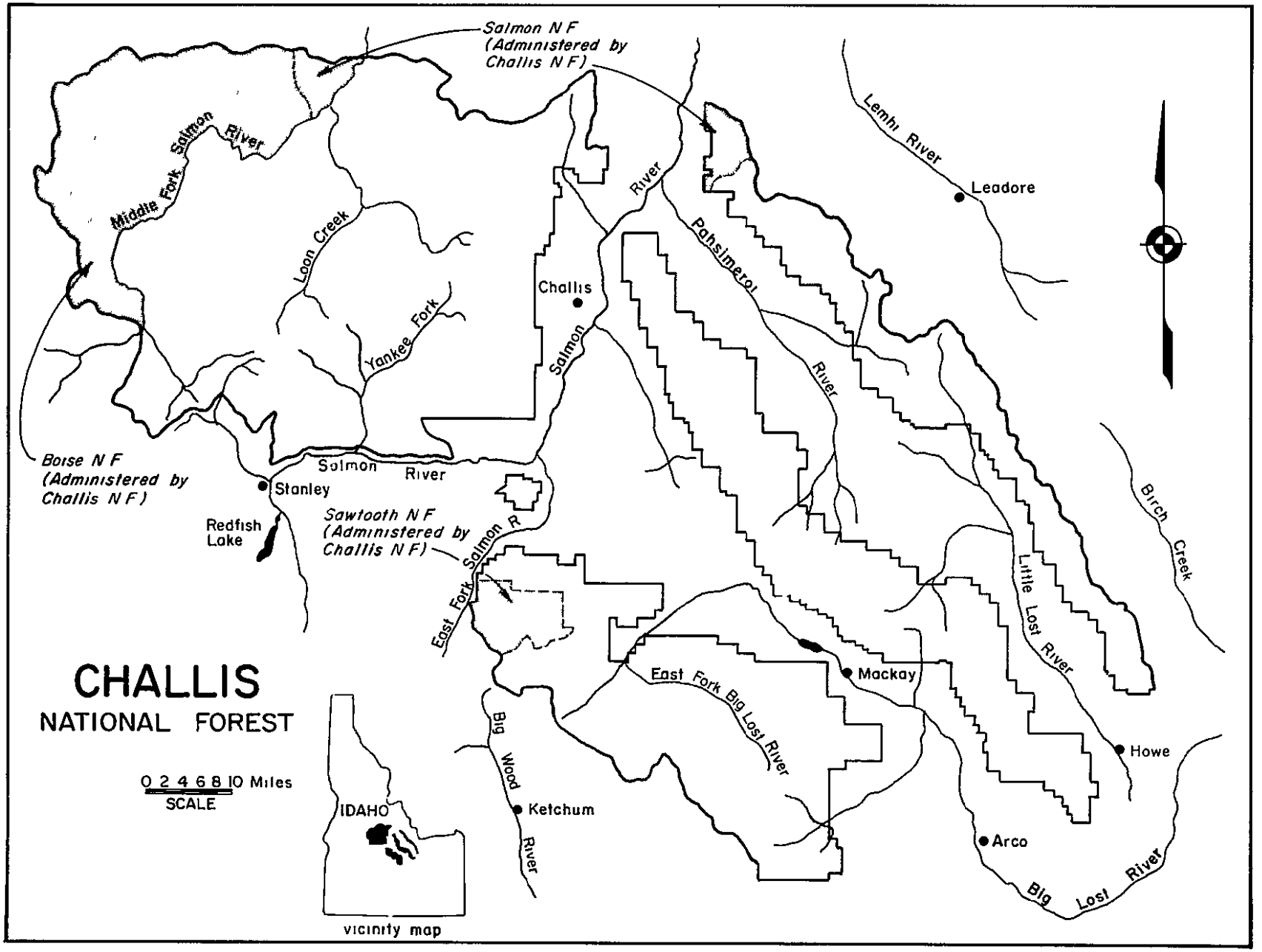
Comments generated by the initial documents (the DEIS and Proposed Forest Plan) were used to make needed revisions to develop the Final Environmental Impact Statement (FEIS), and produce the Selected Forest Plan. Implementation of the Forest Plan will not occur until the FEIS has been filed with the Environmental Protection Agency (EPA), the Record of Decision is signed by the responsible official, and at least 30 days have expired after publication of the Notice of Availability of the FEIS in the Federal Register.

Current regulations call for a review of the Forest Plan each five years, and a major revision at least every 15 years or when conditions or demands have changed significantly. (USDA, FS, 1982).

Planning is conducted under the authority of the Multiple-Use Sustained Yield Act of 1960, the Forest Rangeland Renewable Resources Planning Act of 1974 (RPA), and the National Forest Management Act of 1976 (NFMA). (USC, 1960. 1974. 1976). National, Regional, and Forest planning is an integrated, three-tiered process. At the lower level, the process produces a Forest Plan that is the framework for land and resource management.

B. AREA AFFECTED

The Challis National Forest administers most of the Federal Land within the legally defined boundaries of the Challis National Forest located in Idaho and adjacent portions of the Boise, Salmon, and Sawtooth National Forests. The planning area covers the 2,516,191 acres administered by the Challis National Forest, including approximately 2,177,144 acres of the Challis National Forest, 267,005 acres of the Boise National Forest, 32,577 acres of the Salmon National Forst, and 39,465 acres of the Sawtooth National Forest (see Figure S-1). The Salmon National Forest administers 26,031 acres and the Sawtooth National Forest administers 257,847 acres of the Challis National Forest. These areas are addressed in Forest Plans prepared by the administering Forests. The Forest Supervisor is headquartered in Challis, Idaho. There are Ranger District offices at Challis (2), Mackay, and near Clayton, Idaho.



ADMINISTRATIVE BOUNDARIES

Figure S-1 Challis National Forest Location Map

The Challis National Forest manages lands located in the Lemhi, Lost River, Salmon River, Pioneer, Boulder, White Knob, and Pahsimeroi Mountains. The Forest provides a wide range of resources and opportunities, including timber, range, wildlife, watershed, minerals, developed and dispersed recreation, and wilderness. Major population centers of Boise, Idaho Falls, Pocatello, and Twin Falls, Idaho and Missoula, Montana are between 150 and 200 miles from Challis.

C. ISSUES, CONCERNS, AND MANAGEMENT OPPORTUNITIES

Significant Issues, Concerns, and Management Opportunities (ICO's) identified during the scoping process are the basis for the formulation of alternatives and the management direction proposed for implementation of the Preferred Alternative.

The Issues, Concerns, and Management Opportunities (ICO's) addressed in the DEIS and the proposed Forest Plan are:

1. What is the relationship between all resource levels (timber, range, wildlife and fish, developed and dispersed recreation)?

2. To what degree will the Forest manage for all resource uses in riparian areas to maintain or enhance the overall condition?

3. To what level will the Forest manage for wildlife, fish, and Threatened and Endangered Species habitat (in order to meet Fish and Game population objectives)?

4. What level of firewood will the Forest manage for to meet local demand?

5. To what degree will the Forest continue to allow for exploration and development of the mineral resource; and to what degree should the Forest provide for the opportunity for oil and gas leasing?

6. How will Off-Road Vehicle (ORV) use be managed, including roads and trails proposed for closure?

7. To what degree are additional roads, trails, and recreation facilities planned for?

8. To what degree will the Forest maintain soil productivity, water quality, and instream flow?

9. What level of timber harvest will be met by the Forest, and will it meet the needs of locally dependent mills?

10. What level of fire protection (acres burned) will occur, and what degree of prescribed fire will be used for resource management needs?

11. To what levels will grazing be managed in relation to maintaining the locally dependent ranching community?

12. Can the Forest meet the expected demand for recreation?

13. What unroaded areas will be recommended to Congress for wilderness designation.

14. What will be the management for roadless areas not selected for wilderness nor presently needed for commodity production?

II. ALTERNATIVES, INCLUDING THE PROPOSED ACTION

The FEIS outlines the range of alternatives considered reasonable in providing ways to address the significant issues, concerns, and opportunities. Each alternative features a different management emphasis and provides a mix of resource outputs.

Benchmark levels were developed to define the range of outputs and costs for many activities on the Forest. Some of the benchmark levels were used as alternatives, and other alternatives were developed. Computer modeling of the benchmark levels and alternatives provided the basis for a trade-off analysis and evaluation of alternatives.

Each of the eleven alternatives considered in detail incorporates management direction that ensures multiple use management and environmental protection.

The following is a description of the eleven alternatives that were considered in detail in the DEIS:

ALTERNATIVE 1 - NO ACTION (CURRENT PROGRAM)

This alternative is designed to continue the current trend of goods and services produced by the Forest. The budget is constrained to the level necessary to support this trend.

ALTERNATIVE 2 - MARKET EMPHASIS

This alternative emphasizes production of timber, livestock, minerals, developed recreation and special uses that have potential to produce income to the Government. Outputs from these resources will take precedence over outputs from such non-market resources as wilderness, wildlife, and dispersed recreation. This alternative would produce the highest levels of outputs of all alternatives for timber and range in response to the President's revised statement of Policy on Growth. This alternative also approximates the Draft 1985 RPA Program for timber and range outputs, except that range produces 116 MAUM's in the first decade instead of the 130 MAUM's under 1985 RPA.

ALTERNATIVE 3 - NON-MARKET EMPHASIS

This alternative emphasizes non-market resources such as wilderness, wildlife, fish, water, dispersed recreation (backpacking, snowmobiling, cross-country skiing), and visual quality. It gives development of these non-market outputs priority over market values.

ALTERNATIVE 4 - RPA 1980 PROGRAM

The RPA (Resources Planning Act) alternative directs management efforts and budgets toward supplying or developing the Forest's share of resource outputs called for by the Intermountain Regional Guide.

ALTERNATIVE 5 - MARKET AND NON-MARKET MIX

This alternative emphasizes management of each of the 25 management areas based on the District Rangers and their staffs perspective of the issues, concerns, and opportunities. This includes the managers perspective of resource potential and realistic levels of management activities capable of being applied to these areas.

ALTERNATIVE 6 - CONSTRAINED (-25%) BUDGET

This alternative continues the current program emphasis modified as necessary to cover fixed costs, and operation and maintenance costs at a reduced budget level. The constrained budget is $2.7 million (in 1982 base dollars).

ALTERNATIVE 7 - CURRENT PROGRAM, CONSTRAINED BUDGET

This alternative has the same emphasis as the No-Action Alternative except where changes are required to meet fixed costs and Operation and Maintenance activities. It predicts the level of goods and services expected to be produced if current management direction remains unchanged, and if personnel and funding remain at the present level.

ALTERNATIVE 8 - MAXIMIZE WILDERNESS, AMENITY EMPHASIS

Under this alternative, all roadless areas are managed for Wilderness and roaded areas for their amenity values. It would involve managing 2,174,390 acres of the Forest (86 percent) as wilderness.

ALTERNATIVE 9 - HIGH WILDERNESS, COMMODITY EMPHASIS

This alternative would display a significant increase in proposed wilderness acreage while planning high commodity emphasis prescriptions on the remaining Forest lands [Table II - 6(9)]. The alternative will recommend 1,064,704 acres of roadless areas for wilderness management. Total wilderness, including existing, would equal 1,846,959 acres, or 73 percent of the Forest.

ALTERNATIVE 10 - CURRENT PROGRAM, UNCONSTRAINED BUDGET

This alternative is designed to continue the current trend of goods and services except that timber and range management will be intensified. The budget is unconstrained in order to support this trend.

ALTERNATIVE 11 - 1980 RPA MODIFIED (Preferred Alternative)

This alternative is a modification of the Forest's share of the 1980 Resources Planning Act program direction. It includes recommendation of wilderness areas and a less intensive timber management program than is proposed in the 1980 RPA program.

Comparison of Alternatives

Resource outputs vary among alternatives. Table S-1 summarizes selected outputs for each alternative.

TABLE S-1. PROJECTED ANNUAL DIRECT EFFECTS AT THE MIDPOINT OF THE 50-YEAR PERIOD BY ALTERNATIVE.

	ALTERNATIVES										
OUTPUTS 1/	1	2	3	4	5	6	7	8	9	10	11
Developed Rec. Use (MRVD)	100	134	73	123	114	84	100	84	116	103	124
Dispersed Rec. Use (MRVD)	443	465	400	487	448	496	483	215	267	481	432
Wilderness Rec. Use (MRVD)	203	148	274	148	181	164	148	448	318	162	164
Wilderness (M Acres)	1039	782	1565	782	946	832	902	2174	1831	942	942
Wildlife/Fish Use (M WFUD)	458	456	467	473	464	471	470	458	436	458	463
Livestock Grazing (MAUM)	112	122	106	116	116	113	116	96	103	117	116
Timber Sawtimber (MMBF)	4.9	20.0	2.0	11.3	4.9	2.5	1.0	2.0	4.9	9.9	5.0

1/ Outputs listed are only projections given as third decade averages, MRVD = thousand recreation visitor days, M Acres = thousand acres (includes both existing and proposed wilderness), MWFUD = thousand wildlife fish user days, MAUM = thousand Animal Unit Months, MMBF = million board feet.

III. AFFECTED ENVIRONMENT

A. INTRODUCTION

The mountains of the Challis National Forest are composed of folded sedimentary, metamorphic, volcanic and granite rocks. Elevations vary from about 5,500 feet to 12,655 feet on Mt. Borah. Streams originating on the Forest are important sources for water for the upper Salmon River, Lost River, and Little Lost River.

Vegetative types on the Forest are variable and include alpine, Douglas-fir, lodgepole pine, sagebrush, and grasses.

Three counties (Custer, Lemhi, and Butte) make up the Forest's Primary Zone of Influence (ZOI) and are directly influenced by management practices on the Challis National Forest. Six additional counties (Bonneville, Blaine, Twin Falls, Bannock, Valley, and Ada) are part of the secondary ZOI and are influenced to a lesser extent by Forest management.

B. RESOURCE ELEMENTS

1. Recreation

Challis National Forest recreation opportunities are diverse. Recreation use (1982 totals) at developed sites was about 85,000 Recreation Visitor Days (RVD's), wilderness recreation was about 136,000 RVDs, and recreation in other areas, which is classified as dispersed, was about 336,000 RVDs. Approximately 1,600 miles of trails are currently available on the Forest.

Two systematic surveys and 160 site specific surveys have recorded 460 cultural resource sites on the Forest. Prehistoric sites include campsites, lithic scatter, hunting blinds, and rock art. Historic sites include cabins, mines, stage stations, towns, cemeteries, and Forest administrative sites. The townsite of Custer is listed on the National Register of Historic Places. The Bonanza area and the Yankee Fork Gold Dredge have been nominated to the Register as a historic district.

Iron Bog and Meadow Canyon were established as Research Natural Areas (RNA's) in 1981. Nine additional sites are being proposed for RNA designation.

The Middle Fork of the Salmon River was designated as a Wild and Scenic River in 1968 and is administered by the Challis National Forest.

2. Wilderness

The Forest currently administers 782,255 acres, approximately one-third, of the Frank Church--River of No Return Wilderness. Twenty-eight additional roadless areas totaling about 1,392,135 acres were evaluated for possible proposed additions to the Wilderness System.

3. Wildlife and Fish

The Challis National Forest provides habitat for important and diverse wildlife and fish (both resident and anadromous) populations within the State of Idaho. Habitat for approximately 63 mammal, 247 bird, 19 amphibian and reptile, and 18 fish species occur on the Forest. Within this group, the State of Idaho considers 27 mammal, 45 bird, and 8 fish species to be economically important.

The Forest administers spawning and rearing habitat for salmon and steelhead, which is very important especially in light of the passage of the North West Power Planning Act, court decisions on Indian treat rights and the recently negotiated Salmon Treaty with Canada.

4. Range

The Forest administers 76 grazing allotments that encompass 1,162,300 acres. Within the allotment boundaries, 398,600 acres, or approximately 34 percent of the acreage, is suitable for livestock grazing.

Grazing management is shared between the Forest Service and the grazing permittees. The Forest Service issues grazing permits that specify the type and number of livestock and season of use.

Annually, the Forest produces over 240,000 Animal Unit Months of forage. Less than one-third of this amount is consumed by big-game animals. Currently about 115 MAUM of livestock grazing is permitted and 113 MAUM is actually used.

The demand for sheep grazing on the Forest continues to decline, but demand for cattle grazing remains strong.

5. Timber

There are 340,608 acres classified as available and tentatively suitable for timber production. Current average production of Douglas-fir and lodgepole pine for sawtimber and roundwood is less than 3 million board feet (MMBF).

Fuelwood use for 1983 was reported as 1.9 MMBF and is expected to increase in the future. Most is made available under a charge system.

6. Water

The Challis National Forest yields approximately 2.4 million acre feet of water each year, and as much as 75 percent of this volume results from snow melt. Water quality meets or exceeds State water quality standards, but in some cases may be below its potential.

Demand for water originating on the Forest continues to grow for such uses as irrigation, mineral activity, hydro-electric development, as well as instream flow.

7. Minerals

Past mineral production of gold, silver, tungsten, flourspar, uranium, molybdenum, lead, zinc, and copper from mines within the Forest exceeded $100 million at the time of production. Cyprus Mine/Thompson Creek Project, Sunbeam Mine, and a mill at Preachers Cove are the largest, currently active operations on the Forest. Over 7,000 actively held mining claims on the Forest are recorded.

Oil and gas leases and lease applications have been filed for over 300,000 acres of the Forest. Interest in oil and gas exploration may increase on the eastern part of the Forest.

C. SUPPORT ACTIVITIES

1. Protection

An average of 47 fires, of which about one-third are man-caused, require suppression on the Forest each year. Fire fighting resources are currently combined with the Bureau of Land Management (BLM) and Salmon National Forest to improve efficiency of initial fire suppression activities.

Insects and diseases, primarily western spruce budworm and mistletoe, affect almost half the timber stands on the Forest. Current timber management activities have essentially no effect on this problem.

2. Lands

Over 99 percent of the land within the Forest administrative boundaries is federally owned. This ownership pattern does not restrict production of goods and services from the Forest. Restricted access to the Forest is a problem in a few areas.

3. Soils

Soil productivity varies widely, primarily because of differences in bedrock type, precipitation, slope, and aspect. Stable productive soils are locally intermingled with soils low in stability and/or productivity. Soil loss resulting from disturbance is generally higher on granitic land types than on sedimentary land types.

4. Facilities

Numerous facilities including roads, bridges, buildings, dams, water systems, and airfields are maintained on the Forest. Many of these facilities required large initial investments. Considerable time and money is invested in facility operation and maintenance on the basis of need.

IV. ENVIRONMENTAL CONSEQUENCES

A. DIRECT AND INDIRECT ENVIRONMENTAL EFFECTS

Environmental consequences are the anticipated environmental effects of applying management practices to land areas. Consequences vary for each alternative because different mixes of practices produce different levels of resource outputs.

Environmental consequences of implementing the alternatives are both direct and indirect. Direct effects occur at the same time and place as the initial management activity. Indirect effects often result from the interaction between Forest resources and management activities. They occur either later in time or at a different location, but are nevertheless foreseeable.

B. CONSEQUENCES BY RESOURCE ELEMENT

1. Recreation

Impacts under Alternatives 1, 3, 6, 7, 9, and 10 would be greatest at developed sites. Under Alternatives 2, 4, 5, and 11, the number and quality of facilities would increase and site damage should not occur.

Some resource degradation would occur from dispersed recreation activities under Alternatives 1, 3, 5, 6, and 10. Alternatives 2, 4, 7, and 11 would result in less degradation. Most degradation will be associated with camping, and other activities, in riparian areas.

Alternative 2 would result in the greatest decline in the visual resource. Large increases in wilderness acreage under Alternatives 8 and 9 would provide greatest protection for the visual resource.

The ability of the Forest to reduce the current backlog of unevaluated sites and significant sites awaiting nomination to the NRHP will be limited under Alternatives 1, 2, 3, 4, 5, 6, 7, and 11. Reduction of the number of sites in these two categories could be accomplished in Alternatives 4, 8, 9, and 10. Avoidance, where possible, is the preferred mitigation option to be used by the Forest when ground-disturbing activities conflict with cultural resources. Only Alternatives 4, 8, 9, and 10 would provide funding for other mitigation options.

2. Wilderness

Wilderness designation allows uses specified in the Wilderness Act of 1964, such as nonmotorized recreation, trail construction, and livestock grazing. Areas not designated as wilderness are open to a much wider range of resource developing activities. Under all alternatives, 782,255 acres of the Frank Church--River of No Return Wilderness would be managed by the Forest. Proposed additions to the Wilderness System vary from a high of about 1,392,000 acres under Alternative 8 to no proposed additions under Alternatives 2 and 4. Wilderness use would increase the most under alternatives with larger proposed additions to the Wilderness System.

3. Wildlife

Under all alternatives, the habitat of Threatened or Endangered Species will be managed so that current population levels will be maintained or increased. Gray wolf recovery habitat may be designated on the Challis National Forest by the U.S. Fish and Wildlife Service. All alternatives except 2, 8, and 9 provide some habitat improvement for the gray wolf.

The greatest direct wildlife habitat improvement would occur under alternatives 3 and 4. Alternatives 2, 5, 6, 8 and 9 provide habitat improvements at less than the current rate. Alternatives 2 and 9 have the greatest potential for reducing fish habitat. Alternatives 3, 4 and 11 have the highest potential for increasing the capability of fish habitat.

4. Range

Range condition would improve under all alternatives except Alternative 3. Alternatives 8 and 9 would provide the lowest grazing levels and Alternative 2 would provide the highest grazing level. Habitat conditions for sensitive plants will be maintained under all alternatives.

5. Timber

The average allowable sale quantities of sawtimber over the planning period ranges from one MMBF under Alternative 7, to 15.3 MMBF under Alternative 2. All alternatives except Alternative 7 would meet local demand for sawtimber products. Alternatives 2, 4, and 10 would supply the greatest excess over local demand. All alternatives except possibly Alternative 6 would meet demands for fuelwood and roundwood.

Large areas of overmature timber would remain under all alternatives. As these areas declined in vigor, they would become more susceptible to insect and disease epidemics.

6. Water

Watershed conditions would be maintained under all alternatives. State water quality standards would be met in all alternatives. Increased activity and lower levels of watershed improvement projects would result in a decline in water quality under Alternatives 2, 5, and 9. Alternatives 3, 4, 7, 10, and 11 would result in improved water quality.

7. Minerals

The main effects on mineral activities would be the reduction of available acres and the increased restrictions resulting from proposed additions to the Wilderness System.

Alternative 6 would be the least responsive to the needs of industry and for the protection of other resources. Alternatives 1, 2, 3, 4, 5, and 8 would provide the most adequate responses to expected needs.

C. SUPPORT ACTIVITIES

1. Protection

Alternatives 6 and 8 would not result in cost effective fire protection. Alternatives 2, 3, 4, and 9 would provide a cost-effective fire protection program, and a prescribed fire management program.

Alternatives 2, 4, 7, 10, and 11 would provide for increased efforts to control noxious farm weeds. Higher average timber harvests under Alternatives 2, 4, and 10 would result in a slight decrease in overmature timber that is highly susceptible to insect and disease attack.

2. Lands

Alternative 6 would provide the lowest level of acquisition of non-federal lands within the Forest boundary. Alternatives 2, 4, 9, and 10 provide for the highest levels of land acquisition. All alternatives except Alternative 6 provide for obtaining needed rights-of-way for access to the Forest. Under Alternatives 2, 4, 9, and 10, demand for special use permits is expected to increase.

3. Soils

Sediment yield would be greatest under Alternatives 2 and 4 because of increased activity levels. Alternative 9 would result in increased sediment yield from many activities occurring in the limited areas remaining outside of designated wilderness. Alternatives 3, 7, and 11 would provide for the highest levels of maintained soil productivity.

4. Facilities

Alternatives 1, 6, and 7 would provide the lowest levels of road maintenance. Alternatives 3 and 11 would provide the highest levels of a maintainable road system.

Alternative 6 would not meet maintenance needs for non-road facilities and could require the closing of some facilities. Alternatives 2, 4, 7, and 9 would provide for improvements to some buildings.

D. SOCIAL AND ECONOMIC EFFECTS

Implementation of any of the Forest's management alternatives would cause very little change in the total employment, or income base, in the Challis National Forest's Zone of Influence. Table S-2 summarizes projected effects on economic indicators.

Alternative 4 would create the highest level of potential employment and income base in the ZOI.

E. SHORT-TERM AND LONG-TERM EFFECTS

All of the alternatives would maintain various levels of renewable resource yields, and no short-term productivity envisioned in these alternatives would result in the significant loss of long-term productivity. Those outputs associated with nonrenewable resource developments vary among alternatives.

F. IRREVERSIBLE OR IRRETRIEVABLE COMMITMENTS OF RESOURCES

Resource commitments have been made on some areas of the Forest that will result in foregone opportunities for the management of renewable resources for a considerable period of time. Such long-term resource commitments include the road system, special management areas, campgrounds, and mines.

TABLE S-2 EFFECTS ON ECONOMIC INDICATORS
POPULATION, INCOME, EMPLOYMENT, AND PAYMENTS TO COUNTIES

VARIABLE	NO ACTION ALT. 1	OTHER ALTERNATIVES DIFFERENCE FROM NO ACTION ALTERNATIVE 2	3	4	5	6	7	8	9	10	11
Population											
1981	14,617										
1982	15,046										
1990	17,693	- 16	- 303	+ 140	+ 9	- 68	- 90	- 130	+ 9	0	+4
1995	18,411	+ 60	- 19	+ 137	- 33	- 1	- 127	- 11	- 167	101	-31
Income (1978 MM$ inflated to 1/1/82)											
1981	125										
1982	136										
1990	160	+ .13	-1.07	+ .98	+ .17	- .30	- .50	- .55	+ 17	+ .01	+.11
1995	166	+ .71	- .37	+1.05	- .08	- 23	- .74	- .23	- .54	+ .76	-.16
Employment # of Persons											
1981	6,831										
1982	7,982										
1990	8,244	- 4	- 84	+ 39	+ 3	- 19	- 25	- 36	+ 3	0	+13
1995	8,579	+ 17	- 5	+ 38	- 9	0	- 35	- 3	- 46	+ 28	-9
Selected Sectors Agriculture											
1981	1,011										
1982	1,181										
1990	1,220	+ 4	0	+ 1	0	0	0	- 1	0	0	+1
1995	1,270	+ 2	- 1	+ 1	0	0	- 1	4	- 3	- 1	+1
Logging and Sawmills											
1981	847										
1982	990										
1990	1,022	+ 6	- 7	+ 24	+ 6	- 4	- 11	- 6	+ 6	+ 1	+2
1995	1,064	+ 22	- 13	+ 28	0	- 10	- 17	- 12	0	+ 22	-4
Tourism and Retail Trade											
1981	1,373										
1982	1,604										
1990	1,657	- 11	- 63	+ 7	- 4	- 11	- 11	- 23	- 4	- 1	0
1995	1,724	- 10	+ 10	+ 4	- 8	+ 6	- 14	6	- 37	+ 4	-5
Payments under the 25% fund (1978 dollars inflated to 1/1/82)(M$)											
1981	44.8										
1990	241.9	+ 108 1	- 54 6	+172 5	+ 38 4	- 25 3	- 64.2	- 97 5	+ 3 6	- 4 3	+34 9
1995	253.1	+ 167 2	+ 132 1	+217 1	+ 44 5	- 21 7	- 61.6	-101 8	+ 6 9	+91 4	- 5 9

Data and calculations are based on information from State of Idaho, Division of Economic and Community Affairs, U.S. Department of Commerce, Bureau of Economic Analysis, and Challis National Forest IMPLAN (I/O) Model.

Special management areas include approximately 13,800 acres of existing and proposed research natural areas, 11,300 acres within municipal watersheds, 782,255 acres in designated wilderness, and depending on the alternative, between 0 and 1,392,000 acres of proposed wilderness. Special management of the Forest lands proposed by management alternatives could result in the loss or displacement of some livestock grazing and would prohibit or restrict development of some mineral resources. Losses of other resource outputs because of special area management would be insignificant.

Current mining activities, especially near Thompson Creek and in the Yankee Fork drainage, result in irreversible commitment of mineral resources. Waste dumps and tailing empoundments result in irretrievable commitment of resources on about 1,200 acres. Future mining activities will result in increased irreversible and irretrievable commitment of resources.

G. ADVERSE EFFECTS THAT CANNOT BE AVOIDED

Implementation of the alternatives would result in some adverse environmental effects that could not be avoided. However, the application of Forest-wide standards and guidelines is intended to limit the extent and duration of these adverse effects.

Under all alternatives, a general increase in use of the Forest resources is anticipated, especially in such areas as developed and dispersed recreation, off-road vehicle use, and fuelwood gathering. The consequences of this anticipated increased activity would include increased vehicle exhaust emissions and their resultant effects, as well as increased energy consumption. There would also be an increase in sedimentation, soil compaction, fire hazard, and vegetation degradation as a result of concentrated use by domestic and recreational livestock and the general public. Short-term adverse effects on visual resources, because of vegetation manipulation and road construction, would be of concern in some activities.

H. SELECTED ALTERNATIVE

Alternative 11 has been identified as the Selected Alternative. This selection was made after analysis and evaluation of all reasonable alternatives, documented in Chapter IV, were completed and considered public comment on the DEIS. A summary of activities, benefits and costs associated with the preferred alternative is displayed in Table S-4.

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CHAPTER I

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CHAPTER 1

PURPOSE AND NEED

A. INTRODUCTION

This Final Environmental Impact Statement (FEIS) discusses and compares the environmental consequences of 11 alternative systems of managing the Challis National Forest in the future. These alternatives respond in a variety of ways to issues and concerns identified by the public and the Forest Service. The purpose of this DEIS is to disclose the significant physical, biological, economic and social effects of implementing any of the alternatives. It also describes in detail the selected alternative, which guided the development of the Forest Land and Resource Management Plan, and discusses the process by which all alternatives were developed. The Forest Land and Resource Management Plan is a separate document, accompanying this EIS. Both documents are treated as a combined document under 40 CFR 1506.4.

The goal of the Forest Plan is to provide for multiple use and sustained yield of goods and services from the National Forest in a way that maximizes long term net public benefits in an environmentally sound manner. The Plan and DEIS apply to lands managed by the Challis National Forest, located in Central Idaho. The Plan will guide management of the Forest for the next 10 years. It will be reviewed at at least every five years, and revised at least every 10 to 15 years, or whenever conditions or demands have changed significantly. Provisions for revising the Plan are specified in 36 CFR 219.10(a) and (b).

B. NATIONAL REQUIREMENTS, AND FOREST PLANNING

1. Legislative Framework

Prior to development of the Forest Plan, management of the Challis National Forest was guided by Multiple Use, Unit, or Resource Plans. Each of these provided management direction for a specific unit of land or for management of a specific resource such as range, recreation, timber, or wildlife. The Forest Plan will replace all of these previous plans.

The Forest Plan is intended to serve as an umbrella for project and activity planning that will occur to implement actions called for in the Forest Plan. Most projects will still require an environmental analysis prior to being implemented. These environmental analyses will be tiered under this EIS. A part of these analyses will be to ensure that projects are in conformance with direction in the Forest Plan.

When the plan is implemented, all activities affecting the Forest, including budget proposals, will be brought into compliance. In addition, all permits, contracts, and similar legal documents governing the use and occupancy of National Forest System lands must conform with the Plan; however, existing permits, leases, and contracts that are beyond the control of the Forest Service will remain in effect until adjustments can be made to accommodate Plan direction.

The National Environmental Policy Act (NEPA) regulations (40 CFR 1500) and the National Forest Management Act of 1976 (NFMA) regulations (36 CFR 219) require the preparation of an Environmental Impact Statement (EIS). The Forest and Rangeland Renewable Resources Planning Act (RPA), as amended by the NFMA, requires the preparation of the Forest Plan, including an EIS.

The NEPA and NFMA requirements have many elements in common. Both require public involvement, the preparation of alternatives, protection of the environment, long range planning, monitoring, follow-up, and modifications where necessary. Many of the requirements and procedures of NEPA are built into the NFMA planning system.

The United States Congress recognized that the Frank Church--River of No Return Wilderness is contained within parts of several National Forests, all of which are developing land and resource management plans in compliance with Section 6 of the National Forest Management Act of 1976 (Public Law 94-588). The Central Idaho Wilderness Act directs that the comprehensive management plan for the FC--RONR Wilderness be coordinated with these Forest plans. This plan was completed and approved on March 11, 1985, and is hereby incorporated into all alternatives. The FC--RONR Wilderness management plan provides the basic direction towards preserving the quality and integrity of the Frank Church--River of No Return Wilderness.

2. Planning Process

Regulations to implement the requirements of the National Forest Management Act became effective November 1, 1982, after publication in 47 FR 43037, 36 CFR 219. Those regulations outline in detail how the proposed Forest Plan is to be prepared. The actions required by the National Forest planning regulations set forth in 36 CFR 219.12 and used in the planning process are:

1. Identification of purpose and need.
2. Development of planning criteria.
3. Collection of inventory data and information.
4. Analysis of the management situation.
5. Formulation of alternatives.
6. Estimated effects of alternatives.
7. Evaluation of alternatives.
8. Recommendation of a preferred alternative.
9. Approval of plan.
10. Monitoring and evaluation of plan.

Planning on individual National Forests is coordinated within National and Regional planning as required by the laws cited above and the regulations for implementing them. The Regional Guide establishes management standards and guidelines, provides planning guidance for regionally significant issues and concerns, and distributes national goals and targets from the 1985 RPA to individual Forests. The Forest planning process deals with achieving those goals and addressing local issues and concerns.

The Draft EIS was prepared and circulated for comment upon completion of planning actions 1 through 8. After the close of the draft documents comment period, the Forest repeated planning actions 1 through 8 as necessary. Final Environmental Impact Statement (FEIS) was then prepared, filed with the Environmental Protection Agency, and made available to the public. The Regional Forester will use the FEIS to make a decision under the NFMA, for approval of the Forest Plan (36 CFR 219.10(c), and prepare a Record of Decision which accompanies the Plan and FEIS.

C. LOCATION OF THE FOREST

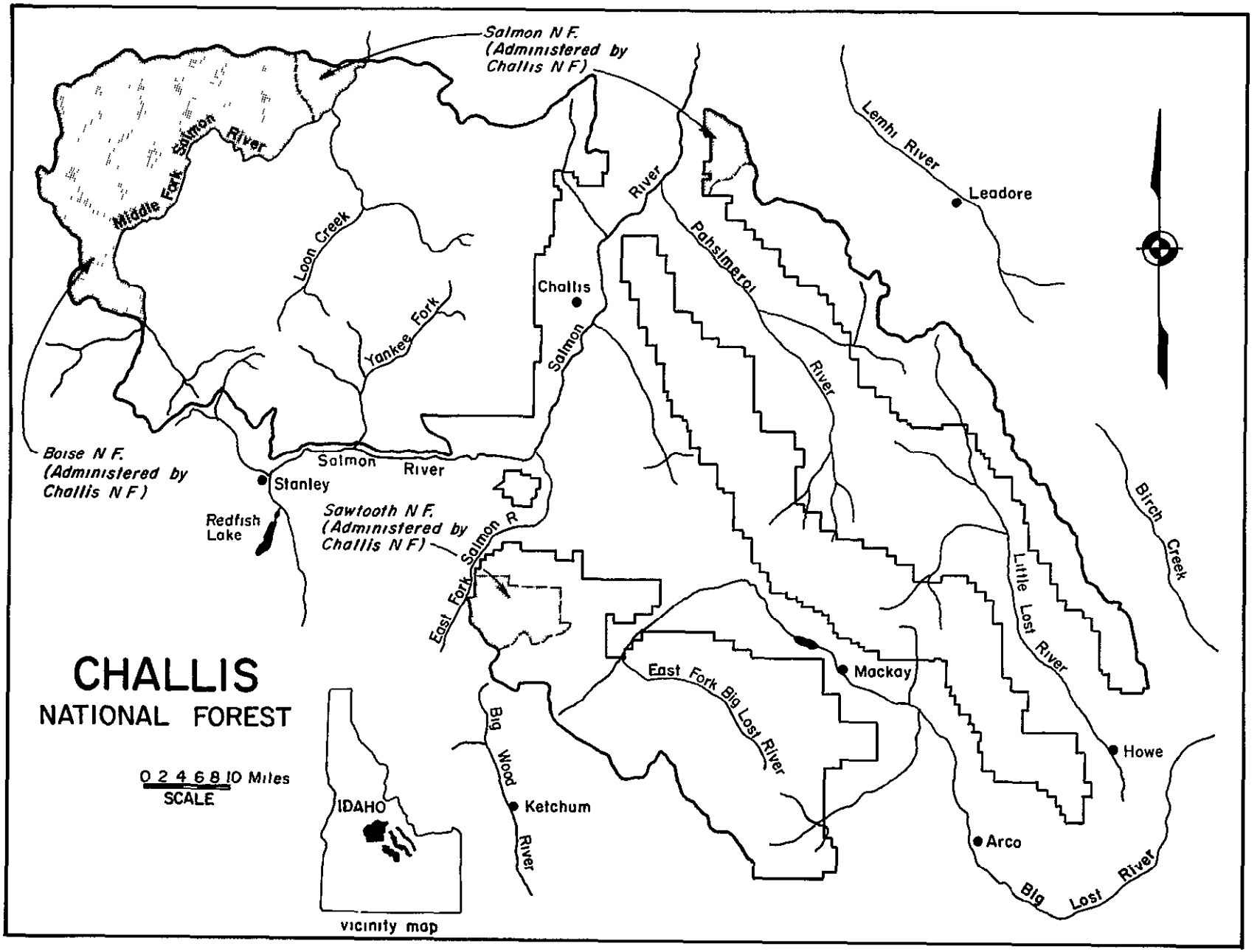
The Challis National Forest administers most of the Federal land within the legally defined boundaries of the Challis National Forest, and adjacent portions of the Boise, Salmon, and Sawtooth National Forests, all of which are located in Idaho. The planning area covers the 2,516,191 acres administered by the Challis National Forest, including approximately 2,177,144 acres of the Challis National Forest, 267,005 acres of the Boise National Forest, 32,577 acres of the Salmon National Forest, and 39,465 acres of the Sawtooth National Forest (see Figure I-1). The Salmon National Forest administers 26,031 acres and the Sawtooth National Forest administers 257,847 acres of the Challis National Forest. These areas are addressed in Forest Plans prepared by the administering Forests. The Forest Supervisor is headquartered in Challis, Idaho. There are Ranger District offices at Challis (2), Mackay, and near Clayton, Idaho.

The Challis National Forest manages lands located in the Lemhi, Lost River, Salmon River, Pioneer, Boulder, White Knob and Pahsimeroi Mountains. The major population centers of Boise, Idaho Falls, Pocatello, and Twin Falls, Idaho and Missoula, Montana are between 150 and 200 miles from Challis.

D. ISSUES, CONCERNS, AND OPPORTUNITIES

The Challis National Forest began the process by publishing an informational insert giving an overview of the Forest and asking for public issues, in the Challis Messenger and Arco Advertiser. This was distributed to 6,000 homes. Forest Service employees made 483 personal contacts, generating 615 issues. Forest Service employees identified 128 additional concerns. Six hundred Public Involvement Guides were mailed to the public resulting in 56 responses and 106 additional issue statements. The total of 850 issues statements were assessed by the Forest Public Involvement Team which grouped and consolidated similar ones into 40 tentative issue statements. These were then combined into a concise list of 12 issue and concern category statements by the Forest Management Team.

Respondents who identified the original 850 issues and concerns were recontacted during the roadless area re-evaluation process. Responses were also solicited by State-wide and local newspaper articles. Additional information was requested by over 300 individuals who then provided 220 additional comments. These comments, public involvement from the RARE II summary, hearings conducted in Idaho by Senator McClure, and follow-up with original contacts, resulted in two additional issue and concern categories.



ADMINISTRATIVE BOUNDARIES

Figure I-1 Challis National Forest Location Map

Most of the issues and concerns that were identified relate to the intensity and rate of resource activities, and the relationship among resources.

A complete discussion of the issue identification process and the process used to screen the issues is found in Appendix A of this document.

The final list of 14 issues and concerns follows. It is possible to track the resolution of each issue by alternative in Chapter II of this document, and to track the consequences of the alternatives on each of these issues in Chapter IV.

The issues and concerns discussed as planning problems in Appendix A are:

1. What is the relationship between all resource levels (timber, range, wildlife and fish, developed and dispersed recreation)?

2. To what degree will the Forest manage for all resource uses in riparian areas to maintain or enhance the overall condition?

3. To what level will the Forest manage for wildlife, fish, and Threatened and Endangered Species habitat (in order to meet Fish and Game population objectives)?

4. What level of firewood will the Forest manage for, to meet local demand?

5. To what degree will the Forest continue to allow for exploration and development of the mineral resource; and to what degree should the Forest provide for the opportunity for oil and gas leasing?

6. How will Off-Road Vehicle (ORV) use be managed, including roads and trails proposed for closure?

7. To what degree are additional roads, trails, and recreation facilities planned for?

8. To what degree will the Forest maintain soil productivity, water quality, and instream flow?

9. What level of timber harvest will be met by the Forest, and will it meet the needs of locally dependent mills?

10. What level of fire protection (acres burned) will occur, and what degree of prescribed fire will be used for resource management needs?

11. To what levels will grazing be managed in relation to maintaining the locally dependent ranching community?

12. Can the Forest meet the expected demand for recreation?

13. What roadless areas will be recommended to Congress for wilderness designation?

14. What will be the management for roadless areas not selected for wilderness nor presently needed for commodity production?

E. PLANNING RECORDS

The planning records contain the detailed information used in developing the Forest Plan as required in 36 CFR 219.10(h). These planning records are available for inspection during regular business hours at the Challis National Forest Supervisor's Office, Forest Service Building, P.O. Box 404, Challis, Idaho 83226. These records are incorporated by reference as provided for the NEPA implementing regulations (40 CFR 1502.12).

F. ORGANIZATION OF FEIS

The Final Environmental Impact Statement is structured as follows:

Chapter II explains the process of developing alternatives, including benchmarks, and describes and compares alternatives, including the preferred alternative.

Chapter III describes the affected environment which is the land, resources, and activities managed by the Challis National Forest.

Chapter IV predicts the environmental consequences of implementing each alternative and includes discussions of the short- and long-term effects and the irreversible and irretrievable commitments of the resources.

Chapter V lists the names and qualifications of the major contributors to the Plan and EIS.

Chapter VI consultation and list of agencies, organizations, and persons who commented on the draft. Public comments and Forest Service responses.

Chapter VII is the Glossary of Terms.

Chapter VIII is the index to terms used in the EIS.

Chapter IX lists references used in preparing the EIS.

APPENDIX A	Describes Issues, Concerns, and Opportunity Identification Process
APPENDIX B	Describes the Analysis Process
APPENDIX C	Evaluates Roadless Areas
APPENDIX D	Plans and Designates Corridors
APPENDIX E	Identifies Procedures for Processing Oil and Gas Lease Applications
APPENDIX F	Outlines the Withdrawal Review Schedule
APPENDIX G	States the Biological Assessment of the Preferred Alternative on Threatened and Endangered Animals
	Part A - Peregrine Falcon and Bald Eagle
	Part B - Gray Wolf

CHAPTER II. ALTERNATIVES

CHAPTER II

TABLE OF CONTENTS

CHAPTER II

ALTERNATIVES, INCLUDING THE PROPOSED ACTION

A. INTRODUCTION

This chapter describes the alternatives and explains how they were developed. Included in it are:

--legal requirements that guided formulation of each alternative.
--development and disposition of benchmarks.
--alternatives developed and evaluated but not considered in detail.
--description of each alternative considered in detail, including the proposed action.
--comparison of the alternatives.

Forest management alternatives were formulated in response to issues and concerns expressed by the public and Forest managers, and in response to legal requirements.

Issues and concerns were identified both nationally and locally during the planning process. Roadless area review and evaluation (RARE II), timber, range, and a variety of other resource related interests were identified as needing to be addressed.

Benchmarks and alternatives were developed from public issues and to describe Forest potentials for resource production. Evaluation at various levels defined sufficient similarity between these benchmarks and alternatives or lack of capability to meet current laws and direction while meeting some issues. This resulted in elimination and combination of alternatives leaving eleven alternatives for intensive evaluation. These eleven alternatives provide a range of responses to the issues and concerns.

Net Public Benefits (NPB) are the overall long term values, to the Nation, of all outputs and positive effects [benefits less all associated inputs and negative effects (costs)], whether they can be quantitatively valued or not, consistent with the principles of multiple use and sustained yield.

Priced components, or outputs that contribute to NPB, are those outputs on which a value can be placed in the economic efficiency analysis. These values can be determined in the marketplace, or can be administratively assigned. Examples are timber, recreation, and livestock grazing. The resource components or outputs and their contributions by alternative to the NPB are detailed in Chapter II.

Non-priced components or outputs that contribute to NPB are those outputs which cannot be assigned a value in the economic efficiency analysis. Examples are visual quality and catchable trout. These components do not contribute to PNB since they are not assigned an economic value, and they represent desirable attributes, for which some amount of PNV is foregone in each alternative.

Relationship Between Qualitative and Quantitative Outputs

Each alternative represents a certain combination of quantitative and qualitative benefits. Often a qualitative benefit is decreased as a

quantitative benefit is increased. An example would be loss of visual quality as the level of timber harvest is increased, while in other alternatives, the level of timber harvest is lowered to meet visual quality objectives (see Table II-7 for a comparison of the alternatives).

Public responses and analysis details are maintained on file at the Challis National Forest Supervisor's Office.

B. FACTORS CONSIDERED IN THE FORMULATION AND ANALYSIS

1. Legal Requirements

In Forest planning, an alternative is a combination of resource objectives, outputs, and constraints that achieve a certain management philosophy.

Many combinations are possible in formulating a range of alternatives for evaluation as possible Forest Plans. The alternatives described in this chapter were formulated in response to direction from the public, the Forest staff, and Federal laws as noted below.

a. Regulations developed from the National Environmental Policy Act (NEPA) and the National Forest Management Act (NFMA) provide direction for formulating alternatives. NEPA regulations (40 CFR 1502.14) require that the alternatives section of any environmental impact statement should:

--rigorously explore and objectively evaluate all reasonable alternatives, and for the alternatives that were eliminated, briefly discuss the reasons why they were eliminated.

--devote substantial treatment to each alternative considered in detail including the preferred alternative, so that reviewers may evaluate their comparative merits.

--include reasonable alternatives not within the jurisdiction of the agency.

--include a "No Action" alternative.

--identify appropriate mitigation measures not already included in the proposed action or other alternatives.

b. The Forest Service NEPA Procedures Handbook (FSH 1909.15, section 23) requires that a reasonable range of alternatives be fully and impartially developed, ensuring that the range of alternatives does not prematurely close options that might protect, restore, or enhance the physical, social, economic, and biological environment.

c. NFMA regulations (36 CFR 219.12(f)) require the following be considered in formulating alternatives:

> The primary goal is to provide an adequate base for identifying the alternative that maximizes net public benefits, consistent with resource integration and management requirements stated in 36 CFR 219.13 through 219.27.

Alternatives shall reflect a range of resource outputs and levels of expenditures.

Alternatives shall provide different ways to address and respond to the major public issues, management concerns, and resource opportunities identified during this planning process.

At least one alternative shall respond to and incorporate the 1980 RPA program displayed in the Intermountain Regional Guide.

At least one alternative shall reflect the present volume of goods and level of services provided, and the most likely amount of goods and services expected to be provided in the future, if present direction continues.

Each alternative shall represent the most cost-efficient combination of management prescriptions examined that can meet the objectives established in the alternatives.

The beginning point for formulating alternatives is the body of data developed in response to projections of demand, and determinations of the potential to resolve public issues and management concerns (CFR 219.12(e)(3) and (4)).

d. The NFMA regulations (36 CFR 219.12(f)(9) require that each alternative state:

--the condition and use that would result from long-term application of the alternative.

--the goods and services to be produced, and the timing and flow of these resource outputs together with associated costs and benefits.

--standards and guidelines for resource management.

--the purpose of the proposed management direction.

e. The Washington Office Guidelines of Implementation dated October 14, 1981, required that an array of alternatives of the following types be considered:

--one that responds to and incorporates the RPA program goals and objectives displayed in the Intermountain Region Guide dated January, 1984. This alternative shows how best to meet the Forest's share of the 1980 RPA Program.

--one that presents the current program (no-action alternative), which is the current level of goods and services provided by the unit and the most likely amount of goods and services expected to be provided if current management direction continues, and if current budget is updated for changing costs over time.

--one that considers outputs equal to those protrayed in Alternative 9 of the 1985 RPA DEIS.

--one that considers market opportunity outputs and emphasizes outputs that have the potential to produce income to the Government.

--one that considers non-market opportunity outputs and emphasizes the non-market and amenity values.

--other alternatives that respond to public issues, management concerns, and resource opportunities and reflect a broad range of resource outputs and levels of expenditures.

f. The Regional Land Management Planning Checklist dated February 1984 required an alternative to be developed that would be constrained by a budget 25 percent less than an average of the past 10 years. The Forest determined the management emphasis for this alternative.

2. Development of Benchmarks

During the Analysis of the Management Situation (AMS) and in formulation of the Forest Planning Model (FORPLAN), potentials of resource supply were determined by using resource capabilities, legal constraints, and professional assumptions about the future. Limits in the capability to supply various goods and services were determined by establishing minimum and maximum levels of production for major resources. In addition, a monetary benchmark was estimated for a set of multiple resource outputs that maximized present net value (PNV). The minimum and maximum levels established the upper and lower range for major outputs analyzed. This analysis established the "benchmark" levels required by 36 CFR 219.12. The provisions of 36 CFR 219.27 (management requirements) do not restrict addressing the issues, concerns, and opportunities.

The Analysis of the Management Situation established three types of benchmarks.

a. Minimum level benchmark - This is the minimum amount and intensity of management needed to maintain and protect the Forest as part of the National Forest System.

b. Resource benchmarks - These are the maximum physical and biological potentials for production for timber, grazing, and wilderness.

c. Monetary benchmarks - These show the maximum present net value that could be achieved.

All benchmarks were used to define the upper and lower limits for production of major resources (Table II-1). Following are descriptions and statements of purpose of the benchmarks developed and considered in Forest planning. The disposition following the description explains why all but the Current Program and Maximum Wilderness Benchmarks were eliminated and not considered as workable alternatives.

TABLE II-1 MINIMUM, CURRENT, AND MAXIMUM BENCHMARK LEVELS FOR TIMBER, RANGE, WILDLIFE & FISH, AND RECREATION

	1990			2000		
RESOURCE	LOWEST	CURRENT	HIGHEST	LOWEST	CURRENT	HIGHEST
Timber (MMBF)	0	3.5	40.1	0	4.9	40.1
Range (M AUM)	0	113	114.0	0	113	119
Wildlife & Fish (M WFUD)	274	289	293	323	385	391
Developed Recreation (M RVD)	0	78	110	0	100	134
Dispersed Recreation (M RVD)	175	355	460	215	443	600
Wilderness Recreation (M RVD)	135	180	373	148	204	448

Tables B-9 through B-17 in Appendix B display the range of outputs, and the costs and effects considered in benchmark analysis. For a complete list of benchmark constraints and outputs, and the prices of outputs included in the PNV analysis, refer to Appendix B.

3. Benchmark Level Description

a. Current Program - This level is the current management direction. It provides for significant increases in recreation use and oil and gas leasing. Wildlife, fish, and grazing benefits increase slightly. Timber outputs, with the exception of fuelwood, remain constant. Fuelwood use will continue to increase.

Benchmark Disposition - This was used to further refine the No Action (Current Program) Alternative. This level produces the base for comparing PNV among benchmarks.

b. Maximum Timber Resources - Timber production was emphasized within the minimum constraints required by law (minimum management requirements) without impairing future productivity of the land. Reasonable biological potential was developed and was not constrained by budget or policy. Outputs of other resources were held at the current level unless they were affected by the timber resource.

Benchmark Disposition - This benchmark was used to determine the upper limit of production for timber as a comparison for other alternatives. The timber volume amounts were used in developing the market opportunity alternative. It was eliminated from further study because it did not respond to the public issues and concerns. It would produce much more timber than local mills could utilize. It would require 303.2 million dollars Present Value Cost (PVC) more than the current program and would decrease the present net value by 62 million (refer to Appendix B, Table B-3 and 4).

c. Maximum Range Resource - Production of forage and livestock was emphasized within the minimum constraints of law without impairing range productivity. Reasonable biological potential was developed and was not constrained by budgets or policy. Outputs of other resources were held at current level unless they were affected by the range resource.

Benchmark Disposition - This level was eliminated from further study because it assigned the big game winter range to commercial livestock production and caused unacceptable adverse impacts on fisheries. It would increase PVC by 210.5 million dollars and decrease PNV by 34.4 million dollars compared to the Current Program over the planning period.

d. Maximum Wilderness Resource - Wilderness was emphasized within the constraints of law and without impairing productivity of the land. Reasonable biological potential was developed without budget or policy constraints. Other resource outputs were held at the current level unless they were affected by wilderness.

Benchmark Disposition - This was developed into an alternative to

meet national direction to evaluate each roadless area as wilderness in at least one alternative. PVC decreased 15.5 million dollars and the PNV increased 26 million dollars compared with the current program.

e. Maximum Present Net Value (Market Value) - All outputs (timber, grazing, developed recreation) that return dollars to the Treasury and have a market value were emphasized. Non-market outputs were added at the current level within the constraints of market outputs to give this level a complete combination of resource outputs.

Benchmark Disposition - This benchmark was dropped from further study because it did not assign values to dispersed recreation, wilderness, water, or wildlife and fish, and therefore produced by far the lowest present net value of all alternatives. PVC increased 91.5 million dollars and PNV decreased 3.8 million dollars from the current program.

f. Maximum Present Value (Assigned Values) - This level emphasized the present net value based on assigned RPA values displayed in Table II-3. Where two or more uses had direct conflicts, the one having the greatest present net value constrained the others.

Benchmark Disposition - This benchmark was used in the economic analysis section to compare the other alternatives. It provided the basis for identifying social, economic, and environmental tradeoffs. It was not a viable alternative because of the high cost of implementation. The nine selected wilderness options are not close to any of the alternatives; therefore, the benchmark was dropped from further consideration. The range of wilderness options will be covered in other alternatives. PVC increased 4.4 million dollars and PNV increased 22.9 million dollars from the current program.

g. Minimum - The least cost of keeping the Forest in public ownership. This program would:

--Protect life, health, and safety of Forest users which would result in many facilities being closed to the public.

--Provide administration of "unavoidable" special uses.

--Protect water and soil resources and prevent significant impairment of productivity of Forest or adjacent lands.

This level is merely custodial management, and the only outputs are those not dependent on Forest Service management, such as water yield, wildlife, and dispersed recreation.

Benchmark Disposition - This benchmark was not a viable alternative because it did not respond to public issues and management concerns and did not provide multiple resource uses and outputs. Also, it did not meet the intent of the Organic Act of 1897, the Multiple Use Sustained Yield Act of 1960, and the Resource Planning Act of 1974 as amended by the National Forest Management Act of 1976. PVC decreased 80.3 million dollars, while PNV decreased 14.3 million from the current level benchmark.

Economic Analysis of Benchmarks - This analysis describes the various benefits, costs, and the present net value of each benchmark level. Table II-2A compares PNV of priced outputs. Table II-2B compares PNV and nonpriced outputs, Table II-7C is a narrative comparison of PNV and qualitative effects.

Present net value (PNV) is the measure of economic efficiency used in Forest planning. It is defined as the difference between the discounted dollar values of all priced outputs and the discounted valued of all expenditures for management and investment (the process of discounting expresses all values at a common date). PNV is one important component or effect that is included in net public benefits. Any differences in PNV among alternatives may be related to the production of public benefits to which prices have not been assigned. Such benefits include certain outputs, such as endangered animals; physical conditions, such as the maintenance of areas with particularly pleasing visual qualities, and desirable distributive effects, as when especially high levels of commodities are produced to help support dependent communities. Also included are reductions in risk, such as those due to intensifications of insect and disease surveys, and improvements in quality, such as those due to increasing recreation site management standards. Similarly, differences in PNV may be related to the production of public benefits to which prices have been assigned. Further, differences in PNV may be directly related to the budget restrictions associated with the alternatives.

An important purpose of this section is to define the differences in the production of public benefits among alternatives that lead to the differences in PNV.

Table II-2 summarizes the economic information that is used in defining PNV for the benchmarks. This information includes total discounted benefits and the contributions to those benefits of individual priced outputs. It also includes total discounted costs of managing the Forest and the rough assignment, to facilitate the later discussion, of those costs to major accounting or budgeting categories of expenditures. (Note: Some combination of cost categories is necessary to support production of any particular price output on a Forest-wide basis under a system of multiple use of integrated Forest management. Therefore, it would not be correct to assume that there is a one-to-one relationship between the dollar benefits listed under contribution of timber, or other priced output, to total discounted benefits and the costs listed under "contribution of timber, or other cost category, to total discounted costs".)

The benchmark levels have a PNV that ranges from 108 percent (Maximum Wilderness) to 81 percent (Maximum Timber) of the existing management situation. The Minimum Level Benchmark has a PNV which is 96.7 percent of the existing situation. However, no timber, grazing or developed recreation outputs are realized under this benchmark.

Comparison of the minimum level PNV and PNV/PVC ratio with those of the other levels reveals that an overwhelming proportion of the values generated from the Forest are based on "naturally occurring outputs". In effect, only a small percent of the value of the existing management situation is produced by management investment.

About 11 percent of the value of the total PNV of all outputs under Max PNV/Assigned is produced by management investment. Comparison of the relative proportion of PNV generated by each resource use for each benchmark level illustrates the same point (Tables II-2A and II-2B).

Most of the PNV for each level is the result of recreation, and wildlife and fisheries. Grazing and timber provide only a small proportion of the PNV levels and are negative in some cases.

4. Alternatives Considered but Eliminated From Detailed Studies

Alternatives that would result in no outputs of such resources as range, recreation, minerals, timber, or wildlife were considered. These alternatives were eliminated from detailed study because they failed to meet the needs of local dependent communities or would violate legal requirements.

Uneven-aged timber harvest methods were considered but were eliminated from detailed study for the following reasons. In many stands lower production volumes would result from difficulty in regenerating desirable conifer species and reduced growth rates in some size classes. Management costs associated with uneven-aged cutting methods would exceed the costs associated with even-aged cutting methods. On steeper slopes, selective harvest using currently available logging techniques would result in unacceptable damage to residual stands. The number of entries and amount of road use would be greater for uneven-aged timber harvest methods than even-aged.

5. How Alternatives Were Developed

The Forest Planning Interdisciplinary (ID) Team developed alternatives in response to the NFMA, NEPA, internal requirements, and public input by the process summarized below:

Item 1. Major issues were identified through public involvement efforts. The Forest's management concerns were added to these public issues.

Item 2. The public issues and management concerns were consolidated into a set of planning issues.

Item 3. Biological potentials were determined for each Forest resource.

Item 4. Demand and supply potentials were estimated for the various resource activities that were highlighted by the planning issues. Needed changes in management direction and opportunities to change future emphasis were identified.

Item 5. Alternative direction statements were established that provided a broad range of options. Prescriptions were developed, guided by the alternative emphasis, and applied to units of land called management areas through use of Coordinated Allocation Choices (CAC). The list of prescriptions, CAC's, and assignment to management areas are shown in Appendix B. Roadless areas were included as grouped analysis areas.

By applying wilderness/non-wilderness prescriptions, an array of wilderness acres was achieved to satisfy the goals of each alternative (Tables II-4). The alternatives address the planning issues reflecting these emphasis statements.

Item 6. Constraints and mitigation measures for each resource output were made for each alternative. These constraints and mitigation measures affect the maximum and/or minimum level of goods and services to be produced. These constraints, and mitigation measures with rationale for their use, are shown in Appendix B.

Item 7. The ID Team, aided by FORPLAN, estimated the goods and services that would be produced under each alternative by decade [see Tables II-6 (1 to 11)].

FORPLAN is a mathematical process, that uses linear programming to select a combination of prescriptions within a given set of constraints, designed to achieve the management direction for each alternative. FORPLAN is further explained in Appendix B.

Item 8. The estimates (prepared in Item 7) were used to revise and refine the constraints and direction of each alternative. These adjustments were necessary to continue to meet the intent of the alternative directions developed in Item 5.

Item 9. Items 5 through 8 were repeated as necessary to arrive at the required range of alternatives.

The following are time periods used for activities and outputs displayed for all alternatives:

PLANNING TIME PERIOD	DECADE	YEARS INCLUDED
1	1	1986 - 1995
2	2	1996 - 2005
3	3	2006 - 2015
4	4	2016 - 2025
5	5	2026 - 2035
6 1/	6 - 10	2036 - 2086
7 1/	11 - 15	2086 - 2135
8 1/	16 - 20	2136 - 2185

1/ Used for timber harvest scheduling only.

TABLE II-2A PRESENT NET VALUE AND PRICED OUTPUTS
BENCHMARK - MINIMUM LEVEL
(DISCOUNTED AT 4%)

BENEFITS	UNIT OF MEASURE	TIME PERIODS (DECADES) 1	2	3	4	5	TOTAL
Wilderness Recreation	M $	11,646	8,631	5,828	3,938	2,662	32,705
Dispersed Recreation	M $	14,882	13,119	9,598	5,985	4,046	47,630
Developed Recreation	M $	0	0	0	0	0	0
Wildlife	M $	20,161	14,878	12,158	10,215	8,933	66,345
Anad Fish Commercial	M $	3,098	4,231	3,883	2,915	2,958	18,423
Anadromous Fish Sport	M $	21,451	22,740	21,423	19,405	13,891	97,910
Coldwater Fish	M $	25,311	18,402	17,756	13,010	12,251	88,730
Range	M $	0	0	0	0	0	0
Timber	M $	0	0	0	0	0	0
Minerals	M $	0	0	0	0	0	0

COSTS	UNIT OF MEASURE	TIME PERIODS (DECADES) 1	2	3	4	5	TOTAL
Total Forest Budget	M $	16,669	11,249	7,623	5,158	3,499	44,198
Fixed Costs							
Protection	M $	6,043	4,074	2,757	1,862	1,260	15,996
GA	M $	4,591	3,095	2,094	1,414	957	12,151
Variable Costs							
Investment Costs							
Timber Roads	M $	0	0	0	0	0	0
Other Roads	M $	0	0	0	0	0	0
Investment Other	M $	42	28	19	13	9	111
Total Investment	M $	42	28	19	13	9	111
Operational Costs	M $	5,992	4,051	2,753	1,869	1,272	15,937
Non-Forest Service Costs	M $	0	0	0	0	0	0

PNV (M $) = 307,548

PVC (M $) = 44,195

PVB (M $) = 351,743

TABLE II-2A PRESENT NET VALUE AND PRICED OUTPUTS
BENCHMARK - MAXIMIZE PRESENT NET VALUE, ASSIGNED
(DISCOUNTED AT 4%)

BENEFITS	UNIT OF MEASURE	TIME PERIODS (DECADES) 1	2	3	4	5	TOTAL
Wilderness Recreation	M $	25,344	17,125	11,563	7,813	5,281	67,126
Dispersed Recreation	M $	7,688	7,617	5,143	3,475	2,349	26,272
Developed Recreation	M $	2,668	2,274	1,536	1,038	701	8,217
Wildlife	M $	20,194	17,043	13,931	11,545	9,511	72,224
Anad Fish Commercial	M $	3,139	4,296	4,362	3,935	2,954	18,686
Anadromous Fish Sport	M $	21,054	23,389	21,982	18,983	14,282	99,690
Coldwater Fish	M $	27,209	23,997	19,473	15,153	12,861	98,693
Range	M $	12,912	8,510	5,705	3,853	2,604	33,584
Timber	M $	14,265	11,190	7,555	5,085	3,302	41,397
Minerals	M $	2,579	2,143	1,447	978	661	7,808

COSTS	UNIT OF MEASURE	TIME PERIODS (DECADES) 1	2	3	4	5	TOTAL
Total Forest Budget	M $	39,575	26,578	16,393	11,071	7,494	101,111
Fixed Costs							
Protection	M $	4,195	2,828	1,913	1,292	875	11,103
GA	M $	6,752	4,552	3,080	2,080	1,408	17,872
Variable Costs							
Investment Costs							
Timber Roads	M $	599	728	824	452	164	2,767
Other Roads	M $	3,882	2,617	270	182	123	7,074
Investment Other	M $	4,558	2,788	1,840	1,313	908	11,407
Total Investment	M $	9,039	6,134	2,934	1,947	1,195	21.249
Operational Costs	M $	18,441	12,541	8,485	5,730	3,879	49,076
Non-Forest Service Costs	M $	10,271	7,915	5,355	3,614	2,494	29,649

PNV (M $) = 344,749

PVC (M $) = 128,948

PVB (M $) = 473,697

TABLE II-2A PRESENT NET VALUE AND PRICED OUTPUTS
BENCHMARK - MAXIMIZE PRESENT NET VALUE, MARKET
(DISCOUNTED AT 4%)

BENEFITS	UNIT OF MEASURE	TIME PERIODS (DECADES) 1	2	3	4	5	TOTAL
Wilderness Recreation	M $	11,605	8,631	5,828	3,938	2,662	32,664
Dispersed Recreation	M $	12,392	10,450	7,056	4,768	3,222	37,888
Developed Recreation	M $	3,074	2,669	1,802	1,218	823	9,586
Wildlife	M $	17,769	14,878	12,291	10,158	6,936	62,032
Anad Fish Commercial	M $	3,017	4,159	4,233	3,820	2,868	18,097
Anadromous Fish Sport	M $	20,486	23,093	21,353	18,433	13,873	97,238
Coldwater Fish	M $	27,952	22,830	18,622	14,455	12,411	94,370
Range	M $	12,976	8,965	6,249	4,215	2,849	35,254
Timber	M $	50,955	35,149	22,478	15,208	10,838	134,628
Minerals	M $	3,925	3,392	2,290	1,548	1,046	12,201

COSTS	UNIT OF MEASURE	TIME PERIODS (DECADES) 1	2	3	4	5	TOTAL
Total Forest Budget	M $	36,526	24,154	14,276	9,919	6,711	91,726
Fixed Costs							
Protection	M $	4,195	2,828	1,913	1,292	875	11,103
GA	M $	6,752	4,552	3,080	2,080	1,408	17,872
Variable Costs							
Investment Costs							
Timber Roads	M $	3,621	2,060	697	1,630	266	8,274
Other Roads	M $	3,882	2,617	270	182	123	7,074
Investment Other	M $	10,845	7,067	4,466	3,029	1,739	27,146
Total Investment	M $	18,349	11,744	5,432	4,841	2,128	42 494
Operational Costs	M $	16,998	11,602	7,850	5,301	3,589	45,340
Non-Forest Service Costs	M $	36,655	24,814	17,367	11,507	8,842	99,180

PNV (M $) = 317,969

PVC (M $) = 215,989

PVB (M $) = 533,958

TABLE II-2A PRESENT NET VALUE AND PRICED OUTPUTS
BENCHMARK - MAXIMIZE TIMBER
(DISCOUNTED AT 4%)

BENEFITS	UNIT OF MEASURE	TIME PERIODS (DECADES) 1	2	3	4	5	TOTAL
Wilderness Recreation	M $	11,646	8,631	5,828	3,938	2,662	32,705
Dispersed Recreation	M $	12,927	10,856	7,330	4,952	3,348	39,413
Developed Recreation	M $	2,547	2,263	1,528	1,033	698	8,069
Wildlife	M $	19,075	16,084	12,928	10,305	7,461	65,853
Anad. Fish Commercial	M $	3,082	4,220	4,288	3,870	2,907	18,367
Anadromous Fish Sport	M $	20,6800	22,994	21,612	18,660	14,064	98,010
Coldwater Fish	M $	26,422	23,213	19,118	14,738	12,536	96,027
Range	M $	12,960	8,746	5,868	3,955	2,674	34,203
Timber	M $	92,146	84,069	54,434	31,342	20,616	282,607
Minerals	M $	3,925	3,392	2,290	1,548	1,046	12,201

COSTS	UNIT OF MEASURE	TIME PERIODS (DECADES) 1	2	3	4	5	TOTAL
Total Forest Budget	M $	40,259	27,141	16,748	11,310	7,656	103,114
Fixed Costs							
Protection	M $	4,195	2,828	1,913	1,292	875	11,103
GA	M $	6,752	4,552	3,080	2,080	1,408	17,872
Variable Costs							
Investment Costs							
Timber Roads	M $	12,213	8,304	3,939	3,533	3,670	31,719
Other Roads	M $	3,882	2,617	270	182	123	7,074
Investment Other	M $	26,071	13,133	10,938	8,193	6,156	64,491
Total Investment	M $	42,166	24,114	15,146	11,908	9,949	103 283
Operational Costs	M $	16,796	11,323	7,662	5,174	3,502	44,457
Non-Forest Service Costs	M $	91,717	67,165	44,163	29,247	18,702	250,994

PNV (M $) = 259,745

PVC (M $) = 427,710

PVB (M $) = 687,455

TABLE II-2A PRESENT NET VALUE AND PRICED OUTPUTS
BENCHMARK - MAXIMIZE RANGE
(DISCOUNTED AT 4%)

BENEFITS	UNIT OF MEASURE	TIME PERIODS (DECADES) 1	2	3	4	5	TOTAL
Wilderness Recreation	M $	1,159	866	585	395	267	3,272
Dispersed Recreation	M $	3,081	2,597	1,754	1,185	801	9,418
Developed Recreation	M $	2,847	2,493	1,684	1,138	769	8,931
Wildlife	M $	18,531	15,470	12,617	10,163	7,712	47,815
Anad Fish Commercial	M $	3,057	4,203	4,273	3,855	4,283	19,671
Anadromous Fish Sport	M $	20,624	23,873	21,926	18,640	14,013	98,076
Coldwater Fish	M $	25,952	22,890	18,663	14,575	12,427	117,397
Range	M $	13,041	9,195	6,331	4,413	2,983	94,507
Timber	M $	78,659	55,408	34,625	24,653	17,814	211,159
Minerals	M $	3,925	3,392	2,290	1,548	1,046	12,201

COSTS	UNIT OF MEASURE	TIME PERIODS (DECADES) 1	2	3	4	5	TOTAL
Total Forest Budget	M $	40,529	26,982	16,550	11,118	7,526	102,712
Fixed Costs							
Protection	M $	4,795	2,828	1,913	1,292	875	11,703
GA	M $	6,752	4,552	3,080	2,080	1,408	17,872
Variable Costs							
Investment Costs							
Timber Roads	M $	2,616	4,006	4,987	2,834	1,630	16,068
Other Roads	M $	3,882	2,617	270	182	123	7,074
Investment Other	M $	19,859	12,956	8,701	5,177	3,115	49,808
Total Investment	M $	26,358	19,579	13,952	8,193	4,868	72 950
Operational Costs	M $	18,830	12,837	8,686	5,866	3,970	50,189
Non-Forest Service Costs	M $	67,440	47,716	31,062	21,520	14,532	182,270

PNV (M $) = 287,473

PVC (M $) = 334,974

PVB (M $) = 622,447

TABLE II- 2A. PRESENT NET VALUE AND PRICED OUTPUTS
BENCHMARK - MAXIMIZE WILDERNESS
(DISCOUNTED AT 4%)

BENEFITS	UNIT OF MEASURE	TIME PERIODS (DECADES) 1	2	3	4	5	TOTAL
Wilderness Recreation	M $	32,043	26,123	17,638	11,918	8,056	95,778
Dispersed Recreation	M $	5,653	4,713	3,182	2,150	1,453	17,151
Developed Recreation	M $	2,190	1,836	1,240	838	566	6,670
Wildlife	M $	20,226	17,043	13,601	10,778	8,401	70,049
Anad. Fish Commercial	M $	3,098	4,236	4,303	3,883	2,915	18,435
Anadromous Fish Sport	M $	20,745	23,093	21,675	18,685	14,081	98,279
Coldwater Fish	M $	26,463	23,328	18,104	13,823	11,320	93,038
Range	M $	12,716	7,979	5,014	3,388	2,290	31,387
Timber	M $	9,521	6,565	4,225	2,995	2,024	25,330
Minerals	M $	1,217	1,096	740	500	338	3,891

COSTS	UNIT OF MEASURE	TIME PERIODS (DECADES) 1	2	3	4	5	TOTAL
Total Forest Budget	M $	33,920	22,845	13,775	9,303	6,297	86,140
Fixed Costs:							
Protection	M $	4,195	2,828	1,913	1,292	875	11,103
GA	M $	6,752	4,552	3,080	2,080	1,408	17,872
Variable Costs:							
Investment Costs							
Timber Roads	M $	557	381	127	278	53	1,396
Other Roads	M $	3,882	2,617	270	182	123	7,074
Investment Other	M $	3,021	1,923	1,267	840	535	7,586
Total Investment	M $	7,461	4,922	1,663	1,300	711	16.057
Operational Costs	M $	17,099	11,647	7,881	5,322	3,603	45,552
Non-Forest Service Costs	M $	6,744	4,569	3,188	2,275	1,635	18,411

PNV (M $) = 351,014

PVC (M $) = 108,994

PVB (M $) = 460,008

TABLE II-2A PRESENT NET VALUE AND PRICED OUTPUTS
BENCHMARK - MINIMUM WILDERNESS
(DISCOUNTED AT 4%)

BENEFITS	UNIT OF MEASURE	TIME PERIODS (DECADES) 1	2	3	4	5	TOTAL
Wilderness Recreation	M $	11,605	8,631	5,828	3,938	2,662	32,664
Dispersed Recreation	M $	12,862	10,845	7,322	4,947	3,345	39,321
Developed Recreation	M $	2,603	2,274	1,536	1,038	701	8,152
Wildlife	M $	20,024	16,856	14,023	12,013	10,137	73,053
Anad. Fish Commercial	M $	3,139	4,302	4,366	3,940	2,958	18,705
Anadromous Fish Sport	M $	21,694	24,205	22,533	19,518	14,644	102,594
Coldwater Fish	M $	27,274	24,046	19,577	15,253	12,977	99,127
Range	M $	12,960	8,932	6,131	4,140	2,799	34,962
Timber	M $	50,947	35,149	22,478	15,210	10,838	134,622
Minerals	M $	3,925	3,392	2,290	1 548	1,046	12,201

COSTS	UNIT OF MEASURE	TIME PERIODS (DECADES) 1	2	3	4	5	TOTAL
Total Forest Budget	M $	38,250	25,531	15,670	10,556	7,142	97,149
Fixed Costs							
Protection	M $	4,195	2,828	1,913	1,292	875	11,103
GA	M $	6,752	4,552	3,080	2,080	1,408	17,872
Variable Costs							
Investment Costs							
Timber Roads	M $	3,621	2,060	697	1,630	266	8,274
Other Roads	M $	3,882	2,617	270	182	123	7,074
Investment Other	M $	10,246	7,283	4,624	3,136	1,811	27,100
Total Investment	M $	17,749	11,960	5,590	4,948	2,200	42 447
Operational Costs	M $	18,500	12,615	8,535	5,764	3,902	49,316
Non-Forest Service Costs	M $	36,655	24,914	17,367	11,508	8,842	99,186

PNV (M $) = 335,476

PVC (M $) = 219,925

PVB (M $) = 555,401

TABLE II-2B. PRESENT NET VALUE AND NONPRICED OUTPUTS
(In 1982 Dollars) 4% Discount Rate

BENCHMARKS	M$ PNV	M$ PVC	M$ PVB	TIMBER SUITABLE LANDS M ACRES	PROPOSED WLD. M ACRES	SEMI-PRIM. NON-MOTOR ROS CLASS M ACRES	ROAD MTCE. MI/YR	PROJECTED POP. ELK/YEAR M ANIM.	PROJECTED POP. DEER/YEAR M ANIM.	ANAD. FISH SPORT M LBS.
Minimum Level	307,548	44,195	351,743	0	0	N/A	0	- - - - Not estimated - - -		
Max PNV/Assigned Prices	344,749	128,948	473,697	63.4	768,419	N/A	560	9.1	61.4	714
Max PNV/Market Prices	317,969	215,989	533,958	179.4	0	N/A	560	6.5	54.7	693
Maximize Timber	259,747	427,710	687,457	359.2	0	N/A	560	7.2	56.4	702
Maximize Range	287,473	334,974	622,447	321.7	0	N/A	560	7.7	54.8	699
Max Wilderness	351,014	108,994	460,008	31.4	1,392,135	N/A	560	8.6	58.6	704
Min Wilderness	335,476	219,925	555,401	173.4	0	N/A	560	9.3	62.9	714

Table II-3 Prices of Outputs Included in PNV Analysis

VALUES OF OUTPUTS
INCLUDED IN
ECONOMIC EFFICIENCY ANALYSIS
(1978 DOLLARS INFLATED TO 1/1/82)

SOURCE	RESOURCE	OUTPUT MEASURE	BENEFIT VALUE OR PRICE
R-4	Lease Rentals Energy & Non-energy	Acres/Year	$ 1.00
RPA	Livestock Use	AUM's	14.06
RPA	Developed Recreation Use	RVD	3.99
RPA	Dispersed Recreation Use	RVD	3.99
RPA	Wilderness Recreation Use	RVD	10.64
RPA	Big Game Hunting	WFUD	30.72
RPA	Water Fowl Hunting	WFUD	42.56
RPA	Small Game Hunting	WFUD	35.64
RPA	Upland Game Hunting	WFUD	36.18
RPA	Nature Study (Non-game)	WFUD	38.57
Forest	Combined Weighted Wildlife Recreation Use 1/	WFUD	32.56 (28.57) 2/
RPA	Cold Water Fishing	WFUD	23.75 (19.75) 2/
RPA	Anadromous Sport Fishing	WFUD	75.48 (71.49) 2/
RPA	Anadromous Commerical Fishing	POUND	2.45
RPA	Fuelwood Harvest	MCF	39.90
FOREST	Roundwood Harvest	MCF	204.58
TIMBERVAL	Douglas-fir Sawtimber (Selling Price Log Scale):		
	7" to 9" DBH	MCF	821.28
	9" to 11" DBH	MCF	1291.04
	11" to 13" DBH	MCF	1475.01
	13" to 15" DBH	MCF	1501.29
	15" to 17" DBH	MCF	1537.43
	17" to 19" DBH	MCF	1570.28
	19" to 21" DBH	MCF	1603.13
	21" to 23" DBH	MCF	1632.69
	Lodgepole Sawtimber (Selling Price Log Scale):		
	4" to 6" DBH	MCF	1067.99
	6" to 8" DBH	MCF	1085.55
	8" to 10" DBH	MCF	1094.32
	10" to 12" DBH	MCF	1103.10
	12" to 14" DBH	MCF	1106.03
	14" to 16" DBH	MCF	1228.92
	16" to 18" DBH	MCF	1351.81
	18" to 20" DBH	MCF	1372.29

1/ A weighted value for wildlife recreation use was computed using the stated RPA values, weighted by percent of total recreation use observed for these categories in 1981. To avoid double valuation (Wildlife & Recreation) the RVD value ($3.99) was subtracted from the combined weighted Wildlife Recreation use value ($32.56-$3.99). $28.57 was used as the equivalent WFUD value in the FORPLAN Model.

2/ Calculations after recreation visit or day value is removed to avoid double valuation.

TABLE II-4 *WILDERNESS PROPOSALS*

ROADLESS AREA NAME	NUMBER	TOTAL ACRES	BENCHMARKS (1) MIN LEVEL	(2) MAX-PNV ASSIGN	(3) MAX-PNV MARKET	(4) MAX TM	(5) MAX RNG	(6)* MAX WILDER-NESS	(7) NO WILDER-NESS	ALTERNATIVES #1 NO ACT CURRENT PROG	#2 MARKET EMPH	#3 NON-MKT EMPH	#4 1980 RPA PROG	#5 MKT & NON-MKT MIX	#6 CONSTR (-25%) BUDGET	#7 CUR PROG CONSTR BUDGET	#9 HIGH WILD COMMODITY EMPHASIS	#10 CURR PROG UNCONST. BUDGET	#11 1980 RPA MODIFIED (PREFERRED)
Camas Creek	901	63,949	0	49,974	0	0	0	63,949	0	0	0	0	0	0	0	0	63,949	0	0
Taylor Mountain	902	14,940	0	14,940	0	0	0	14,940	0	0	0	0	0	0	0	0	14,940	0	0
Lemhi Range	903	149,629	0	149,629	0	0	0	149,629	0	93,000	0	149,629	0	0	0	0	149,629	0	0
Challis Creek	004	41,354	0	41,354	0	0	0	41,354	0	0	0	0	0	0	0	0	41,354	0	0
Squaw Creek	005	96,987	0	68,871	0	0	0	96,987	0	0	0	0	0	0	0	0	0	0	0
Spring Basin	006	5,000	0	607	0	0	0	5,000	0	0	0	0	0	0	0	0	0	0	0
Greylock	007	12,605	0	12,605	0	0	0	12,605	0	0	0	0	0	0	0	0	12,605	0	0
Loon Creek	908	106,758	0	56,823	0	0	0	106,758	0	0	0	0	0	0	0	0	106,758	0	0
Seafoam	009	28,442	0	28,442	0	0	0	28,442	0	0	0	0	0	0	0	0	0	0	0
Grouse Peak	010	7,985	0	0	0	0	0	7,985	0	0	0	0	0	0	0	0	0	0	0
Pahsimeroi Mountain	011	72,107	0	0	0	0	0	72,107	0	0	0	44,617	0	0	0	0	44,617	0	0
Borah Peak	012	129,581	0	129,581	0	0	0	129,581	0	119,675	0	129,581	0	119,675	41,000	119,675	129,581	116,000	119,000
King Mountain	013	82,695	0	0	0	0	0	82,695	0	0	0	82,695	0	0	0	0	82,695	0	0
Jumpoff Mountain	014	13,337	0	0	0	0	0	13,337	0	0	0	0	0	0	0	0	0	0	0
Hanson Lakes	915	13,719	0	0	0	0	0	13,719	0	0	0	0	0	0	0	0	13,719	0	0
Red Mountain	916	5,189	0	0	0	0	0	5,189	0	0	0	0	0	0	0	0	5,189	0	0
Porphyry Peak	017	45,273	0	16,610	0	0	0	45,273	0	0	0	0	0	0	0	0	0	0	0
Copper Basin	019	10,402	0	0	0	0	0	10,402	0	0	0	0	0	0	0	0	0	0	0
Boulder-White Cloud	920	134,754	0	95,053	0	0	0	134,754	0	0	0	134,754	0	0	0	0	134,754	6,000	34,000
Pioneer Mountains	921	169,420	0	49,620	0	0	0	169,420	0	44,369	0	169,420	0	44,369	0	0	169,420	38,000	48,000
Railroad Ridge	922	7,532	0	0	0	0	0	7,532	0	0	0	0	0	0	0	0	0	0	0
Blue Bunch	923	7,472	0	0	0	0	0	7,472	0	0	0	0	0	0	0	0	7,472	0	0
Warm Creek	024	7,516	0	0	0	0	0	7,516	0	0	0	0	0	0	0	0	0	0	0
White Knob	025	62,416	0	45,376	0	0	0	62,416	0	0	0	0	0	0	0	0	0	0	0
Cold Springs	026	8,934	0	8,934	0	0	0	8,934	0	0	0	0	0	0	0	0	0	0	0
Red Hill	027	14,274	0	0	0	0	0	14,274	0	0	0	0	0	0	0	0	0	0	0
Wood Canyon	028	7,626	0	0	0	0	0	7,626	0	0	0	0	0	0	0	0	0	0	0
Diamond Peak	601	72,239	0	0	0	0	0	72,239	0	0	0	72,239	0	0	0	0	72,239	0	0
Total Acres		1,392,135	0	768,419	0	0	0	1,392,135	0	257,044	0	782,935	0	164,044	41,000	119,675	1,048,821	160,000	201,000
Percent of Wilderness Benchmark			0%	55%	0%	0%	0%	100%	0%	18%	0%	56%	0%	12%	3%	9%	75%	11%	14%
Percent of Total Forest Including FC-RONRW (782,255 acres)			31%	62%	31%	31%	31%	86%	31%	41%	31%	62%	31%	38%	33%	36%	73%	37%	39%

TOTAL FOREST ACRES = 2,516,191

*Maximum Wilderness benchmark is the same as Alt #8

C. THE ALTERNATIVES

The eleven alternatives described in this section provide a range of reasonable management options sufficient to address the major issues, concerns and opportunities described in Chapter I, in compliance with NFMA regulations 36 CFR 219.12(f). Each of the alternatives considered in detail incorporates management prescriptions that ensure "multiple use" management and environmental protection. All benefit and cost figures displayed for the alternatives are in 1982 dollars.

Proposals to designate wilderness are preliminary, subject to review by the Chief of the Forest Service, Secretary of Agriculture, and the President, and ultimately must be approved by Congress.

FORPLAN was used to project activities and outputs for benchmarks and alternatives based on information contained in the AMS. Costs for most management activities were held constant throughout the planning period.

Outputs were generally estimated based on the expected influence of management activities. Some outputs were held constant after two periods either because longer term increases were not expected, as in oil and gas leasing, or where confidence in longer range projections was low, as in changes in total numbers of RVDs. Range and wildlife outputs were not held constant until after the 4th or 5th periods to show trends that are not apparent during shorter time intervals. Economic and population changes will influence these outputs more than the influence from management practices.

ALL ALTERNATIVES

Wilderness

The Frank Church--River of No Return Wilderness Plan would be followed in each alternative to the extend funding allows.

Transmission and Utility Corridors

Appendix D discusses corridor planning and designation. This discussion applies to all alternatives. Only exclusion areas resulting from wilderness designation proposals will vary among alternatives. No corridors are designated under any alternative.

Oil and Gas Leasing

Mineral leasing of lands administered by the Forest Service occurs at the discretion of the Bureau of Land Management (BLM). Recommendations for inclusion of surface protection stipulations are made to the BLM by the Forest Service. Response to an offer to lease lands for oil and gas may be: 1) issuance of the lease with only standard Forest Service supplemental stipulations Form 3109-3 and Form 3109-3A (see Appendix E); 2) issuance with one or more additional special stipulations attached that restrict types or times of occupancy (see Appendix E); 3) issuance with no occupancy allowed anywhere on the lease at any time; 4) defer issuing the lease until a later date; or 5) rejection of the offer to lease.

These responses could be combined and/or grouped in the following Forest-wide options for responding to lease applications:

Option A - RECOMMEND GRANTING ALL LEASES WITH STANDARD STIPULATIONS ONLY: Under this option, the Forest Service would recommend to the BLM that all oil and gas leases be issued with standard stipulations only. Special resource protection needs would be identified at the time activity proposals are received, and measures to protect special values would be required as a condition of project or activity permits. There would be no option to deny leases, or portions of leases, under this alternative. Lease activities could conflict with current Land and Resource Management Plan direction.

Option B - RECOMMEND GRANTING LEASES WITH STANDARD AND SPECIAL STIPULATIONS TO COMPLY WITH LAND MANAGEMENT PLANS: Under this option, the Forest Service would recommend to BLM that present and future lease applications be granted with the inclusion of special protective stipulations tailored for each lease parcel. The need for special stipulations would be based on other resource concerns identified in the Challis National Forest Land and Resource Management Plan. Leases, or lease portions, could be denied where they are incompatible with the Land and Resource Management Plan.

Option C - RECOMMEND GRANTING LEASES WITH STANDARD AND SPECIAL STIPULATIONS, AND DEFER OR DENY OTHER LEASES, OR PORTIONS OF LEASES, FOR SPECIFIC REASONS: Under this option, the Forest Service would analyze oil and gas lease applications received, and would recommend to the BLM: 1) leases, or lease portions, be granted with standard stipulations and appropriate special surface protection stipulations for lands suitable for oil and gas activities and development; 2) leases, or lease portions, be denied in instances where oil and gas activities or development would cause significant resource damage or are not compatible with surface resources or uses identified in the Challis National Forest Land and Resource Management Plan, or 3) leases, or lease portions, be deferred for specific reasons such as areas being considered for exchange, withdrawal, or Research Natural Areas, or being recommended for Wilderness designataion. The Forest data base contains maps and other information identifying various resource concerns addressed by special stipulations.

Option D - No-ACTION: National Environmental Policy Act regulations require that a "No Action" alternative be considered. Under this option, the Forest Service would not make any recommendations to the BLM on pending or future oil and gas lease applications. This option is in conflict with Forest Service policy requiring action on lease applications in a timely manner and with the various laws directing responsibility for mineral leasing. If the Forest Service does not act on lease applications, the BLM has authority, on land reserved from the public domain and administered by the Forest Service, to issue the leases without Forest Service recommendations.

Option E - RECOMMEND AGAINST ISSUING ALL LEASES: Under this option, the Forest Service would recommend to the BLM that oil and gas leases not be issued. Management activities would continue in much the same was as they are at the present time without any provisions for gas and oil exploratory drilling and development. Lands administered by the Forest Service would be subject to withdrawal proceedings required in Federal Land Policy and Management Act.

This option does not meet the intent of the mineral leasing acts and

is contrary to Forest Service policy against recommending lease denial unless sound management reasons exists. If the Forest Service reasons for lease denial are not sound, the BLM has the authority to override Forest Service recommendations on land reserved from the public domain and issue the leases.

Option F - MAKE RECOMMENDATIONS ON LEASES OVER TIME: Under this option, the Forest Service would make recommendations on lease applications to BLM over an extended period. Lease evaluations would be scheduled to ensure oil and gas activities would not exceed the administrative capability of the Challis National Forest and to ensure activities are compatible with community resources.

This option is inappropriate because there does not appear to be an equitable way to determine which applications should be processed and which should be deferred. Deferring action on some leases would unjustifiably put those prospective leaseholders at a competitive disadvantage since the lack of leasing rights would preclude exploratory work necessary to compete for production.

Options A and B would, in many cases, provide inadequate safeguards for surface resources. Social and economic effects could be greater than under other options if higher levels of activity result from relatively few constraints.

Option C balances oil and gas exploration and development with the need to safeguard other resources. Oil and gas related activities may occur at a slower rate and require more planning than under options A and B. Effects on other resources should be less than under options A and B.

Options D and E are contrary to policy and, depending on the BLM decision to proceed with leasing, could result in impacts to other resources or unnecessary limitations on oil and gas activities.

Option F could result in arbitrary processing of lease applications and inefficient exploration activities. BLM could also issue leases without Forest Service recommendations resulting in impacts similar to options D and E.

Option C is most responsive to oil and gas lease applications while providing needed safeguards to protect other resources. This option is applied under each alternative. Resource conditions which may be impacted by oil and gas activities and special stipulations that address these resource concerns are displayed in Appendix E. The stipulations identified will be attached to oil and gas leases and exploration permits as appropriate. When specific proposals for drilling or other significant surface disturbance, such as road construction are received, a project specific EA will be prepared.

Riparian Areas

The importance of riparian areas on the Forest have been recognized and given emphasis. Management direction for their protection and/or improvement is the same for all alternatives.

ALTERNATIVE 1- NO ACTION (CURRENT PROGRAM)

This alternative would continue the current trend of goods and services produced by the Forest [Table II-6 (1)]. The budget would be constrained to the level necessary to support this trend.

Recreation

This alternative would continue low levels of developed site maintenance. Sites would deteriorate to the extent that all or parts of sites would have to be closed. Low use, high maintenance cost sites would be closed first. On these sites, improvements such as water systems, toilets, tables, traffic controls, and vegetation would be lost due to our inability to replace them. Some sites, including fee sites, would be managed at a reduced service level and fees would only be collected on 25 percent of the PAOT's. Developed site use would exceed capacity by 1990. This is due to an expected increase in demand and a decrease in facilities as mentioned above. Use would shift from developed sites to the dispersed areas.

Developed sites would probably be started by 1990. Developed site capacity would be reduced by 28 percent by 2030.

Dispersed recreation use would continue to increase. Dispersed recreation would be emphasized over developed recreation, but would still be managed at a reduced service level. No new trails or trailheads would be built. Most trails would be maintained at Level I; limited mileage would receive Level II maintenance. Many of the least-used trails would be in an unsafe condition by the end of the planning period.

Cultural Resources

The Forest would emphasize the inventory of proposed projects in high and moderate sensitivity areas. This would gradually increase the number of known sites, but would not reduce the number of unevaluated sites nor provide monitoring of project effects to unevaluated sites. The Forest would probably not develop plans for the stabilization and enhancement of historic cultural resource sites or the interpretation and scientific study of prehistoric sites. Avoidance would be the preferred method of mitigation of project impacts, except where avoidance or protection would be unfeasible. A comprehensive Forest-wide cultural resource overview would be compiled within the first decade.

Wilderness

This alternative would propose the following roadless areas be designated as wilderness areas:

Lemhi Range (partial)		93,000 acres
Borah Peak (partial)		119,675 acres
Pioneer Mountains (partial)		44,369 acres
	TOTAL	257,044 acres

This, with the existing Frank Church--River Of No Return Wilderness, places a total of 1,039,299 acres, or 41 percent of the Forest, under wilderness management.

Based on the recent roadless area review and the need for manageable boundaries, some modification would be made, adjusting the acres slightly. This analysis does not attempt to define those possible modifications.

These areas will be managed at less than full service levels. Most of the trails in these areas will be maintained at Level I with very few above Level I.

The Middle Fork of the Salmon River (Wild and Scenic River) and the Frank Church -- River of No Return Wilderness will be managed according to the approved Wilderness Management Plan.

Timber

Average allowable sale quatities of sawtimber would be 3.5 MMBF per year for the first decade and then increased to 5.0 MMBF per year in the 2nd through 5th decade.

Decade:	1st	2nd	3rd	4th	5th
MMBF/Yr:	3.5	5.0	5.0	5.0	5.0

Annually, 85 MBF of roundwood products would be offered. Fuelwood offered would be 1.9 MMBF per year.

Road construction/reconstruction needs for sawtimber access would be as follows:

Decade:	1st	2nd	3rd	4th	5th
Miles/Year:	1.8	2.2	2.5	4.6	6.1

In combination with the harvest road system, 0.75 mi/yr of fuelwood access may be needed.

Douglas-fir would be the primary species harvested. Conventional tractor methods would be used for harvest.

Insect and disease problems would remain at the current levels.

Range

Range administration and allotment management would continue at the present level of management through the planning period, but with greater emphasis on efficiency.

Permittees would be required to cooperate and participate in the range improvement program to maintain the AUM outputs. The noxious farm weed control program would continue at its present low level of activity. Livestock use (AUM's) would remain at current levels with increased forage production used to relieve livestock impacts on riparian areas, wilderness and other resource values. This alternative maintains the current economic stability of family ranch operations and the local economy.

Allotment management plans would be developed on the remaining 32 allotments without approved plans, as time permits. The Forest would continue with the Experimental Stewardship Program and expand the Stewardship concept.

Wildlife and Fish

The Forest would continue to provide habitat to ensure viability and recovery of Threatened and Endangered and Forest Service Sensitive plants and animals.

Habitat required to meet Idaho Department of Fish and Game objectives for Management Indicator fish and wildlife species would be met.

All Management Indicator Species would increase in number. Wildlife habitat capability would increase slowly. Habitat capability for anadromous and resident fish would be maintained or improve slowly. Existing anadromous fish populations are well below present habitat capability and would have the potential to increase because of mitigation at Columbia River dams, increased hatchery production, and improved overall coordination through the Northwest Power Planning Act.

Wildlife associated recreation use (Wildlife & Fish User Days or WFUD's) would increase significantly over the 50 year period. This would become increasingly important to the local economy.

Habitat improvement programs for fish and wildlife would be sustained at approximately present levels.

Coordination efforts with timber, range, and minerals would be met.

Minerals and Energy Development

The projected demand for minerals and energy resources known or believed to be located on the Forest would increase in the future. The acreage disturbed by exploration and development is a valid use of National Forest lands subject to proper use or occupancy for valid mining purposes. The Forest would continue to respond to approximately 130 annual requests from industry for leases, permits, licenses, and notices of intent. It is assumed that there would be one large scale project in the planning and development stage at any one time. Responses to major proposals from other agencies and industry would be accomplished through adjustment of the Forest programs, special appropriations, or funding from the applicant.

The Forest would be able to respond to minor increases in mineral activity and maintain complete services. For energy projects, there would be very limited services. Lease applications would be processed as described in Appendix E. Evaluation of site specific oil and gas exploration and development proposals could require funding adjustments.

Withdrawals and legislative requirements associated with the Frank Church--River of No Return Wilderness restricts mineral entry on 782,255 acres of National Forest System lands. Congressional designation of wilderness under this alternative could restrict mineral activities on an additional 257,044 acres. All types of mineral withdrawals would result in a total of 1,039,599 acres or 41 percent of the Forest being placed in a land classification restricting mineral entry.

Lands

The program would continue to be responsive to most special use proposals. The withdrawal reviews would be completed by 1989 as required. Rights-of-way and Small Tracts Act proposals would be processed as needed or scheduled. Only land exchanges for school sections would be considered.

The issuing of special use permits would increase because of the increases in mineral activity, small hydroelectric projects, and requests for electronic sites and/or sharing of established facilities owned by others.

Inspection frequencies would be less than mandated and could even decrease due to an increase in the above mentioned activities. Property boundary marking/posting would be completed after 2020.

The Iron Bog and Meadow Canyon Research Natural Areas would be retained. Establishment reports would be written and submitted, recommending designation of nine additional Research Natural Areas during the first decade.

Soil and Water

Water quality and soil productivity would improve slowly. Present needs for watershed improvement would be met by the year 2005. There would be small increases in sediment delivery to critical stream reaches with sediment levels within threshold limitations. Best Management Practices would be implemented and monitored in areas that have intensive management activities. Watershed protection would be coordinated with local and State agencies. Soil and water resource inventories would be conducted on approximately 30,000 to 40,000 acres per year. This would not meet nationally established soil resource inventory goals. Forest activities in riparian areas would remain moderate. Forest-wide riparian condition should improve slightly. No significant change in water yield would occur.

Fire Management

Fire occurrence within the Forest boundary would continue at past levels of about 35 lightning-caused fires and 15 man-caused fire annually. Over time, man-caused fire occurrence would increase as the number of forest users increase. During the period 1970-1979, man-caused fires accounted for over 70 percent of the area burned and as well as 70 percent of the suppression costs; thus, small increases in man-caused fire occurrence could significantly affect burned area and suppression costs.

The Fire Protection Program would be consistent with the cost effective program selected by the Forest from the Level II Fire Planning process. Based on this process, total protection costs would average about $970,000 annually, with burned area averaging 170 acres. Over time, burned area and protection costs would increase with the increase in man-caused fire occurrence. Total protection costs as used in this paragraph includes presuppression and suppression costs and accounts for any benefits or damages to burned area.

Area Fire Management Plans would be developed for the Frank Church--River of No Return Wilderness during the first decade. Area fire management plans for several other priority areas on the Forest would be developed during the first decade.

Cooperative Fire Protection Agreements with other agencies would remain in effect. The Forest would continue to protect over 1,000,000 acres of BLM administered lands. Fire occurrence on these lands from 1970-1979 averaged three lightning-caused fires and seven man-caused fires annually, with burned area averaging 180 acres. Total annual protection costs are estimated at $75,000 based on a $40,000 presuppression program. Again, burned area and protection costs will increase with an increase in man-caused fire occurrence.

Transportation

Emphasis would be on maintaining a safe, functional, environmentally sound transportation system. In the first three decades, 100 percent of reconstruction needs would be completed. Projects in the last decades would consist of deferred maintenance items and some reconstruction. Reconstruction needs have been identified as 347 miles of arterial/collector roads and 55.8 miles of local roads.

New construction of arterial, collector and local roads not associated with timber would be limited.

Road maintenance could be accomplished on approximately 480 miles per year over the planning period in conjunction with the reconstruction program.

F.A. & O. Facilities

Facility maintenance would be at the minimum level necessary to meet public health and safety standards. Maintenance could arrest deteriorating conditions, but would not allow improvement other than one small project per year. Construction projects would require special funding.

All water and sewer systems would be brought to State standards. Airfields would be brought to safe standards and maintained. Expenditures would be based on the following priority: 1) Correction of health and safety deficiencies, 2) Structural deficiencies, 3) Protection of investment, and 4) Maintaining an acceptable public appearance.

TABLE II-6 (1) ALTERNATIVE 1 - NO ACTION (CURRENT PROGRAM). PROJECTED CHALLIS NATIONAL FOREST PROGRAM OUTPUTS, ACTIVITIES, BENEFITS & COSTS

OUTPUT/ACTIVITY	UNIT OF MEASURE PER YEAR	TIME PERIODS (DECADES) 1986-1995	1996-2005	2006-2015	2016-2125	2026-2035	2036-2085	2086-2135	2136-2185
RECREATION 1/									
Wilderness Use (ROS I)	MRVD	180 0	203 5	203 5	203 5	203 5			
Dispersed Use (ROS II & III)	MRVD	355.3	443 0	443 0	443 0	443 0			
Developed Use (ROS IV)	MRVD	77.7	100.5	100 5	100 5	100 5			
WILDERNESS									
Management	M Acres	1039 2	1039 2	1039.2	1039.2	1039 2			
WILDLIFE AND FISH									
Structural Habitat Improve	Struct	25	25	25	25	25			
Non-Struc. Habitat Improve.	Acres	505	505	505	505	505			
Anad. Fish Commercial	M # Lbs	156	315	474	633	703			
Anadromous Fish Sport	M WFUD	36.6	60 6	83 7	107 3	119 3			
Coldwater Fish	M WFUD	165	215	247 6	279 9	339 2			
Wildlife Use	M WFUD	87 3	109 1	127 2	145 9	163 5			
Populations									
Deer	M Animals	24 6	31 4	39 3	48 2	58 6			
Elk	M Animals	5 5	6 8	7 9	8 1	8.3			
Bighorn Sheep	M Animals	0 9	1 7	2 4	3 2	3 9			
Mountain Goat	M Animals	0 6	0 7	0.7	0 8	1 0			
Red Squirrel	M Acres	342 0	341 7	335.3	331 1	325 9			
RANGE									
Grazing Use (Livestock)									
Actual Use (Projected)	M AUM	112 7	113 2	112 2	112 2	112 2			
Permitted Use (Projected)	M AUM	115	115	114	114	114			
TIMBER									
Allowable Sale Quantities	MMCF	0 8	1 1	1 1	1.1	1 1	1 1	1.1	1 1
	MMBF	3 5	4.9	4 9	4 9	4 9	5 0	5 0	5 0
Roundwood Products 2/	MMCF	0.02	0 02	0 02	0 02	0 02	0 02	0.02	0 02
	MMBF	0 09	0 09	0 09	0 09	0.09	0 09	0 09	0.09
Reforestation	Acres	747	1060	938	937	875	885	549	564
Timber Stand Improvement	Acres	69	0	0	0	0	0	0	0
Fuelwood (Dead & Green)	MCF	420	420	420	420	420	420	420	420
SOIL AND WATER									
Meets or exceeds State Stds	M Ac Ft	2463	2463	2463	2463	2463			
Meets Water Quality Goals 3/	M Ac Ft	2365	2365	2463	2463	2463			
Soil & Water Resource Imp	Acres	103	97	0	0	0			
MINERALS									
Leases	No. Leases	143	184	184	184	184	184	184	184
HUMAN RESOURCE PROGRAMS	Pers. Yrs	17	17	17	17	17	17	17	17
FACILITIES									
Trail Const/Reconstruction	Miles	0	0	0	0	0			
Road Reconstruction (Arterial & Collector)	Miles	10 8	16.2	8 1	1 0	1 0			
Local Road Construction 4/	Miles	0 7	0 7	0 7	0 7	0 7			
Local Road Reconstruction	Miles	1 4	2.6	1 3	8	8			
Timber Purch. Road Constr	Miles	1.8	1 1	1 8	3.5	3 9			
Timber Purch Road Reconstr.	Miles	0	1.1	0 7	1.1	2 2			

1/ Recreation Outputs are not duplicated within the ROS Classes (ROS - Recreation Opportunity Spectrum)

2/ Incidental amounts of roundwood products that may be offered dependent upon demand. These volumes are not included in the allowable sale quantity

3/ Forest water quality goals, which exceed State water quality standards, consist of not exceeding total depth fines of 30%.

4/ Fuelwood roads.

TABLE II-6 (1) ALTERNATIVE 1 - NO ACTION (CURRENT PROGRAM) PROJECTED CHALLIS NATIONAL FOREST PROGRAM OUTPUTS, ACTIVITIES, (Continued)

BENEFITS	UNIT OF MEASURE PER YEAR	TIME PERIODS (DECADES) 1986-1995	1996-2005	2006-2015	2016-2025	2026-2035	2036-2085	2086-2135	2136-2185
Wilderness Recreation	M $	1908	2165	2165	2165	2165			
Dispersed Recreation	M $	1418	1768	1768	1768	1768			
Developed Recreation	M $	310	401	401	401	401			
Wildlife	M $	2496	3116	3634	4170	4670			
Anad Fish Commercial	M $	380	771	1161	1550	1722			
Anadromous Fish Sport	M $	2620	4332	5984	7671	8529			
Coldwater Fish	M $	3261	4252	4890	5528	6699			
Range	M $	1584	1592	1577	1577	1577			
Timber	M $	1246	1784	1784	1784	1784	1784	1614	1605
Minerals	M $	388	490	490	490	490			

COSTS	UNIT OF MEASURE PER YEAR	TIME PERIODS (DECADES) 1	2	3	4	5
Total Forest Budget	M $	3948	4444	4190	4000	4000
Fixed Costs						
Protection	M $	617	617	617	617	617
GA	M $	670	701	700	701	701
Variable Costs						
Investment Costs						
Timber Roads	M $	50 2	61 4	70 0	130 1	168 9
Other Roads	M $	270	460	260	70	70
Investment Other	M $	440 5	484 7	726 2	722 3	689 2
Total Investment	M $	760.9	1006 1	1056 2	922 4	928 1
Operational Costs	M $	2075	2287	2287	2287	2287
Non-Forest Service Costs	M $	857.8	1213 6	1213 6	1213 6	1213 6
Returns to Treasury	M $	967 6	1057 2	1059 3	1057 3	1053 9

ALTERNATIVE 2 - MARKET EMPHASIS

This alternative would emphasize production of timber, livestock, minerals, developed recreation and special uses that have potential to produce income to the Government. Outputs from these resources would take precedence over outputs from such non-market resources as wilderness, wildlife and dispersed recreation [Table II-6 (2)]. This alternative would produce the highest levels of outputs of all alternatives for timber and range, in response to the President's revised statement of Policy on Growth. This alternative also approximates Alternative 9 of the Draft 1985 RPA Program for maximum timber.

Recreation

The Forest would meet the projected demand for developed recreation use on the Forest. Existing high use developed sites would be rehabilitated or reconstructed. Approximately ten new sites would be constructed with priority on new sites near population areas. Single family and group use capacity would be increased. Existing and new sites would be hardened to prevent soil loss, streambank erosion, and loss of vegetation.

The programs at the Custer Museum and Yankee Fork Dredge would be expanded to accommodate an additional 7,000 RVD's expected use.

Dispersed recreation would be managed at reduced service levels. It may diminish in quality due to high levels of timber harvest and grazing activities. Increased timber road construction may reduce the total mileage of system trails. Otherwise, trail conditions will be similar to those under the No Action Alternative.

Cultural Resources

The Forest would emphasize the inventory of proposed projects in high and moderate sensitivity areas. The high number of earth-disturbing activities would greatly increase the number of known sites on the Forest. Some sites may be inadvertently lost or damaged as a result of increased activities. The Forest would not be able to reduce the number of unevaluated sites, and avoidance would be the preferred method of mitigation of project impacts, except where avoidance or protection would be unfeasible. The Forest would place emphasis on the long-term stabilization and enhancement of National Register of Historic Places (NRHP) sites, especially where these sites are compatible with recreation and/or Forest administration, e.g., Custer, Bonanza, the Yankee Fork Dredge, and CCC era structures. A comprehensive Forest-wide cultural resource overview would be compiled within the first decade.

Wilderness

No additional wilderness would be proposed under this alternative. The Frank Church -- River of No Return Wilderness (782,255 acres - 31 percent of the Forest), would be managed in accordance with the approved wilderness management plan.

Timber

Average allowable sale quantities of sawtimber would be 6.6 MMBF per year in the first decade, 10 MMBF per year in the second decade, then 20 MMBF per year throughout the remaining planning period.

Annually, 135 MBF of roundwood products would offered. Fuelwood available would be 1.35 MMBF per year.

The road construction/reconstruction needs for sawtimber access would be as follows:

Decade:	1st	2nd	3rd	4th	5th
Miles/Year:	3.3	7.1	21.1	14.8	12.9

Access to fuelwood would be increased as a result of the road system developed for timber harvest.

Harvest areas are dispersed through a large portion of the commercial timber base. Douglas-fir would be harvested by conventional tractor methods and aerial (cable) methods. Lodgepole pine would only be harvested on areas suitable for conventional tractor methods.

Insect and disease problems would be reduced on areas under intensive management.

Range

Range administration and allotment management would increase slightly above the current level. Livestock use (AUM's) will increase by 9 percent (113,000 to 122,000) over the 50 year planning horizon. The range outputs for Alternative 9 of the 1985 RPA program is 130,000 AUM's which is 8,000 AUM's more than the Forest is capable of producing. Intensive range management systems and range improvements would be necessary to meet this objective. Range outputs would increase the economic stability of local family ranch operations.

Riparian area conditions would be maintained in allotments under intensive management. Riparian area conditions in other areas would be maintained or possibly decline. Noxious weed control would be given more emphasis.

Wildlife and Fish

This alternative would continue to provide habitat to ensure viability of MIS and recovery of Threatened, Endangered and Forest Service Sensitive plants and animals.

State objectives would not be met for bighorn sheep until the 5th decade, for elk after the 3rd decade. All other State objectives would be met.

MIS would be maintained or slowly increase in number. Because of an emphasis on livestock and timber production, wildlife habitat capability would decrease slowly. Habitat capability for anadromous and resident fish would be maintained at current levels. Existing anadromous fish populations are well below current habitat capability and would have the potential to increase because of mitigation at Columbia River dams, increased hatchery production, and improved overall coordination through the Northwest Power Planning Act.

Wildlife associated receation use (WFUD's) would increase moderately over the 50 year period. This would become increasingly important to the local economy.

There would be very few habitat improvement programs for fish and wildlife.

Some coordination efforts with timber, range, and minerals would not be met.

Mineral and Energy Development

The Forest would be able to respond to a moderate increase in mineral activity and maintain complete services. This would provide an adequate level of coordination and ensure that the cumulative effects of increased mineral activities are managed within acceptable levels. It would be anticipated that one large project would be in the planning and development stage at any one time. The Forest would process oil and gas lease applications as described in Appendix E. Major proposals for site-specific exploration and development could require adjustment of the Forest budget, special appropriations, or funding from the proponent.

Withdrawals and legislative requirements associated with the Frank Church -- River of No Return Wilderness would constrain mineral entry on 782,255 acres. Other mineral withdrawal areas would result in 782,555 acres (31 percent) being restricted from mineral entry.

Lands

The Lands Program is the same as that under Alternative 1. Funding to initiate and complete land exchanges with the State of Idaho would be possible. By the end of the fifth decade, all 6,977 acres of State School land should have been acquired. Withdrawal review would be completed by 1989.

The issuing of special use permits would increase because of increases in mineral activities, small hydro-electric projects, and requests for electronic sites. Inspection frequencies would remain at or below present levels. Property boundary marking and posting would be completed by 2020.

The Iron Bog and Meadow Canyon Research Natural Areas would be protected. Nine other research natural areas could be established during the first decade.

Soil and Water

Water quality and soil productivity would decline Forest-wide; however water quality would be within State standards. Use of riparian areas would increase. A decrease in scheduled improvement projects may result in a slight decline in water quality. Small increases in water yield are expected to occur but are assumed to be insignificant. Protection of watershed values, particularly in riparian areas, and mitigation of new watershed impacts would be the responsibility of the resource activity involved in a proposed project. Present needs for watershed improvement would not be met during the planning period. Sediment delivery to critical stream reaches and a limit on total acres disturbed would restrict activities. Soil and water resource inventories would be conducted on 20,000 acres per year.

Fire Management

Fire occurrences within the Forest boundary would continue at recent levels of about 35 lightning-caused fires and 15 man-caused fires annually. Over time, the number of man-caused fires would increase as the number of Forest users increase. During the period 1970-1979, man-caused fires accounted for over 70 percent of the area burned as well as 70 percent of the suppression costs; thus, small increases in man-caused occurrence may significantly affect burned area and suppression costs.

Based on Level II Fire Planning, presuppression and suppression funding levels would result in total protection costs of about $990,000 annually, while burned area would average less than 150 acres. Over time, burned area and protection costs would increase with the increase in man-caused fire occurrence. Total protection costs as used in this paragraph includes presuppression and suppression costs and accounts for any benefits or damages to burned area.

Expertise would be available to obtain data, develop, implement and monitor area fire management plans on large portions of the Forest. This could result in a significant area being subjected to prescribed fire over time.

Cooperative fire protection agreements with other agencies would remain in effect. The Forest would continue to protect over 1,000,000 acres of BLM administered lands. Fire occurrence on these lands from 1970-1979 averaged 3 lightning-caused fires and 7 man-caused fires annually, with burned area averaging 180 acres. Total annual protection costs are estimated at $75,000 based on a $40,000 presuppression program. Again, burned area and protection costs would increase with an increase in man-caused fire occurrence.

Transportation

Emphasis is on maintaining a safe, functional, environmentally sound transportation system serving the needs of market outputs. In the first two decades, 89 percent of the identified reconstruction needs would be completed. Projects in the last two decades will consist of deferred maintenance and some reconstruction. Reconstruction needs have been identified as 347 miles of arterial/collector roads, and 55.8 miles of local roads.

Road maintenance could be accomplished on approximately 560 miles per year over the planning period in conjunction with the reconstruction program. Most arterial and collector roads would be maintained to level 3 standards or better. Most local roads serving commodity outputs would be maintained at level 2.

F.A. & O. Facilities

Facility maintenance would be adequate to ensure that public health and safety standards are met. The maintenance program would allow for repair, maintenance, and some improvement of structures needing repair. Any significant construction projects would have to be specially funded.

All water and sewer systems would be brought to State standards. Airfields would be brought to safe standards and maintained. Expenditures would be prioritized as described in Alternative 1.

TABLE II-6 (2) ALTERNATIVE 2 - MARKET EMPHASIS PROJECTED CHALLIS NATIONAL FOREST PROGRAM OUTPUTS, ACTIVITIES, BENEFITS & COSTS

OUTPUT/ACTIVITY	UNIT OF MEASURE PER YEAR	TIME PERIODS (DECADES) 1986-1995	1996-2005	2006-2015	2016-2025	2026-2035	2036-2085	2086-2135	2136-2185
RECREATION 1/									
Wilderness Use (ROS I)	MRVD	135.0	148 0	148 0	148 0	148 0			
Dispersed Use (ROS II & III)	MRVD	374 0	465.5	465 5	465.5	465.5			
Developed Use (ROS IV)	MRVD	104 0	134 5	134 5	134 5	134 5			
WILDERNESS									
Management	M Acres	782 2	782 2	782 2	782 2	782 2			
WILDLIFE AND FISH									
Structural Habitat Improve	Struct	5	5	5	5	5			
Non-Struc Habitat Improve	Acres	195	195	195	195	195			
Anad Fish Commercial	M # Lbs.	154	313	471	629	699			
Anadromous Fish Sport	M WFUD	35 5	58 4	81 4	104 2	115 8			
Coldwater Fish	M WFUD	162 6	211 8	255 7	255 7	255 7			
Wildlife Use	M WFUD	79	98	119	142	146			
Populations									
Deer	M Animals	24 3	30 7	38 0	46 3	54 8			
Elk	M Animals	5 1	6 1	6 6	6 9	7 0			
Bighorn Sheep	M Animals	0 8	1 3	1 7	2 1	2 4			
Mountain Goat	M Animals	0 6	0 6	0 7	0 7	0 7			
Red Squirrel	M Acres	696 8	678 8	660 9	693 0	625 0			
RANGE									
Grazing Use (Livestock)									
Actual Use (Projected)	M AUM	113 9	117.4	121 7	121 5	121 5			
Permitted Use (Projected)	M AUM	116	119	124	124	124			
TIMBER									
Allowable Sale Quantities	MMCF	1 5	2 2	4 4	4 4	4 4	6 7	6 7	6 7
	MMBF	6 6	10 0	20 0	20 0	20 0	30 0	30 0	30 0
Roundwood Products 2/	MMCF	0 03	0 03	0 03	0 03	0 03	0 03	0 03	0 03
	MMBF	0 14	0 14	0 14	0 14	0 14	0 14	0 14	0.14
Reforestation	Acres	1314	2112	3735	4020	3255	5104	3402	3422
Timber Stand Improvement	Acres	69	0	0	0	0	0	0	0
Fuelwood (Dead & Green)	MCF	500	500	500	500	500	500	500	500
SOIL AND WATER									
Meets or Exceeds State Stds	M Ac Ft	2463	2463	2463	2463	2463			
Meets Water Quality Goals 3/	M Ac Ft	2365	2365	2365	2365	2266			
Soil & Water Resource Imp	Acres	50	20	20	20	20			
MINERALS									
Leases	No. Leases	161	207	207	207	207			
HUMAN RESOURCE PROGRAMS	Pers Yrs	26	26	26	26	26			
FACILITIES									
Trail Const/Reconstruction	Miles	1	1	1	1	1			
Road Reconstruction (Arterial & Collector)	Miles	15 4	15 4	0	0 9	0 9			
Local Road Construction 4/	Miles	0	0	0	0	0			
Local Road Reconstruction	Miles	0 7	0 7	3 3	0 8	0 8			
Timber Purch Road Constr.	Miles	3 3	5 0	17 9	4 1	11 6			
Timber Purch Road Reconstr	Miles	0	2 1	3 2	10 7	1 3			

1/ Recreation Outputs are not duplicated within the ROS Classes (ROS - Recreation Opportunity Spectrum)

2/ Incidental amounts of roundwood products that may be offered dependent upon demand These volumes are not included in the allowable sale quantity.

3/ Forest water quality goals, which exceed State water quality standards consist of not exceeding total depth fines of 30%.

4/ Fuelwood roads

TABLE II-6.(2) ALTERNATIVE 2 - MARKET EMPHASIS. PROJECTED CHALLIS NATIONAL FOREST PROGRAM OUTPUTS, ACTIVITIES, BENEFITS & COSTS (Continued)

BENEFITS	UNIT OF MEASURE PER YEAR	TIME PERIODS (DECADES) 1986-1995	1996-2005	2006-2015	2016-2025	2026-2035	2036-2085	2086-2135	2136-2185
Wilderness Recreation	M $	1431	1575	1575	1575	1575			
Dispersed Recreation	M $	1492	1857	1857	1857	1857			
Developed Recreation	M $	415	537	537	537	537			
Wildlife	M $	2258	2803	3392	4050	4157			
Anad. Fish Commercial	M $	377	767	1154	1541	1712			
Anadromous Fish Sport	M $	2542	4174	5818	7448	8278			
Coldwater Fish	M $	3204	4183	5050	5838	7361			
Range	M $	1607	1651	1712	1708	1708			
Timber	M $	2331	3585	6307	5070	7125	10,070	8850	8725
Minerals	M $	484	619	619	619	619			

COSTS	UNIT OF MEASURE PER YEAR	TIME PERIODS (DECADES) 1	2	3	4	5
Total Forest Budget	M $	4909	4895	4720	6029	4710
Fixed Costs						
Protection	M $	740	740	740	740	740
CA	M $	813	780	740	739	741
Variable Costs						
Investment Costs						
Timber Roads	M $	94 4	198 3	593 5	396.6	363
Other Roads	M $	400	400	70	70	70
Investment Other	M $	644 7	780 8	1308 4	2663.0	1835.6
Total Investment	M $	1139.1	1379 1	1971.9	3129.6	2268 6
Operational Costs	M $	2485	2485	2485	2485	2485
Non-Forest Service Costs	M $	1614.1	2449 3	4856 4	4971 3	5810.2
Returns to Treasury	M $	1400 1	1962 2	2287 9	939 8	2159.4

ALTERNATIVE 3 - NON-MARKET EMPHASIS

This alternative would emphasize non-market resources such as wilderness, wildlife, fish, water, dispersed recreation (backpacking, snowmobiling, cross-country skiing), and visual quality [Table II-6(3)]. It would give development of these non-market outputs priority over market values.

Recreation

Recreation management would emphasize dispersed recreation over developed. Management activities would be directed toward meeting projected demand for quality dispersed recreation through the planning horizon.

Developed Site Management would provide a sufficient level of developed campground capacity to satisfy the current level of recreation use. Most of these sites would be managed at reduced service level. Those used as a base for dispersed recreation and wilderness access would be upgraded and managed as fee sites.

Trailhead camps would be improved and new ones constructed. Sites near wilderness areas would receive high priority for investments. Reconstruction activities would begin in 1986 and new construction in 1990.

Demand for developed sites would exceed supply by 1995 and the overflow would move to dispersed areas.

Dispersed Recreation Management would provide for eighteen transfer sites to be developed or rehabilitated to provide safe parking and horse or trailbike facilities. Twenty-five new sites at major trailhead locations would be constructed, starting in 1990.

Parking facilities at five major snowmobile and five major cross-country ski trails would be developed and maintained. A boat launching ramp would be provided at Mosquito Flat Reservoir.

Trail conditions would be improved and maintained. Heavy use areas would be managed and adequate recreation patrols would be provided for enforcement, public contact, and fire prevention.

Cultural Resources

The Forest would emphasize the inventory of proposed projects in high and moderate sensitivity areas. This would gradually increase the number of known sites, but would not reduce the number of unevaluated sites nor provide monitoring of project effects to unevaluated sites. Avoidance would be the preferred method of mitigation of project impacts, except where avoidance or protection would be unfeasible. While under budget constraints, the Forest would not develop plans for the stabilization and enhancement of historic cultural resource sites or the interpretation and scientific study of prehistoric sites. A comprehensive Forest-wide cultural resource overview would be compiled within the first decade.

Wilderness

The Frank Church -- River of No Return Wilderness (782,255 acres) would be managed according to the approved wilderness management plan.

The following Roadless Areas would be proposed for wilderness designation:

Lemhi Range	149,629 acres
Pahsimeroi Mtns.	44,617 acres
Borah Peak	129,581 acres
King Mtn.	82,695 acres
Boulder-White Clouds	134,754 acres
Pioneer Mtns.	169,420 acres
Diamond Peak	72,239 acres
	782,935 acres

Including existing wilderness, designation of these areas as wilderness by Congress would increase wilderness acreage on the Forest to 1,565,190 acres, or 62 percent of the Forest. This would be 56 percent of the total acreage identified as roadless.

Wilderness management levels would be based on levels of recreation use that takes place in specific areas. Capacity of these areas would exceed projected wilderness recreation use levels through the planning horizon. It would also cause a decrease in motorized dispersed recreation use such as ORV use.

Timber

Average allowable sale quantities of sawtimber would be maintained at 2 MMBF per year throughout the planning period. Annually, 85 MBF of roundwood products would be offered, and fuelwood offered would be 1.89 MMBF.

Road construction/reconstruction needs for sawtimber access would as follows:

Decade:	1st	2nd	3rd	4th	5th
Miles/Year:	1.5	1.5	1.7	2.7	3.8

The fuelwood roading program would provide 0.75 - 1 mile per year of additional roads through the planning period. Additional roading would depend on sawtimber access.

Douglas-fir will be the primary species harvested. Conventional tractor methods would be used for harvest.

Insect and disease potential would remain at present levels.

Range

The range program would have a reduced emphasis. Livestock AUM's would be reduced from 113,000 to 106,000 over the planning horizon. This alternative would probably force a few family ranch operations out of business and/or cause an economic hardship on several ranching operations. Allotment management plans would be developed, as time permits.

Wildlife and Fish

This alternative would continue to provide habitat to ensure viability and recovery of Threatened and Endangered and Forest Service Sensitive plants and animals.

Habitat required to meet Idaho Department of Fish and Game objectives, for fish and wildlife MIS, would be exceeded.

All Management Indicator Species would increase in number. Wildlife habitat capability would increase at a moderate rate. Habitat capability for anadromous and resident fish would improve slowly. Existing anadromous fish populations are well below present habitat capability and would have the potential to increase because of mitigation at dams, increased hatchery production, and improved overall coordination through the Northwest Power Planning Act.

Wildlife associated recreation use (WFUD's) would increase significantly over the 50 year period. This would become increasingly important to the local economy.

Habitat improvement programs for fish and wildlife would be met at a high standard.

Coordination efforts with timber, range, and minerals would be maintained or slightly increased.

Minerals and Energy Development

The Forest would provide appropriate responses within required time periods to the approximately 130 annual requests from industry for leases, permits, licenses, and notices of intent, including coordination for exploration and development activities. This alternative assumes that there would be one large scale project in the planning and development stage at any one time. The Forest should be able to respond to a minor increase in mineral activity and maintain complete services. The backlog of oil and gas lease applications would be processed over several years as described in Appendix E. Stipulations would be more restrictive under this alternative than most others because of the amenity emphasis. Major site-specific proposals for exploration or development could require adjustment of the Forest budget, special appropriations, or funding from the proponent.

Withdrawals and legislative requirements in existing wilderness constrain mineral entry on 782,255 acres of National Forest System lands. Congressional designation of additional wilderness under this alternative, could constrain these activities on an additional 782,935 acres. Mineral withdrawal areas, would total 1,565,490 acres or 62 percent of the Forest.

Lands

The Lands Program would continue at about the present level. Withdrawal reviews would be completed by 1989. Four rights-of-way easements would be processed annually. Land exchanges would not be initiated by the Forest. Eleven miles of boundary would be marked annually. Exchanges for school sections would be accomplished as time permits.

The issuing of special use permits would continue to increase because of increases in mining, small hydroelectric projects, and electronic sites.

Inspections would be fewer than mandated. Property boundary marking and posting would be completed after 2020.

The Iron Bog and Meadow Canyon Research Natural Areas would be protected. Nine additional Research Natural Areas would be established during the first decade.

Soil and Water

Water quality and soil productivity would improve Forest-wide. Overall use on riparian areas would decline, although recreation use and associated impacts would increase. In particular, ORV damage would be mitigated as it occurred. No significant changes in water yield would occur. The soil and water improvement program would be accelerated, and current needs for improvement would be met by the year 2005. Delivered sediment threshold levels would not be exceeded.

Fire Management

The Fire Management organization and activities would be the same as those discussed under Alternative 2.

Transportation

Emphasis would be on maintaining a safe, functional, environmentally sound transportation system. Funding would provide for 100 percent of the reconstruction needs to be completed by the end of the 3rd decade, with funding past that period for a continuing construction/reconstruction program. Reconstruction would occur on 347 miles of arterial/collector roads and 55.8 miles of local roads.

This alternative would allow for a very limited construction program independent of timber roads in the first 3 decades, if the reconstruction program were accomplished. The road construction budget would be at a level which would allow a mix of construction and reconstruction projects through the planning period while completing the reconstruction program. Most of the items in the last decades would consist of deferred maintenance and reconstruction.

Road maintenance would be accomplished on approximately 730 miles per year over the planning period if in conjunction with the reconstruction program proposed in this alternative.

F.A. & O. Facilities

F. A. & O. maintenance would meet public health and safety standards. Maintenance would arrest deteriorating conditions, but would not allow improvement. Any significant construction projects would require special funding.

All water and sewer systems would be brought to State standards. Airfields would be brought to safe standards and maintained.

Expenditures would have the same priority as those described in Alternative 1.

TABLE II-6.(3) ALTERNATIVE 3 - NON-MARKET EMPHASIS PROJECTED CHALLIS NATIONAL FOREST PROGRAM OUTPUTS, ACTIVITIES, BENEFITS & COSTS

OUTPUT/ACTIVITY	UNIT OF MEASURE PER YEAR	TIME PERIODS (DECADES) 1986-1995	1996-2005	2006-2015	2016-2025	2026-2035	2036-2085	2086-2135	2136-2185
RECREATION 1/									
Wilderness Use (ROS I)	MRVD	238.0	274 0	274 0	274 0	274 0			
Dispersed Use (ROS II & III)	MRVD	318 5	400 0	400.0	400 0	400 0			
Developed Use (ROS IV)	MRVD	56 5	73 0	73 0	73 0	73 0			
WILDERNESS									
Management	M Acres	1565 1	1565 1	1565 1	1565 1	1565 1			
WILDLIFE AND FISH									
Structural Habitat Improve	Struct	31	31	31	31	31			
Non-Struc Habitat Improve	Acres	1025	1025	1025	1025	1025			
Anad Fish Commercial	M # Lbs	158	320	481	642	713			
Anadromous Fish Sport	M WFUD	37.3	61.7	85 1	109.1	121 1			
Coldwater Fish	M WFUD	167 8	218 5	251 0	283 6	343 6			
Wildlife Use	M WFUD	86 6	108 1	130 9	160 7	194 2			
Populations									
Deer	M Animals	25 9	32 7	40 6	49 5	59 9			
Elk	M Animals	5 8	7 1	8 3	8 5	8 6			
Bighorn Sheep	M Animals	1 1	1 8	2 5	3 3	4 1			
Mountain Goat	M Animals	0 6	0 7	0 7	0 8	1 0			
Red Squirrel	M Acres	711.6	708 7	705 8	702 9	700 0			
RANGE									
Grazing Use (Livestock)									
Actual Use (Projected	M AUM	112 7	109 5	106 2	106 2	106 2			
Permitted Use (Projected)	M AUM	114	111	108	108	108			
TIMBER									
Allowable Sale Quantities	MMCF	0 4	0 4	0 4	0 4	0 4	0 4	0 8	0 8
	MMBF	2 0	2 0	2 0	2 0	2 0	2 0	3 5	3 5
Roundwood Products 2/	MMCF	0 02	0 02	0 02	0 02	0 02	0 02	0 02	0 02
	MMBF	0.09	0 09	0 09	0 09	0 09	0 09	0 09	0 09
Reforestation	Acres	479 0	475 8	407 8	477 0	458 2	342 0	440 2	373 9
Timber Stand Improvement	Acres	15	0	0	0	0	0	0	0
Fuelwood (Dead & Green)	MCF	420	420	420	420	420	420	420	420
SOIL AND WATER									
Meets or exceeds State Stds	M Ac Ft	2463	2463	2463	2463	2463			
Meets Water Quality Goals 3/	M Ac Ft	2365	2463	2463	2463	2463			
Soil & Water Resource Imp	Acres	89	111	0	0	0			
MINERALS									
Leases	No Leases	61	92	92	92	92			
HUMAN RESOURCE PROGRAMS	Pers Yrs	26	26	26	26	26			
FACILITIES									
Trail Const/Reconstruction	Miles	5	5	5	5	5			
Road Reconstruction (Arterial & Collector)	Miles	16.0	9 3	9 3	2 0	2 0			
Local Road Construction 4/	Miles	0 7	0 8	0 9	1 0	1 1			
Local Road Reconstruction	Miles	2 6	2 7	2 7	8 5	8 5			
Timber Purch Road Constr	Miles	1 5	0 4	1 4	1 7	2 6			
Timber Purch. Road Reconstr	Miles	0	1.1	0 3	1 0	1 2			

1/ Recreation Outputs are not duplicated within the ROS Classes (ROS - Recreation Opportunity Spectrum)

2/ Incidental amounts of roundwood products that may be offered dependent upon demand These volumes are not included in the allowable sale quantity

3/ Forest water quality goals, which exceed State water quality standards consist of not exceeding total depth fines of 30%.

4/ Fuelwood roads

TABLE II-6.(3) ALTERNATIVE 3 - NON-MARKET EMPHASIS. PROJECTED CHALLIS NATIONAL FOREST PROGRAM OUTPUTS, ACTIVITIES, BENEFITS & COSTS (Continued)

BENEFITS	UNIT OF MEASURE PER YEAR	TIME PERIODS (DECADES) 1986-1995	1996-2005	2006-2015	2016-2025	2026-2035	2036-2085	2086-2135	2136-2185
Wilderness Recreation	M $	2523	2915	2915	2915	2915			
Dispersed Recreation	M $	1271	1596	1596	1596	1596			
Developed Recreation	M $	225	291	291	291	291			
Wildlife	M $	2477	3087	3741	4590	5548			
Anad. Fish Commercial	M $	387	784	1179	1573	1748			
Anadromous Fish Sport	M $	2667	4410	6082	7799	8657			
Coldwater Fish	M $	3306	4315	4957	5601	6786			
Range	M $	1582	1539	1493	1493	1493			
Timber	M $	736	751	748	745	715	1132	1022	1022
Minerals	M $	220	302	302	302	302			

COSTS	UNIT OF MEASURE PER YEAR	TIME PERIODS (DECADES) 1	2	3	4	5
Total Forest Budget	M $	4078	4665	4669	4681	4688
Fixed Costs						
Protection	M $	732	732	732	732	732
GA	M $	800	900	900	900	900
Variable Costs						
Investment Costs						
Timber Roads	M $	43 1	36.2	46 4	72 6	103 9
Other Roads	M $	500	290	290	290	290
Investment Other	M $	427	416.2	382.6	401 9	387 6
Total Investment	M $	970 1	742.4	719.0	764.5	781 5
Operational Costs	M $	2476	2469	2474	2484	2484
Non-Forest Service Costs	M $	736 9	739 2	739.2	739.2	739.2
Returns to Treasury	M $	749 1	850 6	847 6	850.0	852 4

ALTERNATIVE 4 - RPA 1980 PROGRAM

The RPA (Resources Planning Act) alternative would direct management efforts and budgets toward supplying or developing the Forest's share of resource outputs called for by the Intermountain Regional Guide [Table II-6(4)].

Recreation

The capacity in existing developed sites would exceed the RPA estimates of use. The existing sites would be hardened to prevent site deterioration. New sites would be constructed to meet 75 percent of total projected demand by 2030. There would be some over-use in the more popular sites prior to that time. Developed use would exceed RPA assigned targets. Ten new sites (866 PAOT) would be developed over the planning period.

The capacity for dispersed use would not exceed Forest-wide capability levels, however, some areas would be excessively used. As timber roading increased, shifts in ROS class from non-motorized to motorized would occur.

Some trails would be upgraded and maintained, which would provide quality recreation experiences. All trails would generally receive at least Level 1 maintenance. Existing trailheads would be maintained or reconstructed to preserve existing capacity. New trailhead facilities would be constructed where demand warrants it.

Cultural Resources

The Forest would emphasize the inventory of proposed projects in high, moderate, and low sensitivity areas, and begin reducing the backlog of unevaluated sites by two per year. This would begin reducing the backlog of significant sites awaiting nomination to the NRHP at the rate of one site per year. Plans for the stabilization and enhancement of significant historic cultural resource sites, and long-term preservation, especially where compatible with recreation and/or Forest administration, would be completed. There would be an emphasis on interpretation and management of historic cultural resource sites. Avoidance would be the preferred method of mitigation of project impacts, except where avoidance or protection would be unfeasible. A comprehensive Forest-wide cultural resource evaluation would be compiled within the first decade.

Wilderness

No additional wilderness would be proposed under this alternative. Existing wilderness would be managed in accordance with the approved wilderness management plans.

Timber

Average allowable sale quantities of sawtimber would average 9.0 MMBF per year in the first decade, 11.3 MMBF per year in the 2nd through the 5th decade.

Approximately 135 MBF of roundwood products, and 2.25 MMBF of fuelwood, would be offered per year.

Road construction/reconstruction needs to meet the sawtimber harvest level would be as follows:

Decade:	1st	2nd	3rd	4th	5th
Miles/Year:	4.5	10.2	15.7	10.8	4.5

Fuelwood access would be adequately provided by sawtimber harvest roads. Occasionally, one mile per year of new roads would be required.

Lodgepole pine and Douglas-fir would be harvested primarily through conventional tractor methods, with some aerial (cable) logging occurring on selected Douglas-fir stands.

Insect and disease potential would be reduced as a result of the high levels of timber harvest.

Range

Range administration and management of allotments would improve.

Actual use would increase to 116 MAUM's (2.7 percent over current) over the 50 year projection period. This increase in AUM's would help stabilize the local family ranching operations and local communities.

New allotment management plans would be developed on the 32 allotments without existing plans, as time permits.

Permittees would be required to cooperate and participate in the range improvement program. Noxious farm weed control, in cooperation with the counties and other agencies, would be increased. The Experimental Stewardship program would be continued, and these concepts would be used in the range program.

Riparian area condition and trend should slowly improve within allotments.

Wildife and Fish

The Forest would continue to provide habitat to ensure viability and recovery of Threatened, Endangered and Forest Service Sensitive plants and animals.

Habitat necessary to support all Idaho Department of Fish and Game objectives, for fish and game MIS, would be exceeded.

Management Indicator Species would all increase in number. Wildlife habitat capability would increase at a moderate rate. Habitat capability for anadromous and resident fish would improve slowly. Exisiting anadromous fish populations are well below present habitat capability and would have the potential to increase because of mitigation at Columbia River dams, increased hatchery production, and improved overall coordination through the Northwest Power Planning Act.

Wildlife associated recreation use (WFUD's) would be at their highest level. This would become increasingly important to the local economy.

Habitat improvement programs for fish and wildlife would be at a high level.

Wildlife and fish coordination efforts, in and out of the Forest Service, would increase significantly.

Minerals and Energy Development

The Forest would be able to respond to a moderate increase in mineral activity and maintain complete services. The Forest would be able to provide an adequate level of coordination, and ensure the cumulative effects of increased mineral activities would be managed within acceptable levels. It is assumed that there would be one large scale project in the planning and development stage at any one time. Oil and gas lease applications would be processed as described in Appendix E; major site-specific proposals for exploration or development could require supplemental funding.

Withdrawals and legislative requirements associated with the Frank Church -- River of No Return Wilderness restrict mineral entry on 782,255 acres and, with other mineral withdrawals, would result in 782,555 acres (31 percent) restricted from mineral entry.

Lands

The issuing of special use permits would increase because of increases in mining activities, small hydroelectric projects, and the needs for electronic sites.

Inspection frequencies would increase, resulting in additional work to bring use in line with permit stipulations. Follow-up actions would increase.

The review of all existing withdrawals for possible termination would be completed by 1989. Rights-of-way for roads and trails would continue to be needed until the backlog cases are completed. This would be accomplished by 2004. Acquisition of State school sections would be aggressively pursued.

Property boundary location and marking would be complete by 2020.

The Iron Bog and Meadow Canyon Research Natural Areas would be protected. Nine additional Research Natural Areas would be established during the first decade.

Soil and Water

Watershed conditions would improve. Existing management-related water quality problems would be mitigated. Increases in water yield would not be significant.

Present needs for watershed improvement would be met by the year 2000. Management constraints would be applied to limit delivery of sediment to critical stream reaches. Soil and water resource inventories would be conducted on 30,000 to 60,000 acres per year.

Fire Management

The fire management organization and activities would be the same as those discussed under Alternative 2.

Transportation

Emphasis would be on maintaining a safe, functional, environmentally sound transportation system. By the end of the 3rd decade, 89 percent of the

reconstruction needs would be completed. The reconstruction needs have been identified as 347 miles of arterial/collector roads and 55.8 miles of local roads.

There would be a very limited construction program independent of timber roads in the first 3 decades, if the reconstruction program were accomplished. Only deferred maintenance would be provided after the third decade.

Road maintenance could be accomplished on approximately 560 miles per year if it were done in conjunction with the reconstruction program.

F. A. & O. Facilities

F.A. & O. facility maintenance would be adequate to ensure that public health and safety standards were met. The maintenance program would allow for repair and some improvement of structures. Any significant construction projects would require special funding.

All water and sewer systems would be brought to State standards. Airfields would be brought to safe standards and maintained.

Expenditures would have the same priority as those identified in Alternative 1.

TABLE II-6 (4) ALTERNATIVE 4 - RPA 1980 PROGRAM. PROJECTED CHALLIS NATIONAL FOREST PROGRAM OUTPUTS, ACTIVITIES, BENEFITS & COSTS

OUTPUT/ACTIVITY	UNIT OF MEASURE PER YEAR	TIME PERIODS (DECADES) 1986-1995	1996-2005	2006-2015	2016-2025	2026-2035	2036-2085	2086-2135	2136-2185
RECREATION 1/									
Wilderness Use (ROS I)	MRVD	135 0	148 0	148.0	148 0	148 0			
Dispersed Use (ROS II & III)	MRVD	392.3	487.5	487 5	487 5	487 5			
Developed Use (ROS IV)	MRVD	110 0	123 0	123 0	123 0	123 0			
WILDERNESS									
Management	M Acres	782 2	782 2	782.2	782 2	782 2			
WILDLIFE AND FISH									
Structural Habitat Improve.	Struct	32	32	32	32	32			
Non-Struc Habitat Improve	Acres	1616	1316	1300	1300	1300			
Anad. Fish Commercial	M # Lbs	154	315	474	632	702			
Anadromous Fish Sport	M WFUD	36 6	60 6	83.7	107 2	119 2			
Coldwater Fish	M WFUD	165 7	215 4	262 0	299 5	376 8			
Wildlife Use	M WFUD	87 3	109 1	127 7	147 8	167 5			
Populations									
Deer	M Animals	24 6	31 4	39 3	48 2	58 6			
Elk	M Animals	5 5	6 8	8 0	8 3	8 4			
Bighorn Sheep	M Animals	1 0	1 7	2.4	3 2	4 0			
Mountain Goat	M Animals	0 6	0 7	0 7	0 8	1 0			
Red Squirrel	M Acres	704 5	694 4	684 2	674 1	664 0			
RANGE									
Grazing Use (Livestock)									
Actual Use (Projected)	M AUM	113 8	115 3	116 0	116 0	116 0			
Permitted Use (Projected)	M AUM	117	118	119	119	119			
TIMBER									
Allowable Sale Quantities	MMCF	2 0	2 5	2.5	2 5	2 5	2 5	2 5	2.5
	MMBF	9 1	11 3	11 3	11 3	11 3	11 3	11 3	11 3
Roundwood Products 2/	MMCF	0 03	0 03	0 03	0 03	0 03	0 03	0 03	0 03
	MMBF	0.14	0 14	0 14	0 14	0 14	0 14	0 14	0.14
Reforestation	Acres	1796	2489	2102	2255	1095	1839	2163	2083
Timber Stand Improvement	Acres	69	0	0	0	0	0	0	0
Fuelwood (Dead & Green)	MCF	500	500	500	500	500	500	500	500
SOIL AND WATER									
Meets or Exceeds State Stds	M Ac Ft	2463	2463	2463	2463	2463			
Meets Water Quality Goals 3/	M Ac Ft	2266	2266	2266	2266	2463			
Soil & Water Resource Imp 4/	Acres	140	160	0	0	0			
MINERALS									
Leases	No. Leases	161	207	207	207	207			
HUMAN RESOURCE PROGRAMS	Pers Yrs	26	26	26	26	26			
FACILITIES									
Trail Const/Reconstruction	Miles	5	5	5	5	5			
Road Reconstruction (Arterial & Collector)	Miles	15 4	15 4	0	0 9	0 9			
Local Road Construction 5/	Miles	1 0	1 0	1.0	1 0	1 0			
Local Road Reconstruction	Miles	0 7	0 7	3 3	0.8	0 8			
Timber Purch. Road Constr	Miles	4 5	7 0	10 8	3 3	2 9			
Timber Purch Road Reconstr	Miles	0	3 2	4 9	7.5	1 6			

1/ Recreation Outputs are not duplicated within the ROS Classes (ROS - Recreation Opportunity Spectrum)
2/ Incidental amounts of roundwood products that may be offered dependent upon demand These volumes are not included in the allowable sale quantity.
3/ Forest water quality goals, which exceed State water quality standards consist of not exceeding total depth fines of 30%
4/ Improvement projects completed by the year 2000.
5/ Fuelwood roads.

TABLE II-6 ALTERNATIVE 4 - 1980 RPA PROJECTED CHALLIS NATIONAL FOREST PROGRAM OUTPUTS, ACTIVITIES, (Continued) BENEFITS & COSTS

BENEFITS	UNIT OF MEASURE PER YEAR	TIME PERIODS (DECADES) 1986-1995	1996-2005	2006-2015	2016-2025	2026-2035	2036-2085	2086-2135	2136-2185
Wilderness Recreation	M $	1431	1575	1575	1575	1575			
Dispersed Recreation	M $	1565	1945	1945	1945	1945			
Developed Recreation	M $	439	491	491	491	491			
Wildlife	M $	2496	3116	3650	4224	4786			
Anad Fish Commercial	M $	378	771	1161	1549	1721			
Anadromous Fish Sport	M $	2620	4332	5984	7671	8529			
Coldwater Fish	M $	3274	4254	5186	5915	7442			
Range	M $	1605	1621	1631	1631	1631			
Timber	M $	3191	4057	4057	3007	2124	3940	5614	5154
Minerals	M $	484	619	619	619	619			

COSTS	UNIT OF MEASURE PER YEAR	TIME PERIODS (DECADES) 1	2	3	4	5
Total Forest Budget	M $	5116	5090	4744	4831	4824
Fixed Costs						
Protection	M $	740	740	740	740	740
GA	M $	838	655	631	630	630
Variable Costs						
Investment Costs						
Timber Roads	M $	129 8	274 6	423 9	272 2	147 7
Other Roads	M $	400	400	70	70	70
Investment Other	M $	858.7	969 3	871 7	958 3	951 7
Total Investment	M $	1388 5	1643 9	1365 6	1300 5	1169 4
Operational Costs	M $	2565	2771	2571	2571	2571
Non-Forest Service Costs	M $	2216 8	2774 5	2774 5	2722 2	2748 2
Returns to Treasury	M $	1657.5	2104 3	2108 2	1113 2	1809 5

ALTERNATIVE 5 - MARKET AND NON-MARKET MIX

This alternative would emphasize management of each of the 25 management areas, based on the District Rangers and their staffs perspective of the issues, concerns, and opportunities [Table II-6(5)]. This includes the managers perspective of resource potential and realistic levels of management activities capable of being applied to these areas.

Recreation

Recreation management would emphasize dispersed recreation over developed recreation. The level of developed recreation would include maintaining capacity in highly used sites. Developed recreation sites would be improved and hardened, plus additional sites would be developed to meet 70 percent of projected demand by 2030. Demand would not exceed capacity until 2005. New sites would be developed primarily near population centers, and areas where significant local demand warranted it.

The trail system would be improved, and heavily used dispersed recreation areas would be managed to produce high quality recreation experiences. The capacity for dispersed use Forest-wide, would not be exceeded. The high quality experiences on the Middle Fork of the Salmon River would be maintained.

Cultural Resources

The Forest would emphasize the inventory of proposed projects in high and moderate sensitivity areas. This would gradually increase the number of known sites, but would not reduce the number of unevaluated sites nor provide monitoring of project effects to unevaluated sites. Avoidance would be the preferred method of mitigation of project impacts, except where avoidance or protection would be unfeasible. The Forest would undertake long-term stabilization and enhancement of significant historic sites, and the interpretation and scientific study of prehistoric cultural resource sites within the Frank Church--River of No Return Wilderness and the Middle Fork Wild and Scenic River Corridor, as specified in approved management plans.

Wilderness

This alternative would propose that the Borah Peak Roadless Area (119,675 acres) and the Pioneer Mountain Roadless Area (44,369 acres) be managed as wilderness. Additionally, it would propose that Lemhi Range Roadless Area (149,629 acres) not be managed as wilderness, but be maintained basically in primitive or semi-primitive nonmotorized ROS Class.

The Frank Church--River of No Return Wilderness would be managed in accordance with the approved Wilderness Management Plan. In total, 946,299 acres, or 38 percent of the Forest, would be managed as wilderness under this alternative.

It is probable that Congressional designation of the proposed areas to wilderness would include some boundary modifications. This analysis does not attempt to describe potential boundary alternatives.

Timber

Average allowable sale quantities of sawtimber would be maintained at 4.9 MMBF per year throughout the planning period. The program will provide 85 MBF of roundwood products per year.

ALTERNATIVE 5 - MARKET AND NON-MARKET MIX

This alternative would emphasize management of each of the 25 management areas, based on the District Rangers and their staffs perspective of the issues, concerns, and opportunities [Table II-6(5)]. This includes the managers perspective of resource potential and realistic levels of management activities capable of being applied to these areas.

Recreation

Recreation management would emphasize dispersed recreation over developed recreation. The level of developed recreation would include maintaining capacity in highly used sites. Developed recreation sites would be improved and hardened, plus additional sites would be developed to meet 70 percent of projected demand by 2030. Demand would not exceed capacity until 2005. New sites would be developed primarily near population centers, and areas where significant local demand warranted it.

The trail system would be improved, and heavily used dispersed recreation areas would be managed to produce high quality recreation experiences. The capacity for dispersed use Forest-wide, would not be exceeded. The high quality experiences on the Middle Fork of the Salmon River would be maintained.

Cultural Resources

The Forest would emphasize the inventory of proposed projects in high and moderate sensitivity areas. This would gradually increase the number of known sites, but would not reduce the number of unevaluated sites nor provide monitoring of project effects to unevaluated sites. Avoidance would be the preferred method of mitigation of project impacts, except where avoidance or protection would be unfeasible. The Forest would undertake long-term stabilization and enhancement of significant historic sites, and the interpretation and scientific study of prehistoric cultural resource sites within the Frank Church--River of No Return Wilderness and the Middle Fork Wild and Scenic River Corridor, as specified in approved management plans.

Wilderness

This alternative would propose that the Borah Peak Roadless Area (119,675 acres) and the Pioneer Mountain Roadless Area (44,369 acres) be managed as wilderness. Additionally, it would propose that Lemhi Range Roadless Area (149,629 acres) not be managed as wilderness, but be maintained basically in primitive or semi-primitive nonmotorized ROS Class.

The Frank Church--River of No Return Wilderness would be managed in accordance with the approved Wilderness Management Plan. In total, 946,299 acres, or 38 percent of the Forest, would be managed as wilderness under this alternative.

It is probable that Congressional designation of the proposed areas to wilderness would include some boundary modifications. This analysis does not attempt to describe potential boundary alternatives.

Timber

Average allowable sale quantities of sawtimber would be maintained at 4.9 MMBF per year throughout the planning period. The program will provide 85 MBF of roundwood products per year.

Fuelwood offerings would be 1.89 MMBF per year throughout the planning period.

Road construction/reconstruction needs for sawtimber access area would be as follows:

Decades:	1st	2nd	3th	4th	5th
Miles/year:	2.5	2.4	3.8	5.2	6.3

Approximately one mile per year of fuelwood roads would be built in the first two decades. Timber harvest roading should provide adequate access for fuelwood, after the second decade.

The primary harvest species would be Douglas-fir. Harvest would occur by utilizing conventional tractor methods.

The insect and disease potential would remain high throughout the planning period.

Range

Range activities would be the same as those in Alternative 4.

Wildlife and Fish

Habitat would be provided to ensure viability and recovery of Threatened and Endangered and Forest Service Sensitive plants and animals.

Habitat required to meet Idaho Department of Fish and Game objectives, for fish and game MIS, would be met.

Management Indicator Species would increase in number. Wildlife habitat capability would be maintained at the present level. Habitat capability for anadromous and resident fish would be maintained. Existing anadromous fish populations are well below present habitat capability and would have the potential to increase because of mitigation at dams, increased hatchery production, and improved overall coordination through the Northwest Power Planning Act.

Wildlife associated recreation use (WFUD's) would increase significantly over the planning period. This would become increasingly important to the local economy.

Habitat improvement programs for fish and wildlife would decrease from present levels.

Some coordination efforts with timber, range, and minerals would not be met.

Minerals and Energy Development

The Forest would be able to respond to industries' requests, and provide interdisciplinary review consistent with the activities planned and the management emphasis of the watersheds.

The Forest should be able to respond to a moderate increase in mineral activity and maintain complete services. It is assumed that there would be one large mineral project in the planning and developing stage at any one time. For energy projects, there would be very limited services, primarily processing oil and gas lease applications as described in Appendix E. Major site-specific proposals for exploration and development could require supplemental funding.

Withdrawals and legislative requirements in existing wilderness would restrict mineral entry on 782,255 acres of National Forest System lands. Congressional designation of additional wilderness under this alternative could restrict these activities on an additional 164,044 acres. This, with other mineral withdrawals, would result in a total of 946,599 acres, or 38 percent of the Forest, placed in a land classification restricting mineral entry.

Lands

The program would continue at about the present level. The withdrawal reviews would be completed on schedule by 1989. Rights-of-way easements for roads and trails would be processed as needed.

Land exchanges would be initiated by the Forest for school sections only.

The issuing of special use permits would increase because of increases in mineral activities, small hydroelectric projects, and the need for electronic sites.

Inspections would be fewer than required because of the anticipated increases stated above. Most property boundary marking and posting would be completed by 2020.

The Iron Bog and Meadow Canyon Research Natural Areas would be protected. Nine additional Research Natural Areas would be established during the first decade.

Soil and Water

Water quality and soil productivity would slowly decline because of increased management activity and decreased improvement scheduling. Monitoring would be at a low level. However, all water would meet State water quality standards. Sediment levels would slowly increase. Condition of riparian areas would remain static, or slowly decline in a few areas. No soil and water improvement would be accomplished under this alternative. No significant change in water yield would occur.

Fire Management

The Fire Management organization and activities would be the same as those discussed under Alternative 1.

Transportation

Emphasis would be on maintaining a safe, functional, environmentally sound transportation system. By the end of the 3rd decade, 100 percent of the road reconstruction needs would be completed. The reconstruction needs have been identified as 347 miles of arterial/collector roads and 55.8 miles of local roads.

There would be a very limited road construction program independent of timber roads in the first 3 decades, if the reconstruction program were accomplished. Only deferred maintenance would be provided after the third decade.

Road maintenance could be accomplished on approximately 560 miles per year over the planning period if it is in conjunction with the reconstruction program proposed in this alternative.

F. A. & O. Facilities

F. A. & O. facility maintenance would be at the minimum level, but would meet public health and safety standards. Maintenance would arrest deteriorating conditions, but would not allow improvement. Any significant construction projects would require special funding.

All water and sewer systems would be brought to State standards. Airfields would be brought to safe standards and maintained.

Expenditures would have the same priority as those identified in Alternative 1.

TABLE II-6.(5) ALTERNATIVE 5 - MARKET AND NON-MARKET MIX. PROJECTED CHALLIS NATIONAL FOREST PROGRAM OUTPUTS, ACTIVITIES, BENEFITS & COSTS

OUTPUT/ACTIVITY	UNIT OF MEASURE PER YEAR	TIME PERIODS (DECADES) 1986-1995	1996-2005	2006-2015	2016-2025	2026-2035	2036-2085	2086-2135	2136-2185
RECREATION 1/									
Wilderness Use (ROS I)	MRVD	165.0	181 5	181 5	181 5	181 5			
Dispersed Use (ROS II & III)	MRVD	358 3	448.0	448.0	448 0	448 0			
Developed Use (ROS IV)	MRVD	89.7	114.5	114.5	114 5	114 5			
WILDERNESS									
Management	M Acres	946.2	946 2	946.2	946 2	946 2			
WILDLIFE AND FISH									
Structural Habitat Improve.	Struct.	10	10	10	10	10			
Non-Struc Habitat Improve.	Acres	425	425	425	425	425			
Anad. Fish Commercial	M # Lbs.	158	322	484	646	718			
Anadromous Fish Sport	M WFUD	36 6	60.6	83 5	106 9	119 0			
Coldwater Fish	M WFUD	168 3	209 0	252 5	291 8	367 9			
Wildlife Use	M WFUD	85.0	105 9	127 8	155.8	181.9			
Populations									
Deer	M Animals	24.4	31 1	39 1	47 3	57 2			
Elk	M Animals	5.5	6 7	7 7	7 9	8.0			
Bighorn Sheep	M Animals	1.0	1 6	2.3	3.0	3 6			
Mountain Goat	M Animals	0.6	0 7	0.7	0 8	1.0			
Red Squirrel	M Acres	724.6	714 5	704 4	694 3	689.0			
RANGE									
Grazing Use (Livestock)									
Actual Use (Projected)	M AUM	113 6	114 7	115.8	115 5	115 5			
Permitted Use (Projected)	M AUM	115	116	117	117	117			
TIMBER									
Allowable Sale Quantities	MMCF	1 1	1.1	1.1	1 1	1 1	2 6	2.6	3 8
	MMBF	4.9	4 9	4 9	4 9	4 9	11 9	11 9	16 9
Roundwood Products 2/	MMCF	0.02	0 02	0 02	0 02	0 02	0 02	0 02	0 02
	MMBF	0 09	0 09	0 09	0.09	0 09	0 09	0.09	0.09
Reforestation	Acres	908	1149	880	976	849	1993	1441	1935
Timber Stand Improvement	Acres	69	0	0	0	0	0	0	0
Fuelwood (Dead & Green)	MCF	420	420	420	420	420	420	420	420
SOIL AND WATER									
Meets or Exceeds State Stds	M Ac Ft	2463	2463	2463	2463	2463			
Meets Water Quality Goals 3/	M Ac Ft	2365	2365	2365	2365	2316			
Soil & Water Resource Imp.	Acres	0	0	0	0	0			
MINERALS									
Leases	No Leases	143	184	184	184	184			
HUMAN RESOURCE PROGRAMS	Pers. Yrs	17	17	17	17	17			
FACILITIES									
Trail Const/Reconstruction	Miles	0	0	0	0	0			
Road Reconstruction (Arterial & Collector)	Miles	17.4	17 4	0	0 9	0 9			
Local Road Construction 4/	Miles	1.0	1 0	0	0	0			
Local Road Reconstruction	Miles	1.2	1 2	3 3	0 8	0.8			
Timber Purch. Road Constr.	Miles	2.5	0.7	3.3	2.9	4 3			
Timber Purch. Road Reconstr.	Miles	0	1 7	0.5	2 3	2.0			

1/ Recreation Outputs are not duplicated within the ROS Classes (ROS - Recreation Opportunity Spectrum)

2/ Incidental amounts of roundwood products that may be offered dependent upon demand. These volumes are not included in the allowable sale quantity

3/ Forest water quality goals, which exceed State water quality standards consist of not exceeding total depth fines of 30%

4/ Fuelwood roads.

TABLE II-6.(5) ALTERNATIVE 5 - MARKET AND NON-MARKET MIX. PROJECTED CHALLIS NATIONAL FOREST PROGRAM OUTPUTS, ACTIVITIES, BENEFITS & COSTS
(Continued)

BENEFITS	UNIT OF MEASURE PER YEAR	TIME PERIODS (DECADES) 1986-1995	1996-2005	2006-2015	2016-2025	2026-2035	2036-2085	2086-2135	2136-2185
Wilderness Recreation	M $	1749	1931	1931	1931	1931			
Dispersed Recreation	M $	1430	1788	1788	1788	1788			
Developed Recreation	M $	358	457	457	457	457			
Wildlife	M $	2430	3025	3652	4452	5198			
Anad Fish Commercial	M $	386	788	1185	1583	1758			
Anadromous Fish Sport	M $	2618	4290	5970	7644	8510			
Coldwater Fish	M $	3324	4128	4988	5764	7267			
Range	M $	1596	1613	1628	1624	1624			
Timber	M $	1748	1784	1784	1784	1784	4093	3820	4898
Minerals	M $	388	490	490	490	490			

COSTS	UNIT OF MEASURE PER YEAR	TIME PERIODS (DECADES) 1	2	3	4	5
Total Forest Budget	M $	4640	4600	4178	4178	4178
Fixed Costs						
Protection	M $	617	617	617	617	617
GA	M $	800	664	644	644	644
Variable Costs						
Investment Costs						
Timber Roads	M $	70.8	59.5	105	135 9	170.7
Other Roads	M $	460	460	70	70	70
Investment Other	M $	522.3	495 3	416 2	432 6	407 1
Total Investment	M $	1053 1	1014 8	591 2	638 5	647 8
Operational Costs	M $	2166	2156	2150	2150	2150
Non-Forest Service Costs	M $	1209 8	1213 6	1213 6	1213 6	1213 6
Returns to Treasury	M $	1121 3	1259 1	1261 8	1262 5	1263 9

ALTERNATIVE 6 - CONSTRAINED (-25%) BUDGET

This alternative would continue the current program emphasis modified as necessary to cover fixed costs, and operation and maintenance costs at a reduced budget level [Table II-6(6)]. The constrained budget would be $2.7 million (in 1982 base dollars).

Recreation

Recreation management would emphasize dispersed recreation. Campgrounds would be closed or managed at reduced service levels. Developed capacity would decrease 80 percent by 2030.

Trail conditions would deteriorate through the planning period. Roads in many locations would be closed as safety and drainage problems cannot be handled under current budget levels. Heavily used areas would deteriorate. Dispersed management would not be able to keep up with expected increases in use. ORV management would not be able to respond adequately to increasing conflicts and watershed problems would increase.

Cultural Resources

The Forest's ability to manage cultural resources would be limited. Proposed ground-disturbing activities would be delayed until cultural resource clearance could be accomplished. Cultural resource sites would probably be lost through neglect or accidental damage.

Wilderness

This alternative would propose that a portion of the Borah Peak Roadless Area (41,000 acres) be designated as wilderness. Should Congress designate this area, it is probable that some boundary modification would be required. This analysis will not attempt to define possible modifications. This places a total of 823,255 acres, or 33 percent of the Forest, in Wilderness.

New wilderness would be managed at less than full service levels. Trail maintenance would be mostly to Level I standards. The Frank Church--River of No Return Wilderness would be managed as specified in the approved Wilderness Management Plan. The reduced budget level would make it difficult to meet the objectives and direction of the Wilderness Plan.

Timber

Average allowable sale quantities of sawtimber would be maintained at 2.5 MMBF per year throughout the planning period. The program would offer 67 MBF per year of roundwood products. Fuelwood offered would be 1.6 MMBF per year throughout the planning period.

Road construction/reconstruction needs for sawtimber access would be as follows:

Decade:	1st	2nd	3rd	4th	5th
Miles/Year:	1.3	1.2	1.1	1.1	1.0

In combination with harvest access roads, 0.5 to 0.75 mile per year of fuelwood access roads would be constructed in decades 1-5.

Douglas-fir would be logged by conventional tractor methods throughout the planning period.

Insect and disease levels would increase throughout the planning period because of the few acres of commercial timber placed under improved management.

Range

Emphasis would be on maintaining present permitted grazing use as near as possible to current levels. Range administration and management would be reduced slightly from the present level. Greater permittee cooperation and participation in the range improvement program would occur.

Wildlife and Fish

Habitat would be adequate to ensure viability and recovery of Threatened and Endangered and Forest Service Sensitive plants and animals.

Habitat required to meet Idaho Department of Fish and Game objectives, for fish and game MIS, would be met.

Management Indicator Species would increase in number. Wildlife habitat capability would be maintained at the present level. Habitat capability for anadromous and resident fish would be maintained or could slowly decline in specific areas. Existing anadromous fish populations are well below present habitat capability and would have the potential to increase because of mitigation at dams, increased hatchery production, and improved overall coordination through the Northwest Power Planning Act.

Wildlife associated recreation (WFUD's) would increase significantly over the planning period. This would become increasingly important to the local economy.

Habitat improvement programs for fish and wildlife would be decreased from present levels.

Some coordination efforts with timber and range would not occur.

Minerals and Energy Development

Sufficient management of industries' requests would be provided, assuming there were no new major development projects. Low levels of oil and gas lease applications could be processed as described in Appendix E. Only the more significant requests would receive intensive interdisciplinary review, unless adjustments to the Forest budget were made, special appropriations were received, or funds were contributed by the proponent.

The Forest assumes there would be at least one project in the planning and developing stage at any one time. This level would not be capable of handling full coordination and management needs of developing projects and would not be able to fully monitor on-going projects, if any increase in activity occurs. The Forest would respond to industry and other agency studies through funding provided by the applicant, special appropriations or adjustment of the Forest programs. The Forest would rely on Zone or Regional support for the assistance of a mining engineer.

Withdrawals and legislative requirements in existing wilderness would restrict mineral entry on 782,255 acres of National Forest System lands. Congressional

designation of additional wilderness under this alternative could restrict these activities on an additional 41,000 acres. A total of 823,555 acres, or 33 percent of the Forest would be withdrawn.

Lands

The issuing of special use permits would continue to increase because of increases in mining activities, small hydro-electric projects, and electronic site needs. Frequency of inspections would decline.

Rights-of-way easements would not be obtained or initiated. Small Tracts Act cases would be postponed whenever possible. Exchanges for school sections would progress slowly due to funding level. Funding would not be available for property boundary marking and posting.

The Iron Bog and Meadow Canyon Research Natural Areas would be protected. Establishment of nine additional Research Natural Areas may not take place until the second decade.

Soil and Water

Watershed conditions would generally remain static and could decline in some areas, but would be within standards established for soil and water quality. Use on some riparian areas would increase because of lack of management, causing deterioration of the resource. Many water quality problems would not be mitigated. Activities would focus on coordination and mitigation of other resource programs rather than implementing watershed restoration projects unless special funding were provided. No significant change in water yield would occur.

All maintenance needs may not be met at this budget level.

Fire Management

Lightning-caused fire occurrence would remain at approximately 35 fires annually. Man-caused fire occurrence would increase from the 1970-1979 level of 15 annually because of a decrease in the prevention program and an increase in dispersed recreation. Over time, man-caused fire occurrence would continue to increase as the number of forest users increase. During the period 1970-1979, man-caused fires accounted for over 70 percent of the area burned and part of the suppression costs; thus a significant increase in man-caused fire occurrence would greatly increase burned area and suppression costs.

Presuppression funding at this level would not provide for a cost-effective protection program.

Based on Level II fire planning, total protection costs would exceed $1,400,000 annually, with burned area exceeding 1,200 acres. Protection costs and area burned would continue to increase as man-caused fire occurrence increased. Total protection costs as used in this paragraph includes presuppression and suppression costs, and accounts for any benefits or damages to the burned area.

Area fire management plans would not be developed and any of the plans that had been previously implemented would be discontinued. The Forest would be unable to meet current commitments in fire protection agreements with other agencies.

Transportation

This alternative would provide none of the reconstruction needs on the Forest. Road conditions would continue to deteriorate and many roads would be closed.

The only new road construction would be those associated with timber.

Road maintenance could be accomplished on approximately 100 miles per year over the planning period, and would be limited to high use arterials and collectors.

F.A. & O. Facilities

The maintenance program would be the minimum necessary to allow operation of some facilities. Administrative sites would be closed as conditions deteriorate.

Water systems not up to State standards would be closed.

Airfields which must remain open would be maintained to a minimum safe standard.

TABLE II-6 (6) ALTERNATIVE 6 - CONSTRAINED (-25%) BUDGET PROJECTED CHALLIS NATIONAL FOREST PROGRAM OUTPUTS, ACTIVITIES, BENEFITS & COSTS

OUTPUT/ACTIVITY	UNIT OF MEASURE PER YEAR	TIME PERIODS (DECADES) 1986-1995	1996-2005	2006-2015	2016-2025	2026-2035	2036-2085	2086-2135	2136-2185
RECREATION 1/									
Wilderness Use (ROS I)	MRVD	149 0	164 0	164 0	164 0	164.0			
Dispersed Use (ROS II & III)	MRVD	400 3	498 5	498 5	498.5	498 5			
Developed Use (ROS IV)	MRVD	63 7	84 5	84 5	84 5	84 5			
WILDERNESS									
Management	M Acres	832.2	832 2	832 2	832 2	832 2			
WILDLIFE AND FISH									
Structural Habitat Improve	Struct	7	7	7	7	7			
Non-Struc Habitat Improve	Acres	390	390	390	390	390			
Anad Fish Commercial	M # Lbs	156	314	473	631	702			
Anadromous Fish Sport	M WFUD	36 7	60 6	83 7	107 2	119 2			
Coldwater Fish	M WFUD	165 1	214 7	261 2	297 6	373 7			
Wildlife Use	M WFUD	86 0	107 3	125 7	145 5	160 9			
Populations									
Deer	M Animals	24 4	31 1	39 1	47 3	57 2			
Elk	M Animals	5 5	6 7	7 7	7 9	8 0			
Bighorn Sheep	M Animals	1 0	1 6	2 3	3 0	3 6			
Mountain Goat	M Animals	0 6	0 7	0 7	0 8	1 0			
Red Squirrel	M Acres	712 8	710 1	707 4	704 7	702 0			
RANGE									
Grazing Use (Livestock)									
Actual Use (Projected)	M AUM	113 6	113 5	113 1	113.0	113 0			
Permitted Use (Projected)	M AUM	115	115	115	115	115			
TIMBER									
Allowable Sale Quantities	MMCF	0 6	0 6	0 6	0 6	0 6	3 1	3 1	4 3
	MMBF	2 5	2 5	2 5	2 5	2.5	13 8	13 8	19 3
Roundwood Products 2/	MMCF	0 01	0 01	0 01	0 01	0 01	0 01	0 01	0.01
	MMBF	0 07	0 07	0 07	0 07	0 07	0 07	0 07	0 07
Reforestation	Acres	462	585	448	497	432	2342	2003	2149
Timber Stand Improvement	Acres	15	0	0	0	0	0	0	0
Fuelwood (Dead & Green)	MCF	350	350	350	350	350	350	350	350
SOIL AND WATER									
Meets or Exceeds State Stds	M Ac Ft	2463	2463	2463	2463	2463			
Meets Water Quality Goals 3/	M Ac Ft	2365	2365	2365	2365	2365			
Soil & Water Resource Imp	Acres	10	6	6	6	6			
MINERALS									
Leases	No Leases	147	188	188	188	188			
HUMAN RESOURCE PROGRAMS	Pers. Yrs	6	6	6	6	6			
FACILITIES									
Trail Const/Reconstruction	Miles	0	0	0	0	0			
Road Reconstruction (Arterial & Collector)	Miles	0	0	0	0	0			
Local Road Construction 4/	Miles	0 5	0 5	0 5	0 5	0 7			
Local Road Reconstruction	Miles	0	0	0	0	0			
Timber Purch Road Constr	Miles	1.3	0 3	0.9	0.5	0 7			
Timber Purch. Road Reconstr.	Miles	0	0 9	0 2	0 6	0 3			

1/ Recreation Outputs are not duplicated within the ROS Classes (ROS - Recreation Opportunity Spectrum)

2/ Incidental amounts of roundwood products that may be offered dependent upon demand These volumes are not included in the allowable sale quantity

3/ Forest water quality goals, which exceed State water quality standards consist of not exceeding total depth fines of 30%

4/ Fuelwood roads

TABLE II-6. ALTERNATIVE 6 - CONSTRAINED (-25%) BUDGET PROJECTED CHALLIS NATIONAL FOREST PROGRAM OUTPUTS, ACTIVITIES, BENEFITS & COSTS. (Continued)

BENEFITS	UNIT OF MEASURE PER YEAR	TIME PERIODS (DECADES) 1986-1995	1996-2005	2006-2015	2016-2025	2026-2035	2036-2085	2086-2135	2136-2185
Wilderness Recreation	M $	1579	1745	1745	1745	1745			
Dispersed Recreation	M $	1597	1989	1989	1989	1989			
Developed Recreation	M $	254	337	337	337	337			
Wildlife	M $	2458	3065	3593	4156	4598			
Anad. Fish Commercial	M $	380	770	1160	1547	1719			
Anadromous Fish Sport	M $	2620	4332	5984	7664	8522			
Coldwater Fish	M $	3262	4240	5159	5878	7381			
Range	M $	1598	1595	1590	1589	1589			
Timber	M $	896	915	915	915	915	4808	4622	5607
Minerals	M $	395	498	498	498	498			

COSTS	UNIT OF MEASURE PER YEAR	TIME PERIODS (DECADES) 1	2	3	4	5
Total Forest Budget	M $	2780	2760	2733	2730	2730
Fixed Costs						
Protection	M $	307	307	307	307	307
GA	M $	700	700	700	700	700
Variable Costs						
Investment Costs						
Timber Roads	M $	36 0	30 3	30 8	28 0	51.7
Other Roads	M $	60.0	60 0	60.0	60.0	60.0
Investment Other	M $	278.7	257.6	203 1	209 9	192 8
Total Investment	M $	374.7	347 9	293 9	297 9	304.5
Operational Costs	M $	1551	1551	1551	1551	1551
Non-Forest Service Costs	M $	615.9	617 8	617.8	617 8	617 8
Returns to Treasury	M $	866 5	984 3	981 5	980.0	978 6

ALTERNATIVE 7 - CURRENT PROGRAM, CONSTRAINED BUDGET

This alternative would have the same emphasis as Alternative 1, except where changes were required to meet fixed costs and Operation and Maintenance activities [Table II-6(7)]. It predicts the level of goods and services expected to be produced if current management direction remains unchanged, and if personnel and funding remain at the present level.

Recreation

The Forest would continue low levels of developed site maintenance. Sites would deteriorate to the extent that either all or parts of sites would have to be closed. Low use, high maintenance cost sites would be closed first. On these sites, improvements such as water systems, toilets, tables, traffic controls, and vegetation would be lost due to our inability to replace them. More sites, even fee sites, would be managed at a reduced service level and fees would be collected only on 25 percent of our PAOTs'. Use would reach capacity by 1990. This would be due to an expected increase in demand and a decrease in facilities as mentioned above. Use would shift from camping in developed sites to the dispersed areas, or off-Forest.

Dispersed recreation use would continue to increase. Dispersed recreation would be emphasized over developed recreation, but would be managed at a reduced service level. No new trails or trailheads would be built. Most trails would be maintained at Level I; limited mileage would receive Level II maintenance. Many of the least used trails would be in an unsafe condition by the end of the planning period.

Cultural Resources

The Forest would emphasize the inventory of proposed projects in high and moderate sensitivity areas. This would gradually increase the number of known sites, but would not reduce the number of unevaluated sites nor provide monitoring of project effects to unevaluated sites. While under budget constraints, the Forest would not develop plans for the stabilization and enhancement of historic cultural resource sites or the interpretation and scientific study of prehistoric sites. Avoidance would be the preferred method of mitigation of project impacts, except where avoidance or protection would be unfeasible.

Wilderness

This alternative would propose that a portion of Borah Peak Roadless Area be recommended for wilderness classification (119,675 acres). This would place 901,930 acres, or 36 percent of the Forest, under wilderness classification.

This area would be managed at less than full service levels. Almost all of the wilderness trails would be maintained at Level I.

The Middle Fork of the Salmon River (Wild and Scenic River) and the Frank Church--River of No Return Wilderness would be managed according to the approved Wilderness Management Plan.

Timber

Average allowable sale quantities of sawtimber would be maintained at 1.0 MMBF per year throughout the planning period. The program would offer 85 MBF per year of roundwood products. The fuelwood program would offer 1.89 MMBF per year throughout the planning period.

Road construction/reconstruction needs for sawtimber access would be as follows:

Decade:	1st	2nd	3rd	4th	5th
Miles/Year:	0.5	0.4	0.4	0.4	0.4

Fuelwood roading in combination with low access mileage for sawtimber will require about 1 mile per year throughout the planning period.

The primary harvest species would be Douglas-fir. Harvest would occur by utilizing conventional tractor methods.

Insect and disease problems could be expected to continue in an increasing trend throughout the planning period.

Range

Range activities would be the same as those in Alternative 4.

Wildlife and Fish

Management would continue to provide habitat to ensure viability and recovery of Threatened and Endangered and Forest Service Sensitive plants and animals.

Habitat required to meet Idaho Department of Fish and Game objectives for fish and game MIS would be met.

Management Indicator Species would all increase in number. Wildife habitat capability would increase slowly. Habitat capability for anadromous and resident fish would be maintained or would improve slowly. Existing anadromous fish populations are well below present habitat capability and would have the potential to increase because of mitigation at dams, increased hatchery production, and improved overall coordination through the Northwest Power Planning Act.

Wildlife associated recreation use (WFUD's) would increase significantly over the planning period. This would become increasingly important to the local economy.

Habitat improvement programs for fish and wildlife would increase slightly.

Coordination efforts with timber, range, and minerals would be met at a minimal standard.

Mineral and Energy Development

The Forest would provide responses within required time periods for the over 130 projected annual requests from industry for leases, permits, licenses, and notices of intent, including coordination for exploration and development activities. Only the more significant requests in terms of potential impacts

would receive the level of coordination and support desired. Oil and gas leases would be processed as described in Appendix E. Responses to major site-specific proposals for exploration and development could require funding adjustments.

It is assumed that there would be one large scale project in the planning and development stage at any one time. If activity increases, some coordination, monitoring, or other management needs may not be met.

Withdrawals and legislative requirements associated with the Frank Church--River of No Return Wilderness restrict mineral entry on 782,255 acres of National Forest System lands. Congressional designation of additional wilderness under this alternative could restrict mineral activities on an additional 119,675 acres. With other mineral withdrawals, a total of 902,230 acres or 36 percent of the Forest, would be placed in a land classification restricted from mineral entry.

Lands

The program would continue at about the present level. The withdrawal reviews would be completed by 1989 as required. Rights-of-way needed and Small Tracts Act proposals would be processed as needed or scheduled. Land exchanges would be considered only for school sections as time permits.

The issuing of special use permits would increase because of increases in mineral activities, small hydroelectric projects, and requests for electronic sites and/or sharing of established facilities owned by others.

Inspection frequencies would remain at present level and could even decrease because of an increase in the above mentioned activities. Most property boundary marking and posting would be completed by 2020.

The Iron Bog and Meadow Canyon Research Natural Areas would be protected. Nine additional Research Natural Areas would be established during the first decade.

Soil and Water

Water quality and soil productivity would improve slowly. Present needs for watershed improvement would be met by the year 2005. This alternative would limit maximum sediment delivery to critical stream reaches within the established threshold levels.

Best Management Practices would be implemented and monitored on future projects. Water quality would be monitored in areas that have intensive management activities. Watershed protection would be coordinated with local and State agencies.

Soil and water resource inventories would be conducted at an annual rate of 30,000 to 60,000 acres.

Use on riparian areas will remain moderate. No significant deterioration of water quality would occur. No significant change in water yield would occur. Potential management-related water quality problems would be mitigated so sediment threshold levels were not exceeded.

Fire Management

The Fire Management organization and activities would be the same as those discussed under Alternative 1.

Transportation

Emphasis would be on maintaining a safe, functional, environmentally sound transportation system. By the end of the 3rd decade, 100 percent of the reconstruction needs will be completed. Only deferred maintenance would be provided after the 3rd decade. The reconstruction needs have been identified as 347 miles of arterial/collector roads, and 55.8 miles of local roads.

New construction of arterial, collector, and local roads not associated with timber would be limited.

Road maintenance could be accomplished on approximately 450 miles per year over the planning period in conjunction with the reconstruction program.

F. A. & O. Facilities

F. A. & O. facility maintenance would meet public health and safety standards. Maintenance and construction would arrest deteriorating conditions, but would not allow improvement. Any significant construction projects would require special fundings.

All water and sewer systems would be brought to State standards. Airfields would be brought to safe standards and maintained.

Expenditures would have the same priority as those identified in Alternative 1.

TABLE II-6 (7) ALTERNATIVE 7 - CURRENT PROGRAM, CONSTRAINED BUDGET PROJECTED CHALLIS NATIONAL FOREST PROGRAM OUTPUTS, ACTIVITIES, BENEFITS & COSTS

OUTPUT/ACTIVITY	UNIT OF MEASURE PER YEAR	TIME PERIODS (DECADES) 1986-1995	1996-2005	2006-2015	2016-2025	2026-2035	2036-2085	2086-2135	2136-2185
RECREATION 1/									
Wilderness Use (ROS I)	MRVD	135 0	148 0	148 0	148 0	148 0			
Dispersed Use (ROS II & III)	MRVD	387 3	483 5	483 5	483 5	483 5			
Developed Use (ROS IV)	MRVD	77 7	100 5	100 5	100 5	100 5			
WILDERNESS									
Management	M Acres	901 8	901.8	901.8	901 8	901 8			
WILDLIFE AND FISH									
Structural Habitat Improve	Struct	12	12	12	12	12			
Non-Struc Habitat Improve	Acres	563	563	563	563	563			
Anad. Fish Commercial	M # Lbs.	156	315	474	633	703			
Anadromous Fish Sport	M WFUD	36 7	60 6	83 7	107 3	119.3			
Coldwater Fish	M WFUD	165 5	215 3	258 8	298 2	374 3			
Wildlife Use	M WFUD	87 3	109 0	127 2	145 9	163 4			
Populations									
Deer	M Animals	24 6	31 4	39 3	48 2	58 6			
Elk	M Animals	5 5	6.8	7 9	8 1	8 3			
Bighorn Sheep	M Animals	0 9	1 7	2 4	3 2	3 9			
Mountain Goat	M Animals	0 6	0 7	0 7	0 8	1 0			
Red Squirrel	M Acres	714 1	713 1	712 1	711 0	710.0			
RANGE									
Grazing Use (Livestock)									
Actual Use (Projected)	M AUM	113 8	114 8	116 1	116 1	116.1			
Permitted Use (Projected)	M AUM	115	116	117	117	117			
TIMBER									
Allowable Sale Quantities	MMCF	0 2	0 2	0 2	0 2	0 2	0 8	0 8	0 8
	MMBF	1 0	1 0	1 0	1 0	1 0	3 5	3.5	3 5
Roundwood Products 2/	MMCF	0 02	0 02	0 02	0 02	0 02	0 02	0 02	0 02
	MMBF	0 09	0 09	0 09	0 09	0 09	0 09	0.09	0 09
Reforestation	Acres	281	225	172	191	166	586	520	478
Timber Stand Improvement	Acres	69	0	0	0	0	0	0	0
Fuelwood (Dead & Green)	MCF	420	420	420	420	420	420	420	420
SOIL AND WATER									
Meets or Exceeds State Stds	M Ac Ft	2463	2463	2463	2463	2463			
Meets Water Quality Goals 3/	M Ac Ft	2365	2365	2463	2463	2463			
Soil & Water Resource Imp	Acres	103	97	0	0	0			
MINERALS									
Leases	No Leases	147	188	188	188	188			
HUMAN RESOURCE PROGRAMS	Pers Yrs	17	17	17	17	17			
FACILITIES									
Trail Const/Reconstruction	Miles	0	0	0	0	0			
Road Reconstruction (Arterial & Collector)	Miles	10 8	16 2	8 1	0 9	0 9			
Local Road Construction 4/	Miles	1 0	1 0	1 0	1 0	1 0			
Local Road Reconstruction	Miles	1 4	2 6	1 3	0 8	0 8			
Timber Purch Road Constr	Miles	0 5	0 1	0 3	0 2	0 3			
Timber Purch Road Reconstr	Miles	0	0 3	0 1	0 2	0 1			

1/ Recreation Outputs are not duplicated within the ROS Classes (ROS - Recreation Opportunity Spectrum)
2/ Incidental amounts of roundwood products that may be offered dependent upon demand These volumes are not included in the allowable sale quantity
3/ Forest water quality goals, which exceed State water quality standards consist of not exceeding total depth fines of 30%
4/ Fuelwood roads

TABLE II-6 ALTERNATIVE 7 - CURRENT PROGRAM, CONSTRAINED BUDGET PROJECTED CHALLIS NATIONAL FOREST PROGRAM OUTPUTS, ACTIVITIES, BENEFITS & COSTS
(Continued)

BENEFITS	UNIT OF MEASURE PER YEAR	TIME PERIODS (DECADES) 1986-1995	1996-2005	2006-2015	2016-2025	2026-2035	2036-2085	2086-2135	2136-2185
Wilderness Recreation	M $	1431	1574	1574	1574	1574			
Dispersed Recreation	M $	1545	1929	1929	1929	1929			
Developed Recreation	M $	310	401	401	401	401			
Wildlife	M $	2498	3116	3634	4170	4670			
Anad Fish Commercial	M $	382	771	1161	1550	1722			
Anadromous Fish Sport	M $	2621	4332	5984	7671	8529			
Coldwater Fish	M $	3261	4252	5111	5889	7392			
Range	M $	1605	1615	1633	1633	1633			
Timber	M $	359	366	366	366	366	1271	1202	1116
Minerals	M $	395	498	498	498	498			

COSTS	UNIT OF MEASURE PER YEAR	TIME PERIODS (DECADES) 1	2	3	4	5
Total Forest Budget	M $	4060	4210	3930	3804	3804
Fixed Costs						
Protection	M $	617	617	617	617	617
GA	M $	700	700	700	700	700
Variable Costs						
Investment Costs						
Timber Roads	M $	13.8	11 7	11.9	10 8	10.8
Other Roads	M $	460	460	70	70	70
Investment Other	M $	306 4	251 5	220.9	224 8	219 8
Total Investment	M $	780 2	723 2	302 8	305 6	300 6
Operational Costs	M $	2068	2093	2093	2093	2093
Non-Forest Service Costs	M $	236.9	237 7	237 7	237 7	237 7
Returns to Treasury	M $	710 8	820 6	821 2	820 6	820 0

ALTERNATIVE 8 - MAXIMIZE WILDERNESS, AMENITY EMPHASIS

Under this alternative, all roadless areas would be managed for wilderness, and roaded areas would be managed for their amenity values [Table II-6(8)]. This would involve managing 2,174,390 acres of the Forest (86 percent) as wilderness.

Recreation

The Forest would continue low levels of developed site maintenance, except near wilderness. Some sites wouldde teriorate to the extent that either all or parts of sites would have to be closed. Low use, high maintenance cost sites would be closed first. Sites near or serving wilderness users would be managed at a full service level. Trailheads needed for wilderness management would be constructed as the need arose. Use would reach capacity by 1990. This would be due to an expected increase in demand and a decrease in facilities as mentioned above. Use would shift from camping in developed sites to the dispersed areas, or off-Forest.

These closures would probably be started by 1990. Developed site capacity would be reduced by 28 percent by 2030.

Dispersed recreation use would continue to increase outside of wilderness. Dispersed recreation would be emphasized over developed recreation, but would still be managed at a reduced service level. No new trails or trailheads would be built except those serving wilderness. Most trails would be maintained at Level II with limited mileage receiving higher maintenance.

Cultural Resources:

The Forest would initiate a monitoring/evaluation plan of the impacts occurring to cultural resource sites resulting from other activities. Emphasis would be placed on long-term stabilization and enhancement of significant historic sites, and the interpretation and scientific study of prehistoric sites within the Frank Church--River of No Return Wilderness and the Middle Fork Wild and Scenic River Corridor as specified in the approved management plans. Cultural resource plans would be developed for other Wilderness areas as needed. The Forest would de-emphasize maintenance and interpretation at Custer and the Yankee Fork Dredge, consistent with the low level developed site maintenance program of this alternative.

Wilderness

All inventoried Roadless Areas (Table 11-4) would be recommended for wilderness classification. This would add 1,392,135 acres to the wilderness system for a total of 2,174,390 acres, or 86 percent of the Forest land base.

Wilderness would be managed at a reduced service level until management plans were approved. The Frank Church--River of No Return Wilderness would be managed as specified in the management plan. The Middle Fork Wild and Scenic River would be managed as specified in the approved plans.

Timber

Average allowable sale quantities of sawtimber would be maintained at 2.0 MMBF per year throughout the planning period.

The program would offer 85 MBF per year of roundwood. Fuelwood offerings would be 1.89 MMBF per year throughout the period.

Road construction/reconstruction needs for sawtimber access would be as follows:

Decade:	1st	2nd	3rd	4th	5th
Miles/Year:	1.0	1.5	2.5	2.1	1.0

In combination with harvest access roads, 0.75 mile to 1 mile of road per year would be necessary to provide fuelwood access.

The primary harvest species would be Douglas-fir. Harvest would occur by utilizing conventional tractor methods.

Insect and disease potential would remain the same throughout the planning period.

Range

Because of emphasis on wilderness management and other amenity values, range administration and management would be reduced from the current program.

Livestock use (AUM's) would decline 15 percent over the planning period. This alternative would have the greatest impact on range outputs (AUM's), and could create a severe impact on the family ranching operations. To maintain the AUM output, permittees' cooperation and participation in the range improvement program would be assumed.

Wildlife and Fish

The Forest would continue to provide habitat to ensure viability and recovery of Threatened and Endangered and Forest Service Sensitive plants and animals.

Habitat required to meet Idaho Department of Fish and Game objectives, for fish and game MIS, would be met.

Management Indicator Species would increase in number. Wildlife habitat capability would decrease in areas outside wilderness and increase slowly in wilderness. Habitat capability for anadromous and resident fish would be maintained or decreased slightly in non-wilderness and would improve slowly in wilderness. Existing anadromous fish populations are well below present habitat capability and would have the potential to increase because of mitigation at dams, increased hatchery production, and improved overall coordination through the Northwest Power Planning Act.

Wildlife associated recreation use (WFUD's) would increase significantly over planning period. This would become increasingly important to the local economy.

Habitat improvement programs for fish and wildlife would be sustained at a very low level.

Mineral and Energy Development

The Forest would be able to respond to a moderate increase in mining activity and maintain complete services. For energy projects, there would be very limited services. Oil and gas lease applications would be processed as described in Appendix E. Stipulations would be relatively restrictive because of the amenity emphasis. This emphasis would require funding adjustments to respond to major site-specific exploration and development proposals.

Withdrawals and legislative requirements in existing wildernesses would restrict mineral entry on 782,255 acres of National Forest System lands. Congressional designation of additional wilderness under this alternative could restrict these activities on an additional 1,392,135 acres. With other mineral withdrawals, a total of 2,174,690 acres, or 86 percent of the Forest, would be removed from mineral entry.

Lands

The program would continue at about the present level. The withdrawal reviews would be completed on schedule by 1989. Rights-of-way easements for roads and trails would be processed as needed.

Land exchanges would be initiated by the Forest only for school sections.

The issuing of special use permits would increase because of increases in mineral activities, small hydro-electric projects, and the need for additional electronic sites.

Inspections would be fewer than mandated because of anticipated increases as stated above. Most property boundary marking and posting would be completed by 2020.

The Iron Bog and Meadow Canyon Research Natural Areas would be retained. Establishment reports would be written and submitted, recommending designation of nine additional Research Natural Areas during the first decade.

Soil and Water

Water quality and soil productivity would slowly improve naturally with time, as a result of reduced management activities. Riparian conditions Forest-wide would tend to decline in the first decade and then should slowly improve to the end of the planning period. Sediment levels would increase slightly along the roaded corridors. Instream flow determinations may not be accomplished under this alternative and the soil and water improvement needs would not be met during the planning period. No significant changes in water yield would occur.

Fire Management

Lightning-caused fire occurrence would remain at the past levels of approximately 35 fires annually while man-caused fire occurrence would increase from the 1970-1979 level of 15 annually. This increase in man caused fire occurrence would be due to the decrease in the prevention program and the increase in dispersed recreation. Over time, man-caused fire occurrence would continue to increase as the number of forest users increased. During the period 1970-1979, man-caused fires accounted for over 70 percent of the area

burned, and 70 percent of the suppression costs; thus an increase in man-caused fire occurrence would significantly increase burned area and suppression costs.

Presuppression funding at this level would not provide for a cost effective fire protection program. Based on Level II fire planning, total protection costs would average about $1,200,000 annually and area burned would average about 660 acres. Protection costs and area burned would continue to increase as man-caused fire occurrence increased. Total protection costs as used in this paragraph includes presuppression and suppression costs, and accounts for any benefits or damages to burned area.

Area fire management plans would not be developed or implemented. Previously implemented plans would be discontinued. The Forest would be unable to meet current commitments in fire protection agreements with other agencies.

Transportation

The Forest would emphasize maintaining a safe, functional, environmentally sound transportation system. By the end of the 3rd decade, 89 percent of the reconstruction needs will be completed. Only deferred maintenance would be provided after the third decade. The reconstruction needs have been identified as 347 miles of arterial/collector roads, and 55.8 miles of local roads.

This alternative would not provide for new construction of roads for other than timber management needs.

Road maintenance could be accomplished on approximately 560 miles/year over the planning horizon if in conjunction with the reconstruction program proposed in this alternative. Most arterial and collector roads would be maintained to level 3 standards or better. Most local roads serving commodity outputs would be maintained at level 2.

F.A. & O. Facilities

F.A. & O. facility maintenance would be at the minimum levels to meet public health and safety standards. Maintenance would arrest deteriorating conditions, but would not allow improvement. Any significant construction projects would require special funding.

All water and sewer systems would be brought to State standards. Airfields would be brought to safe standards and maintained.

Expenditures would have the same priority as those identified in Alternative 1.

TABLE II-6 (8) ALTERNATIVE 8 - MAXIMIZE WILDERNESS, AMENITY EMPHASIS PROJECTED CHALLIS NATIONAL FOREST PROGRAM OUTPUTS, ACTIVITIES, BENEFITS & COSTS

OUTPUT/ACTIVITY	UNIT OF MEASURE PER YEAR	TIME PERIODS (DECADES) 1986-1995	1996-2005	2006-2015	2016-2025	2026-2035	2036-2085	2086-2135	2136-2185
RECREATION 1/									
Wilderness Use (ROS I)	MRVD	327 7	448.0	448 0	448 0	448 0			
Dispersed Use (ROS II & III)	MRVD	174.8	215 0	215 0	215.0	215 0			
Developed Use (ROS IV)	MRVD	67.5	84 0	84 0	84 0	84.0			
WILDERNESS									
Management	M Acres	2174 3	2174 3	2174 3	2174 3	2174 3			
WILDLIFE AND FISH									
Structural Habitat Improve	Struct.	4	4	4	4	4			
Non-Struc. Habitat Improve.	Acres	77	77	77	77	77			
Anad. Fish Commercial	M # Lbs.	156	315	474	634	704			
Anadromous Fish Sport	M WFUD	35 8	58 9	81 9	104 5	116 5			
Coldwater Fish	M WFUD	165 6	215 5	247 7	279 9	339 1			
Wildlife Use	M WFUD	87 2	108.8	128 7	150 9	174.0			
Populations									
Deer	M Animals	24 6	31 5	39 3	48.4	58 5			
Elk	M Animals	5 5	6.9	8.2	8 5	8 6			
Bighorn Sheep	M Animals	1 0	1 7	2 5	3 3	4 0			
Mountain Goat	M Animals	0 6	0 7	0.8	0 9	1.0			
Red Squirrel	M Acres	712 2	709 9	707 6	705 3	703 0			
RANGE									
Grazing Use (Livestock)									
Actual Use (Projected)	M AUM	111 5	103 5	96 4	96 4	96 4			
Permitted Use (Projected)	M AUM	114	106	98	98	98			
TIMBER									
Allowable Sale Quantities	MMCF	0 5	0.5	0 5	0 5	0 5	0 5	0.8	0 8
	MMBF	2 05	2.05	2 05	2 05	2 05	2 05	3 5	3 5
Roundwood Products 2/	MMCF	0 02	0 02	0 02	0 02	0 02	0 02	0 02	0.02
	MMBF	0 09	0 09	0 09	0 09	0.09	0 09	0 09	0 09
Reforestation	Acres	479	476	408	476	370	342	440	374
Timber Stand Improvement	Acres	15	0	0	0	0	0	0	0
Fuelwood (Dead & Green)	MCF	420	420	420	420	420	420	420	420
SOIL AND WATER									
Meets or Exceeds State Stds	M Ac Ft	2463	2463	2463	2463	2463			
Meets Water Quality Goals 3/	M Ac Ft	2365	2365	2365	2365	2365			
Soil & Water Resource Imp.	Acres	10	4	0	0	0			
MINERALS									
Leases	No. Leases	41	58	58	58	58			
HUMAN RESOURCE PROGRAMS	Pers Yrs.	17	17	17	17	17			
FACILITIES									
Trail Const/Reconstruction	Miles	0	0	0	0	0			
Road Reconstruction (Arterial & Collector)	Miles	15 4	15 4	0	0 9	0.9			
Local Road Construction 4/	Miles	0 7	0 7	0 7	0 7	0 7			
Local Road Reconstruction	Miles	0 7	0.7	3 3	0.8	0.8			
Timber Purch. Road Constr.	Miles	1.0	0.8	1.9	0 8	0.5			
Timber Purch. Road Reconstr.	Miles	0	0 7	0.6	1 3	0.5			

1/ Recreation Outputs are not duplicated within the ROS Classes. (ROS - Recreation Opportunity Spectrum)
2/ Incidental amounts of roundwood products that may be offered dependent upon demand These volumes are not included in the allowable sale quantity.
3/ Forest water quality goals, which exceed State water quality standards consist of not exceeding total depth fines of 30%
4/ Fuelwood roads.

TABLE II-6 (8) ALTERNATIVE 8 - MAXIMIZE WILDERNESS, AMENITY EMPHASIS PROJECTED CHALLIS NATIONAL FOREST PROGRAM OUTPUTS, ACTIVITIES, BENEFITS & COSTS
(Continued)

BENEFITS	UNIT OF MEASURE PER YEAR	TIME PERIODS (DECADES) 1986-1995	1996-2005	2006-2015	2016-2025	2026-2035	2036-2085	2086-2135	2136-2185
Wilderness Recreation	M $	3951	4767	4767	4767	4767			
Dispersed Recreation	M $	697	858	858	858	858			
Developed Recreation	M $	269	335	335	335	335			
Wildlife	M $	2493	3110	3676	4311	4971			
Anad Fish Commercial	M $	382	773	1163	1553	1725			
Anadromous Fish Sport	M $	2558	4214	5858	7474	8332			
Coldwater Fish	M $	3263	4257	4893	5529	6698			
Range	M $	1572	1456	1355	1355	1355			
Timber	M $	736	751	748	745	715	1132	1022	1022
Minerals	M $	150	200	200	200	200			

COSTS	UNIT OF MEASURE PER YEAR	TIME PERIODS (DECADES) 1	2	3	4	5
Total Forest Budget	M $	3922	3860	3860	3860	3860
Fixed Costs						
Protection	M $	497	497	497	497	497
GA	M $	800	735	800	800	800
Variable Costs						
Investment Costs						
Timber Roads	M $	29 4	41 0	67 6	53 5	28 6
Other Roads	M $	400	400	70	70	70
Investment Other	M $	288 0	270 2	254 6	268 5	259 6
Total Investment	M $	717 4	711 2	392 2	392 0	358 2
Operational Costs	M $	2040	2047	2046	2046	2046
Non-Forest Service Costs	M $	501 1	502 7	502 3	502 0	529 5
Returns to Treasury	M $	577 7	633 3	622 2	621 9	566 8

ALTERNATIVE 9 - HIGH WILDERNESS, COMMODITY EMPHASIS

This alternative would display a significant increase in proposed wilderness acreage while placing high commodity emphasis prescriptions on the remaining Forest lands [Table II-6(9)].

Recreation

Low levels of developed site maintenance would continue. Sites would deteriorate to the extent that either all or parts of sites would have to be closed. Low use, high maintenance cost sites would be closed first. Developed sites near and serving wilderness users would receive priority over others for maintenance. Use would reach capacity by 1990. This would be due to an expected increase in demand and a decrease in facilities as mentioned above. Use would shift from camping in developed sites to the dispersed areas.

Dispersed recreation use would continue to increase outside of wilderness. Dispersed recreation would be emphasized over developed recreation, but would still be managed at a reduced service level. No new trails or trailheads would be built except those serving wilderness. Most trails would be maintained at Level II; limited mileage would receive higher maintenance.

Cultural Resources

The Forest would emphasize the inventory of proposed projects in high, moderate, and low sensitivity areas. This would add to the number of known sites on the Forest, and efforts could be made to reduce the backlog of unevaluated sites by four per year. Also, the Forest could begin reducing the backlog of significant sites awaiting nomination to the NRHP. Avoidance would be the preferred method of mitigation of project impacts, except where avoidance or protection would be unfeasible. The Forest would initiate a monitoring/evaluation plan of the impacts occurring to cultural resource sites resulting from other activities. Plans would be prepared for the preservation and/or enhancement of significant cultural resource sites, and would emphasize the stabilization and enhancement of significant historic sites, and the interpretation and scientific study of prehistoric sites within the Frank Church--River of No Return Wilderness and the Middle Fork Wild and Scenic River Corridor as specified in the approved management plans. Cultural resource management plans for other Wilderness areas would be developed as needed.

Wilderness

The following Roadless Areas would be proposed for wilderness designation:

Camas Creek	63,949 acres	Taylor Mountain	14,940 acres
Lemhi Range	149,629 acres	Challis Creek	41,354 acres
Greylock	12,605 acres	Loon Creek	106,758 acres
Pahsimeroi Mtn.	44,617 acres	Borah Peak	129,581 acres
King Mountain	82,695 acres	Hanson Lakes	13,719 acres
Red Mountain	5,189 acres	Boulder/White Cloud	134,754 acres
Pioneer Mountain	169,420 acres	Blue Bunch	7,472 acres
Diamond Peak	72,239 acres		

These acres add up to 1,048,821. When these acres are added to the already existing wilderness acres, this places 73 percent of the Forest under wilderness classification.

Additional trailheads would be needed to meet the demands. Trails would be maintained at Level I and II within the wilderness.

The Frank Church--River of No Return Wilderness, as well as the Middle Fork Wild and Scenic River, would be managed as specified in the management plans.

Timber

Average allowable sale quantities of sawtimber offered would be maintained at 4.9 MMBF per year throughout the planning period.

The roundwood program would offer 135 MBF per year of products. Fuelwood offered would be 2.25 MMBF per year for the planning period.

Road construction/reconstruction needs for sawtimber access would be as follows:

Decade:	1st	2nd	3rd	4th	5th
Miles/Year:	2.5	3.7	6.3	4.6	2.2

Fuelwood roading would require 0.5 to 0.75 mile per year, in addition to the sawtimber access road system.

The primary harvest species would be Douglas-fir. Harvest would occur by utilizing conventional tractor methods. Some aerial (cable) logging would occur during the 5th decade.

Insect and disease problems would decrease on the area of land under management, but would increase Forest-wide in wilderness areas.

Range

Range administration and management would be slightly reduced from current level.

Livestock use (AUM's) would decline 9 percent over the planning period. This alternative would impact the economic stability of family ranching operations.

Wildlife and Fish

The Forest would continue to provide habitat to ensure viability and recovery of Threatened and Endangered and Forest Service Sensitive plants and animals.

Habitat required to meet Idaho Department of Fish and Game objectives, for fish and game MIS, would be met.

Management Indicator Species would increase in number. Wildlife habitat capability would decrease outside wilderness, and would increase slowly in wilderness. Habitat capability for anadromous and resident fish could decrease in non-wilderness and could improve slowly in wilderness. Existing numbers of anadromous fish populations are well below present habitat capability and would have the potential to increase because of mitigation at dams, increased hatchery production, and improved overall coordination through the Northwest Power Planning Act.

Wildlife associated recreation use (WFUD's) would increase significantly over the planning period but at a slow rate. This would become increasingly important to the local economy.

Mineral and Energy

The Forest would be able to respond to a minor increase in mineral activity and would maintain complete services. For energy projects, there would be very limited services. Oil and gas lease applications would be processed as described in Appendix E. Funding adjustments could be required to respond to major site-specific exploration and development proposals.

Withdrawals and legislative requirements in existing wilderness would restrict mineral entry on 782,255 acres of National Forest System Lands. Congressional designation of additional wilderness under this alternative could restrict these activities on an additional 1,048,821 acres. Mineral withdrawals would total 1,831,376 acres or 73 percent of the Forest.

Lands

The same program as that under Alternative 1 would be carried out. Funding to initiate and complete land exchanges with the State of Idaho would be possible. By the end of the fifth decade, all State School sections should be acquired. About 6,977 acres would then be under our management, thus reducing some management problems. Withdrawal review would be completed by 1989.

The issuing of special use permits would increase because of increases in mineral activities, small hydroelectric projects, and requests for electronic sites. Inspection would remain at the present level and could decrease because of the activities mentioned above. Property boundary marking and posting would be completed by 2020.

The Iron Bog and Meadow Canyon Research Natural Areas would be retained. Establishment reports would be written and submitted, recommending designation of nine additional Research Natural Areas during the first decade.

Soil and Water

Water quality and soil productivity would slowly improve in wilderness areas. However, water quality would steadily decline in the intensively managed areas, especially where activities would be limited to long, narrow corridors paralleling major streams. There would be a decline in water quality but State water quality standards would be met. Likewise, sediment levels would increase significantly in these areas. Riparian areas would tend to remain static or would slowly decline during the first decade, then progressively decline in non-wilderness areas over later decades of the planning period. Soil and water improvement needs would not be met during the planning period. No significant changes in water yield would occur.

Fire Management

The fire management organization and activities will be the same as those discussed under Alternative 2.

Transportation

Emphasis would be on maintaining a safe, functional, environmentally sound transportation system. By the end of the 3rd decade, 89 percent of the reconstruction needs would be completed. Only a deferred maintenance program could be provided after the 3rd decade. The reconstruction needs have been identified as 347 miles of arterial/collector roads, and 55.8 miles of local roads.

This alternative would not provide for new construction of roads for other than timber needs.

Road maintenance could be accomplished on approximately 560 miles per year over the planning horizon in conjunction with the reconstruction program. Most arterial and collector roads would be maintained to level 3 standards or better. Most local roads serving commodity outputs would be maintained at level 2.

F. A. & O. Facilities

F. A. & O. facility maintenance would be at the minimum levels necessary to meet public health and safety standards. Maintenance would arrest deteriorating conditions, but would not allow improvement. Any significant construction needs would require special funding.

All water and sewer systems would be brought to State standards. Airfields would be brought to safe standards and maintained.

Expenditures would have the same priority as those identified in Alternative 1.

TABLE II-6 (9) ALTERNATIVE 9 - HIGH WILDERNESS/COMMODITY EMPHASIS PROJECTED CHALLIS NATIONAL FOREST PROGRAM OUTPUTS, ACTIVITIES, BENEFITS & COSTS

OUTPUT/ACTIVITY	UNIT OF MEASURE PER YEAR	TIME PERIODS (DECADES) 1986-1995	1996-2005	2006-2015	2016-2025	2026-2035	2036-2085	2086-2135	2136-2185
RECREATION 1/									
Wilderness Use (ROS I)	MRVD	304 6	318 0	318 0	318 0	318 0			
Dispersed Use (ROS II & III)	MRVD	218 4	266 9	266 9	266 9	266 9			
Developed Use (ROS IV)	MRVD	90 0	116.0	116 0	116 0	116 0			
WILDERNESS									
Management	M Acres	1831 0	1831 0	1831 0	1831 0	1831.0			
WILDLIFE AND FISH									
Structural Habitat Improve.	Struct	1	1	1	1	1			
Non-Struc. Habitat Improve	Acres	2	2	2	2	2			
Anad. Fish Commercial	M # Lbs	154	311	468	625	694			
Anadromous Fish Sport	M WFUD	35.3	58 0	80 9	103 2	115 1			
Coldwater Fish	M WFUD	158 1	205 6	236.8	270 0	329 2			
Wildlife Use	M WFUD	79 8	99 7	118 2	138 7	149 9			
Populations									
Deer	M Animals	22 7	28 9	36 7	46 1	56 5			
Elk	M Animals	5 2	6.4	6 8	7.0	7.2			
Bighorn Sheep	M Animals	1 0	1 6	2 3	3 0	3.8			
Mountain Goat	M Animals	0.6	0.7	0 7	0.8	1 0			
Red Squirrel	M Acres	710 0	703 9	698 2	692 9	687 0			
RANGE									
Grazing Use (Livestock)									
Actual Use (Projected)	M AUM	111 5	107 4	103 2	103 0	103 0			
Permitted Use (Projected)	M AUM	114	109	105	105	105			
TIMBER									
Allowable Sale Quantities	MMCF	1 1	1.1	1.1	1 1	1 1	1 1	1.9	1 9
	MMBF	4 9	4 9	4 9	4.9	4 9	4 9	8.6	8 6
Roundwood Products 2/	MMCF	0.03	0.03	0 03	0 03	0 03	0 03	0.03	0 03
	MMBF	0 14	0.14	0 14	0 14	0 14	0 14	0 14	0 14
Reforestation	Acres	909	1150	945	1127	877	799	1077	919
Timber Stand Improvement	Acres	69	0	0	0	0	0	0	0
Fuelwood (Dead & Green)	MCF	500	500	500	500	500	500	500	500
SOIL AND WATER									
Meets or Exceeds State Stds	M Ac Ft	2463	2463	2463	2463	2463			
Meets Water Quality Goals 3/	M Ac Ft	2365	2365	2365	2365	2340			
Soil & Water Resource Imp.	Acres	31	28	0	0	0			
MINERALS									
Leases	No. Leases	66	95	95	95	95			
HUMAN RESOURCE PROGRAMS	Pers. Yrs	26	26	26	26	26			
FACILITIES									
Trail Const/Reconstruction	Miles	0	0	0	0	0			
Road Reconstruction (Arterial & Collector)	Miles	15 4	15 4	0	0 9	0 9			
Local Road Construction 4/	Miles	0 5	0 5	0 7	0 7	0 7			
Local Road Reconstruction	Miles	0 7	0 7	3 3	0 8	0.8			
Timber Purch. Road Constr.	Miles	2.5	2.0	4 9	1 2	1 5			
Timber Purch. Road Reconstr.	Miles	0	1 7	1 4	3 4	0 7			

1/ Recreation Outputs are not duplicated within the ROS Classes (ROS - Recreation Opportunity Spectrum)

2/ Incidental amounts of roundwood products that may be offered dependent upon demand These volumes are not included in the allowable sale quantity.

3/ Forest water quality goals, which exceed State water quality standards consist of not exceeding total depth fines of 30%

4/ Fuelwood roads.

TABLE II-6 (9) ALTERNATIVE 9 - HIGH WILDERNESS/COMMODITY EMPHASIS PROJECTED CHALLIS NATIONAL FOREST PROGRAM OUTPUTS, ACTIVITIES, BENEFITS & COSTS (Continued)

BENEFITS	UNIT OF MEASURE PER YEAR	TIME PERIODS (DECADES) 1986-1995	1996-2005	2006-2015	2016-2025	2026-2035	2036-2085	2086-2135	2136-2185
Wilderness Recreation	M $	3229	3371	3371	3371	3371			
Dispersed Recreation	M $	871	1065	1065	1065	1065			
Developed Recreation	M $	359	463	463	463	463			
Wildlife	M $	2282	2850	3377	3963	4283			
Anad Fish Commercial	M $	377	761	1146	1531	1700			
Anadromous Fish Sport	M $	2526	4150	5787	7381	8232			
Coldwater Fish	M $	3115	4061	4697	5333	6502			
Range	M $	1573	1510	1450	1449	1449			
Timber	M $	1756	1792	1786	1747	1669	1751	2743	2485
Minerals	M $	245	337	337	337	337			

COSTS	UNIT OF MEASURE PER YEAR	TIME PERIODS (DECADES) 1	2	3	4	5
Total Forest Budget	M $	4567	4549	4201	4191	4190
Fixed Costs						
Protection	M $	740	740	740	740	740
GA	M $	815	807	816	816	816
Variable Costs						
Investment Costs						
Timber Roads	M $	70 9	99 3	173 2	113 3	57 7
Other Roads	M $	400	400	70	70	70
Investment Other	M $	459.6	469 7	410 4	448 2	429.0
Total Investment	M $	930 5	969 0	653 6	631 5	556 7
Operational Costs	M $	2264	2264	2264	2264	2264
Non-Forest Service Costs	M $	1211.3	1215 2	1214 6	1203 6	1253 9
Returns to Treasury	M $	982 0	1098.0	1087 3	1058 6	929 5

ALTERNATIVE 10 - CURRENT PROGRAM, UNCONSTRAINED BUDGET

This alternative would continue the current trend of goods and services except that timber and range management would be intensified [Table II-6(10)]. The budget would be unconstrained in order to support this trend.

Recreation

The projected demand for developed recreation use on the Forest would be met. Existing high use developed sites would be rehabilitated or reconstructed. Approximately ten new sites would be constructed with priority on new sites near population areas. Single family and group use capacity would be increased. Existing and new sites would be hardened to prevent soil loss, streambank erosion, and loss of vegetation.

The program at the Custer Museum and Yankee Fork Dredge would be expanded to accommodate an additional 7,000 RVD's expected use.

Dispersed recreation would be managed at reduced service levels. It could diminish slightly in quality due to high levels of timber harvest and grazing activities. Increased timber road construction could reduce the total mileage of system trails. Dispersed recreation improvements would be developed to enhance wilderness as well as to prevent over-use of some areas.

Because motorized vehicles are restricted in wilderness, trails would be closed to this type of use.

The Big Hat Creek Trail through to Morgan Creek Summit would be nominated as a National Recreation Trail. This would complement the nomination by the Salmon National Forest as the trail is located on both Forests.

Cultural Resources

The Forest would emphasize the inventory of proposed projects in high, moderate, and low sensitivity areas. This would greatly add to the number of known sites on the Forest, and efforts could be made to reduce the backlog of unevaluated sites by three per year. Also, the Forest could begin reducing the backlog of significant sites awaiting nomination to the NRHP. Avoidance would be the preferred method of mitigation of project impacts, except where avoidance or protection would be unfeasible. The Forest would develop plans for the preservation and/or enhancement of significant sites, and begin to initiate some of these plans. A comprehensive Forest-wide cultural resource overview would be completed within the first decade.

Wilderness

Under this alternative, approximately 160,000 acres of roadless areas would be proposed for inclusion into the wilderness system. They would be:

Borah Peak	116,000 acres
Boulder/White Clouds	6,000 acres
Pioneer Mountains	38,000 acres

This would place 942,255 acres, or 37 percent of the Forest, in the system. These, as well as the existing wilderness, would be managed as specified in the approved management plans.

Trail maintenance would be at Level I with short sections and main trails maintained at higher standards.

Timber

Average allowable sale quantities for sawtimber would be 3.6 MMBF per year for the first decade, 9.9 MMBF per year for the remainder. The roundwood products would be 85.5 MBF per year throughout.

Fuelwood offered would would be maintained at 1.9 MMBF per year over the planning period.

Road construction/reconstruction needs for sawtimber access would be as follows:

Decade:	1st	2nd	3rd	4th	5th
Miles/Year:	2.0	6.0	11.8	6.9	6.2

Fuelwood access roading would require 1.0 mile per year for first decade, then the necessary access would be provided through the sawtimber program.

The primary harvest species would be Douglas-fir. Harvest would occur by utilizing conventional tractor methods. During the 5th decade, some aerial (cable) logging would occur.

Insect and disease potential would decline on managed lands throughout the planning period. About one-third of the commercial stands would be placed under management.

Range

This Alternative would be essentially the same as Alternative 4. Range administration and management would be slightly above the present level.

Permitted livestock use (AUM's) would increase by 3.5 percent over the planning period. This would increase the economic stability of the local family ranching operations that receive the increases.

Wildlife and Fish

The Forest would continue to provide habitat to ensure viability and recovery of Threatened and Endangered and Forest Service Sensitive plants and animals.

Habitat required to meet Idaho Department of Fish and Game objectives, for fish and game MIS, will be met.

Management Indicator Species would increase in number. Wildlife habitat capability would be maintained at present levels. Habitat capability for anadromous and resident fish would be maintained or would improve slowly. Existing anadromous fish populations are well below habitat capability and would have the potential to increase because of mitigation at dams, increased hatchery production, and improved overall coordination through the Northwest Power Planning Act.

Wildlife associated recreation use (WFUD's) would increase significantly over the planning period. This would become increasingly important to the local economy.

Habitat improvement programs for fish and wildlife would be moderately high.

Coordination efforts with timber, range,.and minerals would be slightly increased.

Mineral and Energy Development

The Forest would be able to respond to a minor increase in mineral activity and maintain complete services. Adequate services could be provided for processing oil and gas lease applications as described in Appendix E. Funding adjustments could be required to respond to major site-specific exploration and development proposals.

Withdrawals and legislative requirements in existing wilderness would restrict mineral entry on 782,255 acres of National Forest Service lands. Congressional designation of additional wilderness under this alternative could restrict these activities on an additional 160,000 acres. A total of 942,555 acres, or 37 percent of the Forest, would be withdrawn.

Lands

The issuing of special use permits would increase because of increases in mining activities, small hydro-electric projects, and need for electronic sites.

Inspection would increase, thus requiring additional work to bring use in line with permit stipulations. Additional follow-up actions would increase.

The withdrawal review process would be completed by 1989. Rights-of-way for roads and trails would continue to be needed until the backlog cases were completed by 2004. An aggressive exchange program with the State would be possible.

The backlog miles of property boundary location and marking would be completed by 2020.

The Iron Bog and Meadow Canyon Research Natural Areas would be protected. Nine other Research Natural Areas would be established during the first decade.

Soil and Water

Watershed conditions would improve over the planning period. The projected trend would be based on accomplishing the improvement backlog by the year 2005.

More emphasis would be placed on mitigating watershed damage as it occurs, especially in riparian areas. Likewise, the maintenance program would be intensified in response to the priority given to riparian conditions and conflicts addressed in the issues and concerns package.

The alternative would complete soil and water resource inventory on high priority areas by 2000.

Adequate monitoring would be provided to meet Forest soil and water objectives and to comply with State cooperative agreements. This would include monitoring impacts of oil and gas exploration. Forest water needs would be inventoried, particularly instream flow requirements for fisheries and channel maintenance. The watershed condition inventory would be updated as additional improvement needs were identified. No significant changes in water yield would occur.

Fire Management

The fire management organization and activities would be the same as those discussed under Alternative 1.

Transportation

Emphasis would be on maintaining a safe, functional, environmentally sound transportation system. By the end of the 3rd decade, 100 percent of the reconstruction needs would be completed. Only a deferred maintenance program would be provided after the 3rd decade. The reconstruction needs have been identified as 347 miles of arterial/collector roads, and 55.8 miles of local roads.

This alternative would not provide for new construction of roads for other than timber, if the 89 percent of reconstruction needs were accomplished.

Road maintenance could be accomplished on approximately 560 miles per year over the planning period, if in conjunction with the reconstruction program proposed in this alternative. Most arterial and collector roads would be maintained to level 3 standards or better. Most local roads serving commodity outputs would be maintained at level 2.

F. A. & O. Facilities

F. A. & O. facility maintenance would be at the minimum levels to meet public health and safety standards. Maintenance would arrest deteriorating conditions, but would not allow improvement. Any significant construction projects would require special funding.

All water and sewer systems would be brought to State standards. Airfields would be brought to safe standards and maintained.

Expenditures would have the same priority as those identified in Alternative 1.

TABLE II-6 (10) ALTERNATIVE 10 - CURRENT PROGRAM, UNCONSTRAINED BUDGET PROJECTED CHALLIS NATIONAL FOREST PROGRAM OUTPUTS, ACTIVITIES, BENEFITS & COSTS

OUTPUT/ACTIVITY	UNIT OF MEASURE PER YEAR	TIME PERIODS (DECADES) 1986-1995	1996-2005	2006-2015	2016-2025	2026-2035	2036-2085	2086-2135	2136-2185
RECREATION 1/									
Wilderness Use (ROS I)	MRVD	148	162	162	162	162			
Dispersed Use (ROS II & III)	MRVD	385	481	481	481	481			
Developed Use (ROS IV)	MRVD	81	103	103	103	103			
WILDERNESS									
Management	M Acres	942 2	942 2	942 2	942 2	942 2			
WILDLIFE AND FISH									
Structural Habitat Improve	Struct	19	19	19	19	19			
Non-Struc Habitat Improve	Acres	659	659	659	659	659			
Anad Fish Commercial	M # Lbs	154	315	476	635	705			
Anadromous Fish Sport	M WFUD	37 0	61 0	84 0	108 0	120 0			
Coldwater Fish	M WFUD	166 9	216 6	245 0	280 0	340 0			
Wildlife Use	M WFUD	85 5	106 8	128 8	157 8	185 0			
Populations									
Deer	M Animals	24 6	32 0	41 2	51 1	61 2			
Elk	M Animals	5 8	7 0	8 3	8 6	8 7			
Bighorn Sheep	M Animals	1 0	1 7	2 5	3 2	3 9			
Mountain Goat	M Animals	0 6	0 7	0 7	0 8	1 0			
Red Squirrel	M Acres	806 0	796.5	787 0	777 5	668 0			
RANGE									
Grazing Use (Livestock)									
Actual Use (Projected)	M AUM	115	117	117	117	117			
Permitted Use (Projected)	M AUM	116	118	118	118	118			
TIMBER									
Allowable Sale Quantities	MMCF	0 8	2 2	2 2	2 2	2.2	2 2	2 6	3 4
	MMBF	3.6	9 9	9 9	9 9	9 9	9 9	11 6	15.2
Roundwood Products 2/	MMCF	0 02	0 02	0 02	0 02	0 02	0 02	0 02	0 02
	MMBF	0 09	0.09	0.09	0 09	0 09	0 09	0 09	0 09
Reforestation	Acres	671	1921	2175	1895	1802	1779	1296	1631
Timber Stand Improvement	Acres	69	0	0	0	0	0	0	0
Fuelwood (Dead & Green)	MCF	420	420	420	420	420	420	420	420
SOIL AND WATER									
Meets or Exceeds State Stds	M Ac Ft	2463	2463	2463	2463	2463			
Meets Water Quality Goals 3/	M Ac Ft	2365	2365	2365	2365	2414			
Soil & Water Resource Imp.	Acres	100	100	0	0	0			
MINERALS									
Leases	No Leases	149	190	190	190	190			
HUMAN RESOURCE PROGRAMS	Pers Yrs	17	17	17	17	17			
FACILITIES									
Trail Const/Reconstruction	Miles	3	3	3	3	3			
Road Reconstruction (Arterial & Collector)	Miles	17 4	17 4	0	0 9	0 9			
Local Road Construction 4/	Miles	1 0	0	0	0	0			
Local Road Reconstruction	Miles	1 2	1.2	3 3	0.8	0 8			
Timber Purch Road Constr	Miles	2 0	4 5	9 0	5 0	4 0			
Timber Purch Road Reconstr.	Miles	0	1 5	2 8	1 9	2 2			

1/ *Recreation Outputs are not duplicated within the ROS Classes* (ROS - Recreation Opportunity Spectrum)

2/ Incidental amounts of roundwood products that may be offered dependent upon demand These volumes are not included in the allowable sale quantity.

3/ Forest water quality goals, which exceed State water quality standards consist of not exceeding total depth fines of 30%.

4/ Fuelwood roads

TABLE II-6.(10) ALTERNATIVE 10 - CURRENT PROGRAM, UNCONSTRAINED BUDGET. PROJECTED CHALLIS NATIONAL FOREST PROGRAM OUTPUTS, ACTIVITIES, BENEFITS & COSTS (Continued)

BENEFITS	UNIT OF MEASURE PER YEAR	TIME PERIODS (DECADES) 1986-1995	1996-2005	2006-2015	2016-2025	2026-2035	2036-2085	2086-2135	2136-2185
Wilderness Recreation	M $	1569	1724	1724	1724	1724			
Dispersed Recreation	M $	1536	1918	1918	1918	1918			
Developed Recreation	M $	326	411	411	411	411			
Wildlife	M $	2444	3050	3682	4512	5289			
Anad Fish Commercial	M $	377	772	1166	1556	1727			
Anadromous Fish Sport	M $	2646	4362	6006	7722	8580			
Coldwater Fish	M $	3297	4278	4840	5516	6698			
Range	M $	1590	1550	1537	1536	1536			
Timber	M $	1390	3816	3553	3529	3815	3784	3780	4903
Minerals	M $	318	391	391	391	391			

COSTS	UNIT OF MEASURE PER YEAR	TIME PERIODS (DECADES) 1	2	3	4	5
Total Forest Budget	M $	4587	4447	4267	4267	4267
Fixed Costs						
Protection	M $	617	617	617	617	617
GA	M $	663	645	655	655	655
Variable Costs						
Investment Costs						
Timber Roads	M $	36	291.7	171 3	334 3	96.8
Other Roads	M $	460	380	90	90	90
Investment Other	M $	505.5	811.5	865.5	810.0	777.6
Total Investment	M $	1001.5	1483 2	1126 8	1331.1	964 4
Operational Costs	M $	2165	2190	2170	2170	2170
Non-Forest Service Costs	M $	949.5	2588 7	2582.7	2740.4	2997.7
Returns to Treasury	M $	950 2	1805 3	1546.6	1364 1	1392.3

ALTERNATIVE 11 - 1980 RPA MODIFIED (SELECTED)

This Alternative is a modification of the Forest's share of the 1980 Resources Planning Act program direction. It includes a recommendation of wilderness areas and a less intensive timber management program than proposed in the 1980 RPA program [Table II-6(11)].

Recreation

Existing developed recreation sites would be hardened to prevent site deterioration. New sites would be constructed to meet 75 percent of the total projected demand by 2030. There would be some over-use in the more popular sites prior to that time. Ten new sites (866 PAOT's) would be developed over the next 5 decades, producing a total capacity of 2,500 PAOT's in fee sites.

Yankee Fork Dredge and Custer Museum would be operated under a Memorandum of Understanding with consessionnaires at the standard level of management. Funding for stabilization would be requested outside of the budget (special funds). New sites would be developed as demand dictates. Sites near population centers would be considered first.

The demand for dispersed use would not exceed capacity Forest-wide. However, some localized sites would be over-used. As timber roading increases, minor shifts in ROS class from non-motorized to motorized will occur. The anticipated budget would be adequate to provide facilities to reduce conflicts between user groups.

Users would be directed away from over-used areas. Corridors into wilderness would be managed to maintain a natural appearance. No new development such as fences would be allowed within the corridors. Existing non-conforming developments may be removed.

Trailhead facilities would be rehabilitated and new ones would be provided as demands dictate. Trails would be upgraded and maintained at levels sufficient to meet safety needs and provide quality recreation experiences. Trails will generally be maintained to Level I standards.

Trail system management needs to strike a balance (i.e., motorized and non-motorized). The Forest would provide for diversified uses of trails and, at the same time, stabilize trail maintenance program through a more even funding level each year.

Recreation special use permit administration would emphasize permit compliance.

The Forest would work with the BLM to establish a Borah Quake National Natural Area or geologic area to protect part of the fault scarp. Interpretive services would be provided at the site. The area would be jointly examined with the BLM and the acres determined during the next few years.

The Big Hat Creek Trail through to Morgan Creek Summit would be nominated as a National Recreation trail. This would complement nomination by the Salmon National Forest as the trail is located on both Forests.

Cultural Resources

The Forest would emphasize inventory of proposed projects in high, moderate, and low sensitivity areas. This would greatly increase the number of known cultural resource sites on the Forest, but would not reduce the number of unevaluated sites. Avoidance would be the preferred method of mitigation of project impacts, except where avoidance or protection is unfeasible. The number of significant sites awaiting nomination to the NRHP will be reduced at the rate of not less than one site per year. The Forest would develop plans for the preservation, protection, interpretation, and/or enhancement of significant historic cultural resource sites, i.e., Custer, Bonanza, and the Yankee Fork Dredge, through a MOU with the State Historic Preservation Officer and any interested private concessionnaire organizations. Restoration and/or stabilization at these sites would be done under full plan funding level. The Forest will initiate a monitoring/evaluation plan for cultural resource sites with priority given to sites where impacts may occur to cultural resource sites resulting from other activities. The Forest would undertake long-term stabilization and/or enhancement of significant historic sites, and the interpretation and scientific study of prehistoric cultural resource sites within the Frank Church--River of No Return Wilderness and the Middle Fork Wild and Scenic River Corridor, as specified in approved management plans, as funding can be made available. A comprehensive Forest-wide cultural resource overview would be compiled within five years. A protection plan will be developed in the first decade.

Wilderness

Existing Frank Church--River of No Return Wilderness. Manage as specified in approved management plan. Some trails would be maintained by permitted outfitters and guides. Eliminate unused/unneeded trails after evaluation of system.

The Middle Fork River management would receive priority funding and managed as specified in the approved management plan.

Three new wilderness areas would be proposed. They are: Borah Peak, 119,000 acres; Boulder/White Clouds, 34,000 acres on Challis NF; and Pioneer Mountains, 48,000 acres. These proposals are preliminary administrative proposals, and they would receive further review by the Chief of the Forest Service, the Secretary of Agriculture, and the President. The President then makes his recommendation to Congress which reviews and passes the legislation for the President's signature. These proposals place 983,255 acres, or 39 percent of the Forest, into the wilderness System. Both the Boulder/White Clouds and Pioneer Mountains Roadless Areas include lands administered by the Challis and Sawtooth National Forest. Final determination for the Boulder/White Clouds Roadless Area would be included in the Sawtooth National Forest EIS and Record of Decision. Final determination for the Pioneer Mountains Roadless Area is included in the Challis National Forest EIS.

Management plans for these areas would be prepared during the first decade. Coordination with the Sawtooth National Forest would be provided in preparing the plans for the Boulder/White Cloud and the Pioneer Mountain Wildernesses.

The Forest would recommend that no new wild, scenic, or recreation rivers be proposed for inclusion into the National Wild and Scenic River System.

Timber

average allowable sale quantities of sawtimber would start at 3.0 MMBF per year for the first decade, then rise to 4.0 MMBF per year for the 2nd decade, 5 MMBF per year in the 3rd decade, 6 MMBF per year in the 4th decade, and 7 MMBF per year in the 5th decade. The roundwood products will be 85.5 MBF per year throughout the planning period.

Fuelwood offered would be 2.25 MMBF per year throughout the planning period.

New road construction/reconstruction needs for sawtimber access will be as follows:

Decade:	1st	2nd	3rd	4th	5th
Miles/Year:	3.0	2.0	2.3	5.3	8.0

Fuelwood access roading would require 1.0 mile per year for decades one, two and three, then the necessary access will be provided through the sawtimber program. Throughout the planning period, Douglas-fir and lodgepole pine will be harvested by utilizing conventional tractor methods. Starting in the 5th decade, Douglas-fir will also be accessed using aerial (cable) methods.

Insect and disease potential will decline on managed lands throughout the planning period. This Alternative will place about one-third of commercial stands under management.

Range Management

Range administration and management would increase by 2.64 percent, providing a slight increase in resource management.

Permitted livestock AUM's (acutal AUM's is approx. 2M less than permitted) would increase slightly (1.7%) over the planning period. This increase would help stabilize the local family ranching operations and local communities.

Allotment management plans would be developed for the remaining 32 allotments.

Permittees would be required to cooperate and participate in the range improvement program to maintain current outputs and to realize the planned AUM increase.

Noxious weed control activities and cooperation with counties and other agencies would increase. The Experimental Stewardship Program would be continued and these concepts used in the general range program.

Riparian area condition should slowly improve within allotments.

Wildlife and Fish

This alternative would continue to provide habitat to ensure viability and recovery of Threatened and Endangered and Forest Service Sensitive plants and animals.

Habitat required to meet Idaho Department of Fish and Game objectives, for fish and game MIS, will be met.

Management Indicator Species would increase in number. Wildlife habitat capability would be maintained or improve slowly. Habitat capability for anadromous and resident fish would be maintained or will improve slowly. Existing anadromous fish populations are well below present habitat capability and would have the potential to increase because of mitigation at Columbia River dams, increased hatchery production, and improved overall coordination through the Northwest Power Planning Act.

Wildlife associated recreation (WFUD's) would increase significantly over the planning period. This would become increasingly important to the local economy.

Habitat improvement programs for fish and wildlife will be moderately high.

Coordination efforts with timber, range, and minerals would be increased and the quality improved.

Minerals and Energy Development

The Forest would be able to respond to a minor increase in mineral activity and to maintain complete services. Oil and gas lease applications would be processed as described in Appendix E, and monitoring of activities would be provided. Major site-specific proposals for oil and gas exploration and development would require adjustment of the Forest program budget, special Regional appropriations, or funding from the proponent.

It is assumed that one large project would be on-going at any one time.

Withdrawals and legislative requirements in existing wilderness restrict minerals entry on 782,255 acres of National Forest System lands. Congressional designation of additional wilderness under this alternative could restrict these activities on an additional 201,000 acres. This, together with existing mineral withdrawal acres, would total 983,555 acres, or 39 percent of the Forest, withdrawn.

Lands

The issuing of special use permits would increase because of increases in mining activities, small hydro-electic projects, and the need for electronic sites.

Inspection frequencies would increase, thus additional work would be required to bring use in to compliance with the permit provisions.

Permits would be administered to emphasize permit compliance. New applications for energy-related projects would take priority over others. The Forest would eliminate unneeded or unused occupancies under permits.

Cabins under permit would be reviewed. A firm occupancy period and termination date will be established for the four cabins under permit.

The withdrawal review process would be completed by 1989. State school sections would be acquired by an active exchange program.

Road and trail rights-of-way backlog cases would be completed by 2004. This is an average of four cases per year. Most property boundary marking and posting will be completed by 2020.

The Iron Bog and Meadow Canyon Research Natural Areas would be protected. Establishment reports would be submitted, recommending designation of nine additional Research Natural Areas.

Soil and Water

Watershed conditions would improve during the entire planning period. The soil and water improvement backlog would be met by the year 2005. Emphasis will be given to developing plans and environmental assessments two years in advance of programed improvement projects. There would be a slight increase in delivered sediment as a result of management activities, but an increased improvement emphasis would reduce the impact from existing sources. Best Management Practices would be implemented and monitored for representative activities on the Forest. Soil and water resource inventories would be conducted on 30,000 to 60,000 acres per year.

Fire Management

Fire occurrence within the Forest would increase slightly above current levels of about 35 lightning-caused fires and 15 man-caused fire annually. Man-caused fire occurrence would increase as the number of forest users increase. During the period 1970-1979, man-caused fires accounted for over 70 percent of the area burned and 70 percent of the suppression costs; thus, a small increase in man-caused fire occurrence may significantly increased burned area and suppression costs.

The fire protection program would be less cost effective than the program selected by the Forest from the Level II Fire Planning process. Based on this process, total protection costs will average about $1,020,000 annually, with burned area averaging 170 acres. Over time, burned area and protection costs will increase with the increase in man-caused fire occurrence. Total protection costs as used in this paragraph includes presuppression and suppression costs and accounts for any benefits or damages to burned area.

Area Fire Management Plans will be developed for the Frank Church--River of No Return Wilderness during the first decade. Also, with emphasis, fire management plans would be developed for other priority areas on the Forest during the first decade. Cooperative Fire Protection Agreements with other agencies would remain in effect. The Forest would continue to protect over 1,000,000 acres of BLM administered lands. Fire occurrence on these lands from 1970-1979 averaged three lightning-caused fires and seven man-caused fires annually, with burned area averaging 180 acres. Total annual protection costs are estimated at $75,000 based on a $40,000 presuppression program. Again, burned area and protection costs would increase with an increase in man-caused fire occurrence.

Transportation

Emphasis is on maintaining a safe, functional, environmentally sound transportation system. By the end of the 3rd decade, 100 percent of the reconstruction needs will be completed. The reconstruction needs have been identified as 347 miles of arterial/collector roads, and 55.8 miles of local roads.

In the first 3 decades, a very limited construction program would occur independent of timber roads. The road construction budget is at a level which would allow a mix of construction and reconstruction projects through the planning period while completing the reconstruction program. Most of the projects in the last decades would consist of deferred maintenance items as well as some reconstruction if those needs are identified.

Road maintenance could be accomplished on approximately 560 mile per year over the planning period in conjunction with the reconstruction program.

F. A. & O. Facilities

F. A. & O. facility maintenance will be maintained at the minimum levels necessary to meet public health and safety standards. Maintenance would arrest deteriorating conditions, but would not allow improvement. Any significant construction projects would be funded through the F.A. & O. construction program, outside the regular Forest budget. All water and sewer systems would be brought to State standards, and airfields would be brought to safe standards and maintained.

Expenditures would have the same priority as those identified in Alternative 1.

TABLE II-6 (11) ALTERNATIVE 11 - 1980 RPA MODIFIED PROJECTED CHALLIS NATIONAL FOREST PROGRAM OUTPUTS, ACTIVITIES, BENEFITS & COSTS

OUTPUT/ACTIVITY	UNIT OF MEASURE PER YEAR	TIME PERIODS (DECADES) 1986-1995	1996-2005	2006-2015	2016-2025	2026-2035	2036-2085	2086-2135	2136-2185
RECREATION 1/									
Wilderness Use (ROS I)	MRVD	148	164	164	164	164			
Dispersed Use (ROS II & III)	MRVD	379	432	432	432	432			
Developed Use (ROS IV)	MRVD	110	124	124	124	124			
WILDERNESS									
Management	M Acres	983 3	983.3	983 3	983 3	983 3			
WILDLIFE AND FISH									
Structural Habitat Improve	Struct	20	20	20	20	20			
Non-Struc Habitat Improve	Acres	643	643	643	643	643			
Anad Fish Commercial	M # Lbs	157	317	478	640	711			
Anadromous Fish Sport	M WFUD	36 8	60 8	84 0	108 0	120 0			
Coldwater Fish	M WFUD	166 0	216.5	249 5	281 5	341 5			
Wildlife Use	M WFUD	86 0	107 2	129 8	160 0	191 0			
Populations									
Deer	M Animals	24 6	32 5	40 0	49 5	59 9			
Elk	M Animals	5 5	7 0	8 3	8.6	8 7			
Bighorn Sheep	M Animals	1 0	1 7	2 5	3 2	4 0			
Mountain Goat	M Animals	0 6	0 7	0.8	0.9	1 0			
Red Squirrel	M Acres	342 0	341.7	333 3	331 1	325 9			
RANGE									
Grazing Use (Livestock)									
Actual Use (Projected)	M AUM	114	115	116	116	116			
Permitted Use (Projected)	M AUM	115	116	117	117	117			
TIMBER									
Allowable Sale Quantities	MMCF	0 7	0 9	1 1	1 3	1 6	2 2	2 2	2 2
	MMBF	3 0	4 0	5 0	6 0	7 0	10 0	10 0	10 0
Roundwood Products 2/	MMCF	0 02	0 02	0 02	0 02	0 02	0 02	0 02	0 02
	MMBF	0 09	0 09	0 09	0 09	0 09	0 09	0 09	0.09
Reforestation	Acres	653	867	913	1123	1217	1776	1149	1297
Timber Stand Improvement	Acres	69	0	0	0	0	0	0	0
Fuelwood (Dead & Green)	MCF	500	500	500	500	500	500	500	500
SOIL AND WATER									
Meets or Exceeds State Stds	M Ac Ft	2463	2463	2463	2463	2463			
Meets Water Quality Goals 3/	M Ac Ft	2365	2365	2365	2463	2463			
Soil & Water Resource Imp	Acres	120	80	10	10	10			
MINERALS									
Leases	No. Leases	149	190	190	190	190			
HUMAN RESOURCE PROGRAMS	Pers. Yrs	17	17	17	17	17			
FACILITIES									
Trail Const/Reconstruction	Miles	6	6	6	6	6			
Road Reconstruction (Arterial & Collector)	Miles	10 8	16 2	8 1	0 9	0 9			
Local Road Construction 4/	Miles	1	1	1	0	0			
Local Road Reconstruction	Miles	1 4	2.6	1 3	0 8	0 8			
Timber Purch. Road Constr	Miles	3 0	0.9	1 6	4 2	5 8			
Timber Purch Road Reconstr	Miles	0	1 1	0 7	1.1	2 2			

1/ Recreation Outputs are not duplicated within the ROS Classes (ROS - Recreation Opportunity Spectrum)

2/ Incidental amounts of roundwood products that may be offered dependent upon demand These volumes are not included in the allowable sale quantity

3/ Forest water quality goals, which exceed State water quality standards consist of not exceeding total depth fines of 30%.

4/ Fuelwood roads.

TABLE II-6 (11) ALTERNATIVE 11 - 1980 RPA MODIFIED. PROJECTED CHALLIS NATIONAL FOREST PROGRAM OUTPUTS, ACTIVITIES, BENEFITS & COSTS.
(CONTINUED)

BENEFITS	UNIT OF MEASURE PER YEAR	TIME PERIODS (DECADES) 1986-1995	1996-2005	2006-2015	2016-2025	2026-2035	2036-2085	2086-2135	2136-2185
Wilderness Recreation	M $	1569	1738	1738	1738	1738			
Dispersed Recreation	M $	1512	1724	1724	1724	1724			
Developed Recreation	M $	439	457	495	495	495			
Wildlife	M $	2459	3065	3711	4574	5461			
Anad Fish Commercial	M $	385	777	1171	1568	1742			
Anadromous Fish Sport	M $	2631	4347	6006	7722	8580			
Coldwater Fish	M $	3270	4265	4915	5546	6728			
Range	M $	1596	1610	1624	1624	1624			
Timber	M $	1068	1446	1802	2158	2515	3578	3123	3012
Minerals	M $	395	498	498	498	498			

COSTS	UNIT OF MEASURE PER YEAR	TIME PERIODS (DECADES) 1	2	3	4	5
Total Forest Budget	M $	4410	4400	4360	4230	4240
Fixed Costs						
Protection	M $	589	589	589	589	589
GA	M $	750	750	750	750	750
Variable Costs						
Investment Costs						
Timber Roads	M $	48	76	160	186	322
Other Roads	M $	330	330	270	130	130
Investment Other	M $	608	600	645	697	746
Total Investment	M $	986	1006	1075	1013	1198
Operational Costs	M $	2216	2241	2229	2236	2236
Non-Forest Service Costs	M $	733	981	1226	1471	1716
Returns to Treasury	M $	828	1036	1151	1264	1378

D. COMPARISON OF ALTERNATIVES

This section compares the other alternatives with the No Action Alternative. The numbers, displayed in Table II-7, compare the outputs, activities, benefits and costs of each alternative.

Alternative 1 - No Action (Current Program)
Alternative 2 - Market Emphasis
Alternative 3 - Non-Market Emphasis
Alternative 4 - RPA 1980 Program
Alternative 5 - Market and Non-Market Mix
Alternative 6 - Constrained (-25%) Budget
Alternative 7 - Current Program, Constrained Budget
Alternative 8 - Maximize Wilderness, Amenity Emphasis
Alternative 9 - High Wilderness, Commodity Emphasis
Alternative 10 - Current Program, Unconstrained Budget
Alternative 11 - 1980 RPA Modified (Selected)

The purpose of Forest planning is to identify and select for implementation the alternative that most nearly maximizes net public benefits. Net public benefits are defined as the "overall long term value to the Nation of all outputs and positive effects (benefits less all associated inputs and negative effects costs) whether they can be quantitatively valued or not, consistent with the principles of multiple use and sustained yield".

There is no mathematical formula available to define the desired alternative. Indeed, there are differences of opinion about whether particular effects of alternatives are positive or negative. Therefore, it is necessary to separately define all the major effects of each alternative as the basis for review, judgment, and eventual selection.

Present net value, present value costs and present value benefits provide a way to compare the economics of various alternatives. These values are shown for each alternative in Table II-7A(1) through Table II-7A(11). Alternatives and benchmarks are ranked by present net value and present value cost in Tables B-3 and B-4 respectively. The following discussion compares present value costs and present value benefits with the Maximum Present Net Value Benchmark.

Alternative 1 - No Action (Current Program)

The present value costs of this alternative would decrease $4.4 million and present value benefits would decrease $27.4 million. Timber costs would greatly decrease under this alternative. Benefits from timber would also decrease along with reduced wilderness recreation benefits and slightly reduce wildlife and fish benefits.

Alternative 2 - Market Emphasis

The present value costs of this alternative would increase $69.8 million and present value benefits would increase $14.4 million. Timber related costs would increase greatly along with an increase in other investments. Benefits from timber, range and minerals would increase while most other benefits would decrease.

Alternative 3 - Non-Market Emphasis

The present value costs of this alternative would decrease $2.1 million and present value benefits would decrease $35 million. Timber, range, road and investment costs would all decrease. Recreation, wildlife and fish costs would increase. Benefits from dispersed recreation and anadromous sport fishing would increase. Benefits form anadromous commercial fishing would be unchanged. All other benefits would decrease.

Alternative 4 - RPA 1980 Program

The present value costs of this alternative would increase $54.1 million and present value benefits would increase $14 million. Timber related costs would increase along with smaller increases for other activities except wilderness and non-timber roads. Benefits would increase from all activities except wilderness recreation and fisheries.

Alternative 5 - Market and Non-Market Mix

The present value costs of this alternative would decrease $18.9 million and present value benefits would decrease $23.3 million. Generally costs would decrease especially non Forest Service timber costs. Benefits would increase from non-wilderness recreation, anadromous fisheries, and range while other benefits would decrease

Alternative 6 - Constrained (-25%) Budget

The present value costs of this alternative decreased $50.5 million and present value benefits decreased $44.7 million. All costs would decrease. Benefits from dispersed recreation, anadromous fisheries and range would increase while other benefits would decrease.

Alternative 7 - Current Program, Constrained Budget

The present value costs of this alternative would decrease $33.5 million and present value benefits would decrease $57.1 million. Operational costs would increase while other costs would decrease. All timber costs would decrease greatly. Benefits would increase from dispersed recreation, anadromous sport fisheries, range and minerals while other benefits would decrease, with timber showing the greatest decrease.

Alternative 8 - Maximize Wilderness, Amenity Emphasis

The present value costs of this alternative would decrease $29.7 million and present value benefits would decrease $23.1 million. Generally costs would decrease except for wilderness recreation and wildlife and fish costs. Benefits from wilderness recreation would be at a maximum and anadromous fisheries benefits would increase while all other benefits would decrease.

Alternative 9 - High Wilderness, Commodity Emphasis

The present value costs of this alternative would increase $4 million and present value benefits would decrease $26.6 million. Operating costs would increase because of increased commodity production from non-wilderness area. Total timber costs would decrease because of greatly reduced road costs. Benefits from wilderness and developed recreation would increase while other benefits would decrease because of the greatly reduced non-wilderness land base where most activities could occur.

Alternative 10 - Current Program, Unconstrained Budget

The present value costs of this alternative would increase $22.8 million and present value benefits would decrease $49.2 million. Non-road investment and operating costs would increase while other costs especially total timber costs would decrease. Benfits from dispersed recreation, anadromous sport fisheries, and timber would increase while benefits from other activities would decrease.

Alternative 11 - 1980 RPA Modified

The present value costs of this alternative would decrease $2.9 million and present value benefits would decrease $30.7 million. Timber production costs including road costs would decrease while other resource operation and investment costs would increase. Timber benefits would decrease because of relatively low timber harvest levels during the first two decades. Dispersed and developed recreation, anadromous fisheries and mineral benefits would increase. The other benefits would remain the same or would decrease.

Chapter IV, Environmental Consequences, describes in greater detail the expected effects of implementing each alternative. Consequences are briefly summarized in this section.

Recreation

Campground facilities and services would decrease under Alternatives 1, 3, 6, and 10. Alternatives 2, 4, 5, and 11 (Selected) would increase facility numbers and improve their quality over time. Alternatives 8 and 9 would increase the number of trailhead sites and campgrounds used by wilderness users, while others would deteriorate. Alternative 11 (Selected) would emphasize trailhead facilities within the wilderness corridors.

Very little site rehabilitation would be provided under Alternatives 1, 2, 6, and 10, resulting in most sites deteriorating over time. Facilities would be rehabilitated and new sites developed, under Alternatives 2, 4, 5, and 11 (Selected).

Dispersed recreation opportunities and services would decrease under Alternatives 3, 8 and 9 because of the addition of new wilderness areas. Dispersed recreation would be emphasized over developed recreation under Alternatives 1, 3, 5, 6, 7, 10, and 11 (Selected).

TABLE II-7. RESOURCE OUTPUTS, ACTIVITIES, COSTS, AND BENEFITS BY ALTERNATIVES AND BENCHMARKS

OUTPUT/ACTIVITY	UNIT OF MEASURE PER/YR	MIN LEVEL 1	MAX PNV ASSIGNED 2	MAX PNV MARKET 3	MAX TIMBER 4	MAX RANGE 5	MAX WILD 6	MIN WILD 7	CURRENT LEVEL
BENCHMARKS									
RECREATION									
Developed Recreation Use									
Decade 1	MRVD	0	83	95	79	88	68	81	(Same as Alt. 1)
2	MRVD	0	104	122	104	114	84	104	
3	MRVD	0	104	122	104	114	84	104	
4	MRVD	0	104	122	104	114	84	104	
5	MRVD	0	104	122	104	114	84	104	
Dispersed Use									
Decade 1	MRVD	460	238	383	399	380	175	398	
2	MRVD	600	348	478	497	474	215	496	
3	MRVD	600	348	478	497	474	215	496	
4	MRVD	600	348	478	497	474	215	496	
5	MRVD	600	348	478	497	474	215	496	
Wilderness Use									
Decade 1	MRVD	135	295	135	135	143	373	135	
2	MRVD	148	356	148	148	143	448	148	
3	MRVD	148	356	148	148	143	448	148	
4	MRVD	148	356	148	148	143	448	148	
5	MRVD	148	356	148	148	143	448	148	
WILDERNESS MANAGEMENT									
Decade 1	M ACRE	782	1551	782	782	782	2174	782	
2	M ACRE	782	1551	782	782	782	2174	782	
3	M ACRE	782	1551	782	782	782	2174	782	
4	M ACRE	782	1551	782	782	782	2174	782	
5	M ACRE	782	1551	782	782	782	2174	782	
WILDLIFE & FISH									
Structural Habitat Improvement									
Decade 1	STRUCT.	1	4	1	4	2	1	7	
2	STRUCT	1	4	1	4	2	1	7	
3	STRUCT.	1	4	1	4	2	1	7	
4	STRUCT	1	4	1	4	2	1	7	
5	STRUCT.	1	4	1	4	2	1	7	
Non-Structural Habitat Improvement									
Decade 1	ACRES	0	414	119	353	162	74	678	
2	ACRES	0	414	119	353	162	74	678	
3	ACRES	0	414	119	353	162	74	678	
4	ACRES	0	414	119	353	162	74	678	
5	ACRES	0	414	119	353	162	74	678	
Wildlife & Fish Use									
Decade 1	M WFUD	282	293	275	283	278	289	294	
2	M WFUD	323	391	364	377	368	384	392	
3	M WFUD	439	482	452	466	455	459	486	
4	M WFUD	550	575	540	547	541	536	506	
5	M WFUD	687	700	631	647	635	630	720	
RANGE									
Grazing Use (Livestock)									
Decade 1	M AUM	0	113	114	114	114	112	114	
2	M AUM	0	110	116	114	119	103	116	
3	M AUM	0	110	120	113	126	96	118	
4	M AUM	0	110	120	113	126	96	118	
5	M AUM	0	110	120	113	126	96	118	
TIMBER									
Programed Sales Offered									
Decade 1	MMBF	0	5.0	3 7	40 1	28.4	3 2	16 7	
2	MMBF	0	5.6	3 7	40.1	28.8	3 2	16 7	
3	MMBF	0	5.6	3 7	40 1	28 8	3 2	16 7	
4	MMBF	0	5.6	3 7	40 1	28 8	3.2	16.7	
5	MMBF	0	5.6	3.7	40 1	28 8	3.2	16.7	
6-10	MMBF	0	5 6	3.7	40.1	28 4	3 2	16 7	
11-15	MMBF	0	9 0	24 8	55.0	49 1	4 1	24 8	
16-20	MMBF	0	5.6	25.2	55 0	49 1	5.0	25 2	
Roundwood Products									
Decade 1	MCF	0	19	19	19	19	19	19	
2	MCF	0	19	19	19	19	19	19	
3	MCF	0	19	19	19	19	19	19	
4	MCF	0	19	19	19	19	19	19	
5	MCF	0	19	19	19	19	19	19	
6-10	MCF	0	19	19	19	19	19	19	
11-15	MCF	0	19	19	19	19	19	19	
16-20	MCF	0	19	19	19	19	19	19	

TABLE II-7. RESOURCE OUTPUTS, ACTIVITIES, COSTS, AND BENEFITS BY ALTERNATIVES AND BENCHMARKS. (Continued)

Reforestation								
Decade 1	ACRES	0	1016	3066	6594	6314	667	3066
2	ACRES	0	1274	3882	6376	6974	715	3882
3	ACRES	0	1036	3215	2628	5834	614	3215
4	ACRES	0	1171	3308	6530	5410	649	3308
5	ACRES	0	1094	2805	1838	5183	551	2805
6-10	ACRES	0	968	2960	2268	5639	554	2960
11-15	ACRES	0	1090	2561	3642	5652	448	2561
16-20	ACRES	0	1092	2734	2714	6319	543	2734
Fuelwood (Dead & Green)								
Decade 1	MCF	420	420	420	420	420	420	420
2	MCF	420	420	420	420	420	420	420
3	MCF	420	420	420	420	420	420	420
4	MCF	420	420	420	420	420	420	420
5	MCF	420	420	420	420	420	420	420
6-10	MCF	420	420	420	420	420	420	420
11-15	MCF	420	420	420	420	420	420	420
16-20	MCF	420	420	420	420	420	420	420
SOIL AND WATER								
Meets/Exceeds State Standards								
Decade 1	M AC FT	2303	2463	2463	2463	2463	2463	2463
2	M AC FT	2303	2463	2463	2463	2463	2463	2463
3	M AC FT	2303	2463	2463	2463	2463	2463	2463
4	M AC FT	2303	2463	2463	2463	2463	2463	2463
5	M AC FT	2303	2463	2463	2463	2463	2463	2463
Meets Water Quality Goals								
Decade 1	M AC FT	-	-	-	-	-	-	-
2	M AC FT	-	-	-	-	-	-	-
3	M AC FT	-	-	-	-	-	-	-
4	M AC FT	-	-	-	-	-	-	-
5	M AC FT	-	-	-	-	-	-	-
Soil & Water Resource Improvement								
Decade 1	ACRES	0	97	44	87	100	79	119
2	ACRES	0	11	30	20	60	4	10
3	ACRES	0	0	0	0	0	0	0
4	ACRES	0	0	0	0	0	0	0
5	ACRES	0	0	0	0	0	0	0
MINERALS								
Leases								
Decade 1	LEASES	0	124	161	161	161	41	161
2	LEASES	0	156	207	207	207	58	207
3	LEASES	0	156	207	207	207	58	207
4	LEASES	0	156	207	207	207	58	207
5	LEASES	0	156	207	207	207	58	207
HUMAN RESOURCE PROGRAM								
Decade 1	PER/YR	0	17	17	17	17	17	17
2	PER/YR	0	17	17	17	17	17	17
3	PER/YR	0	17	17	17	17	17	17
4	PER/YR	0	17	17	17	17	17	17
5	PER/YR	0	17	17	17	17	17	17
FACILITIES								
Trail Construction/Reconstruction								
Decade 1	MILES	0	-	-	-	-	-	-
2	MILES	0	-	-	-	-	-	-
3	MILES	0	-	-	-	-	-	-
4	MILES	0	-	-	-	-	-	-
5	MILES	0	-	-	-	-	-	-
Road Construction/Reconstruction								
Decade 1	MILES	0	174	174	-	174	174	174
2	MILES	0	174	174	-	174	174	174
3	MILES	0	5	5	-	5	5	5
4	MILES	0	5	5	-	5	5	5
5	MILES	0	5	5	-	5	5	5
Local Road Construction								
Decade 1	MILES	0	3	3	-	3	3	28
2	MILES	0	1	1	-	1	1	28
3	MILES	0	7	7	-	7	7	3
4	MILES	0	7	7	-	7	7	3
5	MILES	0	8	8	-	8	8	3

TABLE II-7 RESOURCE OUTPUTS, ACTIVITIES, COSTS, AND BENEFITS BY ALTERNATIVES AND BENCHMARKS (Continued).

Local Road Reconstruction								
Decade 1	MILES	0	28	28	-	28	28	28
2	MILES	0	28	28	-	28	28	28
3	MILES	0	3	3	-	3	3	3
4	MILES	0	3	3	-	3	3	3
5	MILES	0	3	3	-	3	3	3
Timber Purchase Road Construction								
Decade 1	MILES	0	3	15	51	54	2	15
2	MILES	0	3	7	50	16	1	7
3	MILES	0	6	5	24	43	1	5
4	MILES	0	3	19	45	35	3	19
5	MILES	0	2	4	60	28	1	4
Timber Purchase Road Reconstruction								
Decade 1	MILES	0	1	5	-	20	1	5
2	MILES	0	2	8	-	11	1	8
3	MILES	0	2	2	-	3	1	2
4	MILES	0	4	5	-	4	1	5
5	MILES	0	2	2	-	6	1	2

BENCHMARKS

BENEFITS	UNIT OF MEASURE PER/YR	MIN LEVEL 1	MAX PNV ASSIGNED 2	MAX PNV MARKET 3	MAX TIMBER 4	MAX RANGE 5	MAX WILD 6	MIN WILD 7	CURRENT LEVEL
Wilderness Recreation									
Decade 1	M $	1436	3125	1431	1436	1436	3951	1431	(Same as Alt 1)
2	M $	1575	3125	1575	1575	1575	4767	1575	
3	M $	1575	3125	1575	1575	1575	4767	1575	
4	M $	1575	3125	1575	1575	1575	4767	1575	
5	M $	1575	3125	1575	1575	1575	4767	1575	
Dispersed Recreation									
Decade 1	M $	1835	948	1528	1594	1515	697	1586	
2	M $	2394	1390	1907	1981	1892	860	1979	
3	M $	2394	1390	1907	1981	1892	860	1979	
4	M $	2394	1390	1907	1981	1892	860	1979	
5	M $	2394	1390	1907	1981	1892	860	1979	
Developed Recreation									
Decade 1	M $	0	329	379	314	351	270	321	
2	M $	0	415	487	413	455	335	415	
3	M $	0	415	487	413	455	335	415	
4	M $	0	415	487	413	455	335	415	
5	M $	0	415	487	413	455	335	415	
Wildlife									
Decade 1	M $	2486	2485	2191	2352	2285	2494	2469	
2	M $	2715	3110	2715	2935	2823	3110	3076	
3	M $	3286	3765	3322	3494	3410	3676	3790	
4	M $	4086	4618	4063	4122	4065	4311	4805	
5	M $	5286	5628	4104	4415	4208	4971	5998	
Anadromous Fish Commercial									
Decade 1	M $	382	387	372	380	377	382	387	
2	M $	772	784	759	770	767	773	785	
3	M $	1161	1179	1144	1159	1155	1163	1180	
4	M $	1553	1574	1528	1548	1542	1553	1576	
5	M $	1725	1748	1697	1720	1713	1725	1750	
Anadromous Fish Sport									
Decade 1	M $	2645	2596	2526	2550	2543	2558	2675	
2	M $	4146	4268	4215	4196	4174	4214	4417	
3	M $	5790	5941	5771	5841	5926	5858	6090	
4	M $	7362	7593	7373	7464	7456	7474	7807	
5	M $	8220	8451	8209	8322	8292	8332	8665	
Coldwater Fish									
Decade 1	M $	3121	3355	3200	3258	3200	3263	3363	
2	M $	3358	4379	4166	4236	4177	4257	4388	
3	M $	4799	5263	5033	5167	5044	4893	5291	
4	M $	6004	6061	5822	5895	5830	5529	6101	
5	M $	7249	7610	7344	7418	7353	6698	7679	
Range									
Decade 1	M $	0	1593	1600	1598	1608	1568	1598	
2	M $	0	1553	1636	1596	1678	1456	1630	
3	M $	0	1542	1689	1586	1765	1355	1657	
4	M $	0	1542	1689	1582	1765	1355	1656	
5	M $	0	1542	1689	1582	1765	1355	1656	
Timber									
Decade 1	M $	0	1759	6283	11,362	9699	1174	6282	
2	M $	0	2042	6414	15,341	10,111	1198	6414	
3	M $	0	2042	6075	14,712	9358	1142	6075	
4	M $	0	2034	6083	12,537	9861	1198	6084	
5	M $	0	1954	6413	12,199	10,541	1198	6413	
6-10	M $	0	-	-	-	-	-	-	
11-15	M $	0	-	-	-	-	-	-	
16-20	M $	0	-	-	-	-	-	-	

TABLE II-7. RESOURCE OUTPUTS, ACTIVITIES, COSTS, AND BENEFITS BY ALTERNATIVES AND BENCHMARKS (Continued)

Minerals								
Decade 1	M $	0	318	484	484	484	150	484
2	M $	0	391	619	619	619	200	619
3	M $	0	391	619	619	619	200	619
4	M $	0	391	619	619	619	200	619
5	M $	0	391	619	619	619	200	619

		BENCHMARKS						
COSTS	UNIT OF MEASURE PER/YR	MIN LEVEL 1	MAX PNV ASSIGNED 2	MAX PNV MARKET 3	MAX TIMBER 4	MAX RANGE 5	MAX WILD 6	MIN WILD 7	CURRENT LEVEL
TOTAL FOREST BUDGET									
Decade 1	M $	1975	4689	4291	4770	4802	4019	4532	
2	M $	1977	4671	4245	4770	4742	4015	4487	
3	M $	1980	4258	3825	4350	4299	3578	4070	
4	M $	1984	4258	3815	4350	4276	3578	4060	
5	M $	1988	4258	3813	4350	4276	3578	4058	
Fixed Costs									
Protection									
Decade 1	M $	716	497	497	497	497	497	497	
2	M $	716	497	497	497	497	497	497	
3	M $	716	497	497	497	497	497	497	
4	M $	716	497	497	497	497	497	497	
5	M $	716	497	497	497	497	497	497	
GA									
Decade 1	M $	544	800	800	800	800	800	800	
2	M $	544	800	800	800	800	800	800	
3	M $	544	800	800	800	800	800	800	
4	M $	544	800	800	800	800	800	800	
5	M $	544	800	800	800	800	800	800	
Variable Costs									
Investment Costs									
Timber Roads									
Decade 1	M $	0	71	429	1447	310	66	429	
2	M $	0	128	362	1470	704	67	362	
3	M $	0	214	181	1023	1294	33	181	
4	M $	0	174	627	1359	1090	107	627	
5	M $	0	93	151	2085	926	30	151	
Other Roads									
Decade 1	M $	0	460	460	460	460	460	460	
2	M $	0	460	460	460	460	460	460	
3	M $	0	70	70	70	70	70	70	
4	M $	0	70	70	70	70	70	70	
5	M $	0	70	70	70	70	70	70	
Investment Other									
Decade 1	M $	5	540	1285	3089	2353	358	1214	
2	M $	5	490	1242	2308	2277	338	1280	
3	M $	5	478	1160	2841	2260	329	1201	
4	M $	5	505	1165	3151	1991	323	1206	
5	M $	5	516	988	3498	1770	304	1029	
Total Investment									
Decade 1	M $	5	1071	2174	4996	3123	884	2103	
2	M $	5	1078	2064	4238	3441	865	2102	
3	M $	5	762	1411	3934	3624	432	1452	
4	M $	5	749	1862	4580	3151	500	1903	
5	M $	5	679	1209	5653	2766	404	1250	
Operational Costs									
Decade 1	M $	710	2014	2014	1990	2231	2026	2192	
2	M $	712	2039	2039	1990	2256	2047	2217	
3	M $	715	2039	2039	1990	2256	2047	2217	
4	M $	719	2039	2039	1990	2256	2047	2217	
5	M $	723	2039	2039	1990	2256	2047	2217	
NON-FOREST SERVICE COSTS									
Decade 1	M $	0	4343	4343	10,867	7990	799	4343	
2	M $	0	4361	4361	11,804	8368	803	4361	
3	M $	0	4511	4511	11,471	8068	828	4511	
4	M $	0	4426	4426	11,249	8277	875	4426	
5	M $	0	5024	5024	10,626	8257	929	5024	
RETURNS TO TREASURY									
Decade 1	M $	30	1052	2619	1175	2387	717	2618	
2	M $	30	1230	2872	4351	2563	776	2871	
3	M $	30	1230	2390	4056	2119	686	2386	
4	M $	30	1224	2484	2104	2414	696	2482	
5	M $	30	1117	2219	2391	3114	644	2214	

TABLE II-7. RESOURCE OUTPUTS, ACTIVITIES, COSTS, AND BENEFITS BY ALTERNATIVES AND BENCHMARKS. (Continued)

OUTPUT/ACTIVITY	UNIT OF MEASURE PER/YR	ALTERNATIVES 1	2	3	4	5	6	7	8	9	10	11
RECREATION												
Developed Recreation Use												
Decade 1	MRVD	78	104	56	110	90	64	78	67	90	81	110
2	MRVD	100	134	73	123	114	84	100	84	116	103	124
3	MRVD	100	134	73	123	114	84	100	84	116	103	124
4	MRVD	100	134	73	123	114	84	100	84	116	103	124
5	MRVD	100	134	73	123	114	84	100	84	116	103	124
Dispersed Use												
Decade 1	MRVD	355	374	318	392	358	400	387	175	218	385	379
2	MRVD	443	465	400	487	448	498	483	215	267	481	432
3	MRVD	443	465	400	487	448	498	483	215	267	481	432
4	MRVD	443	465	400	487	448	498	483	215	267	481	432
5	MRVD	443	465	400	487	448	498	483	215	267	481	432
Wilderness Use												
Decade 1	MRVD	180	135	238	135	165	149	135	328	305	148	148
2	MRVD	203	148	274	148	181	164	148	448	318	162	164
3	MRVD	203	148	274	148	181	164	148	448	318	162	164
4	MRVD	203	148	274	148	181	164	148	448	318	162	164
5	MRVD	203	148	274	148	181	164	148	448	318	162	164
WILDERNESS MANAGEMENT												
Decade 1	M ACRE	1039	782	1567	782	946	832	902	2174	1831	942	983
2	M ACRE	1039	782	1565	782	946	832	902	2174	1831	942	983
3	M ACRE	1039	782	1565	782	946	832	902	2174	1831	942	983
4	M ACRE	1039	782	1565	782	946	832	902	2174	1831	942	983
5	M ACRE	1039	782	1565	782	946	832	902	2174	1831	942	983
WILDLIFE & FISH												
Structural Habitat Improvement												
Decade 1	STRUCT	25	5	31	32	10	7	12	4	1	19	20
2	STRUCT	25	5	31	32	10	7	12	4	1	19	20
3	STRUCT.	25	5	31	32	10	7	12	4	1	19	20
4	STRUCT.	25	5	31	32	10	7	12	4	1	19	20
5	STRUCT.	25	5	31	32	10	7	12	4	1	19	20
Non-Structural Habitat Improvement												
Decade 1	ACRES	505	195	1025	1616	425	390	563	77	2	659	643
2	ACRES	505	195	1025	1616	425	390	563	77	2	659	643
3	ACRES	505	195	1025	1616	425	390	563	77	2	659	643
4	ACRES	505	195	1025	1616	425	390	563	77	2	659	643
5	ACRES	505	195	1025	1616	425	390	563	77	2	659	643
Wildlife & Fish Use												
Decade 1	M WFUD	289	277	292	290	290	288	289	289	273	289	289
2	M WFUD	385	368	388	385	375	383	385	383	363	384	384
3	M WFUD	458	456	467	473	464	471	470	458	436	458	463
4	M WFUD	533	502	553	554	554	550	551	535	512	546	549
5	M WFUD	622	517	659	663	669	654	657	630	594	645	652
RANGE												
Grazing Use (Livestock)												
Decade 1	M AUM	113	114	113	114	114	114	114	111	111	115	114
2	M AUM	113	117	109	115	115	113	115	103	107	117	115
3	M AUM	112	122	106	116	116	113	116	96	103	117	116
4	M AUM	112	121	106	116	115	113	116	96	103	117	116
5	M AUM	112	121	106	116	115	113	116	96	103	117	116
TIMBER												
Allowable Sale Quantity												
Decade 1	MMBF	3 5	6 6	2.0	9 0	4 9	2 5	1 0	2.0	4 9	3.6	3.0
2	MMBF	4.9	10 0	2 0	11 3	4.9	2 5	1.0	2 0	4.9	9.9	4.0
3	MMBF	4 9	20 0	2 0	11 3	4.9	2 5	1.0	2 0	4.9	9.9	5.0
4	MMBF	4 9	20.0	2 0	11.3	4.9	2 5	1.0	2.0	4.9	9.9	6.0
5	MMBF	4 9	20.0	2 0	11 3	4.9	2 5	1 0	2 0	4.9	9.9	7.0
6-10	MMBF	5.0	30 0	2 0	11.3	11 9	13.8	3 5	2.0	4 9	9.9	10.0
11-15	MMBF	5.0	30 0	3.5	12.9	11.9	13.8	3 5	3.5	8 6	11 6	10.0
16-20	MMBF	5.0	30 0	3.5	12.9	16 9	19.3	3 5	3.5	8.6	15.2	10 0
Roundwood Products												
Decade 1	MCF	19	30	19	30	19	15	19	19	30	19	19
2	MCF	19	30	19	30	19	15	19	19	30	19	19
3	MCF	19	30	19	30	19	15	19	19	30	19	19
4	MCF	19	30	19	30	19	15	19	19	30	19	19
5	MCF	19	30	19	30	19	15	19	19	30	19	19
6-10	MCF	19	30	19	30	19	15	19	19	30	19	19
11-15	MCF	19	30	19	30	19	15	19	19	30	19	19
16-20	MCF	19	30	19	30	19	15	19	19	30	19	19

TABLE II-7. RESOURCE OUTPUTS, ACTIVITIES, COSTS, AND BENEFITS BY ALTERNATIVES AND BENCHMARKS. (Continued)

Reforestation												
Decade 1	ACRES	747	1314	479	1796	908	462	281	479	909	671	653
2	ACRES	1060	2112	476	2489	1149	585	225	476	1150	1921	867
3	ACRES	938	3735	408	2102	880	448	172	408	945	2175	913
4	ACRES	937	4020	477	2255	976	497	191	476	1127	1895	1123
5	ACRES	875	3255	458	1095	849	432	166	370	877	1802	1217
6-10	ACRES	885	5104	342	1839	1993	2342	586	342	799	1779	1776
11-15	ACRES	549	3402	440	2163	1441	2003	520	440	1077	1296	1149
16-20	ACRES	564	3422	374	2083	1935	2149	478	374	919	1631	1297
Timber Stand Improvement												
Decade 1	ACRES	69	69	15	69	69	15	69	15	69	69	69
2-20	ACRES	NO ESTIMATE										
Fuelwood (Dead & Green)												
Decade 1	MCF	420	500	420	500	420	350	420	420	500	420	500
2	MCF	420	500	420	500	420	350	420	420	500	420	500
3	MCF	420	500	420	500	420	350	420	420	500	420	500
4	MCF	420	500	420	500	420	350	420	420	500	420	500
5	MCF	420	500	420	500	420	350	420	420	500	420	500
6-10	MCF	420	500	420	500	420	350	420	420	500	420	500
11-15	MCF	420	500	420	500	420	350	420	420	500	420	500
16-20	MCF	420	500	420	500	420	350	420	420	500	420	500
SOIL AND WATER												
Meets/Exceeds State Standards												
Decade 1	M AC FT	2463	2463	2463	2463	2463	2463	2463	2463	2463	2463	2463
2	M AC FT	2463	2463	2463	2463	2463	2463	2463	2463	2463	2463	2463
3	M AC FT	2463	2463	2463	2463	2463	2463	2463	2463	2463	2463	2463
4	M AC FT	2463	2463	2463	2463	2463	2463	2463	2463	2463	2463	2463
5	M AC FT	2463	2463	2463	2463	2463	2463	2463	2463	2463	2463	2463
Meets Water Quality Goals												
Decade 1	M AC FT	2365	2365	2365	2266	2365	2365	2365	2365	2365	2365	2365
2	M AC FT	2365	2365	2463	2266	2365	2365	2365	2365	2365	2365	2365
3	M AC FT	2463	2365	2463	2266	2365	2365	2463	2365	2365	2365	2365
4	M AC FT	2463	2365	2463	2266	2365	2365	2463	2365	2365	2365	2463
5	M AC FT	2463	2266	2463	2463	2316	2365	2463	2365	2340	2414	2463
Soil & Water Resource Improvement												
Decade 1	ACRES	103	50	89	140	0	10	103	10	31	100	120
2	ACRES	97	20	111	60	0	6	97	4	28	100	80
3	ACRES	0	20	0	0	0	6	0	0	0	0	10
4	ACRES	0	20	0	0	0	6	0	0	0	0	10
5	ACRES	0	20	0	0	0	6	0	0	0	0	10
MINERALS												
Leases												
Decade 1	LEASES	143	161	61	161	143	147	147	41	66	149	149
2	LEASES	184	207	92	207	184	188	188	58	95	190	190
3	LEASES	184	207	92	207	184	188	188	58	95	190	190
4	LEASES	184	207	92	207	184	188	188	58	95	190	190
5	LEASES	184	207	92	207	184	188	188	58	95	190	190
HUMAN RESOURCE PROGRAM												
Decade 1	PER/YR	17	26	26	26	17	6	17	17	26	17	17
2	PER/YR	17	26	26	26	17	6	17	17	26	17	17
3	PER/YR	17	26	26	26	17	6	17	17	26	17	17
4	PER/YR	17	26	26	26	17	6	17	17	26	17	17
5	PER/YR	17	26	26	26	17	6	17	17	26	17	17
FACILITIES												
Trail Construction/Reconstruction												
Decade 1	MILES	0	1	5	5	0	0	0	0	0	3	6
2	MILES	0	1	5	5	0	0	0	0	0	3	6
3	MILES	0	1	5	5	0	0	0	0	0	3	6
4	MILES	0	1	5	5	0	0	0	0	0	3	6
5	MILES	0	1	5	5	0	0	0	0	0	3	6
Road Reconstruction												
Decade 1 Arterial/	MILES	12 7	15.4	16.0	15.4	17.4	0	10 8	15.4	15.4	17 4	10 8
2 Collector	MILES	17 1	15.4	9.3	15.4	17.4	0	16.2	15.4	15.4	17 4	16.2
3 " "	MILES	11.0	0	9.3	0	0	0	8.1	0	0	0	8.1
4 " "	MILES	1.0	0.9	2.0	0 9	0.9	0	0.9	0.9	0.9	0 9	1.0
5 " "	MILES	1.0	0 9	2.0	0.9	0 9	0	0.9	0.9	0 9	0 9	1.0
Local Road Construction												
Decade 1	MILES	0.7	0	0.7	1.0	1 0	0.5	1.0	0.7	0.5	1.0	1.0
2	MILES	0.7	0	0.8	1.0	1.0	0.5	1.0	0.7	0.5	0	1 0
3	MILES	0.7	0	0.9	1 0	0	0.5	1.0	0 7	0.7	0	1.0
4	MILES	0.7	0	1.0	1.0	0	0 5	1.0	0 7	0.7	0	0
5	MILES	0.0	0	1.1	1.0	0	0.7	1.0	0.7	0.7	0	0

TABLE II-7. RESOURCE OUTPUTS, ACTIVITIES, COSTS, AND BENEFITS BY ALTERNATIVES AND BENCHMARKS (Continued)

Local Road Reconstruction												
Decade 1	MILES	1 4	0 7	2.6	0 7	1 2	0	1 4	0 7	0 7	1 2	1.4
2	MILES	2 6	0 7	2.7	0 7	1 2	0	2 6	0 7	0 7	1.2	2 6
3	MILES	1 3	3 3	2.7	3 3	3.3	0	1.3	3.3	3 3	3.3	1.3
4	MILES	0 8	0.8	8 5	0 8	0 8	0	0.8	0 8	0 8	0 8	0.8
5	MILES	0 8	0 8	8 5	0 8	0.8	0	0.8	0 8	0 8	0.8	0.8
Timber Purchase Road Construction												
Decade 1	MILES	1 8	3 3	1 2	4.5	2.5	2 5	0 5	1 0	2 5	2 0	3 0
2	MILES	1 1	5 0	0 4	7.0	0.7	0.3	0 1	0.8	2 0	4.5	0.9
3	MILES	1 8	17 9	1 4	10 8	3 3	0.9	0 3	1 9	4 9	9 0	1 6
4	MILES	3.5	4 1	1 7	3.3	2 9	0.5	0 2	0 8	1 2	5.0	4 2
5	MILES	3 9	11 6	2 6	2.9	4 3	0 7	0 3	0 5	1 5	4 0	5 8
Timber Purchase Road Reconstruction												
Decade 1	MILES	0	0	0	0	0	0	0	0	0	0	0
2	MILES	1 1	2 1	1 1	3 2	1 7	0 9	0 3	0 7	1.7	1 5	1 1
3	MILES	0 7	3 2	0.3	4 9	0 5	0 2	0 1	0 6	1.4	2 8	0 7
4	MILES	1 1	10 7	1.0	7.5	2.3	0 6	0 2	1 3	3 4	1 9	1 1
5	MILES	2.2	1 3	1 2	1 6	2 0	0 3	0 1	0 5	0.7	2 2	2 2

BENEFITS	UNIT OF MEASURE PER/YR	ALTERNATIVES 1	2	3	4	5	6	7	8	9	10	11
Wilderness Recreation												
Decade 1	M $	1908	1431	2523	1431	1749	1579	1431	3951	3229	1569	1569
2	M $	2165	1575	2915	1575	1931	1745	1574	4767	3371	1724	1738
3	M $	2165	1575	2915	1575	1931	1745	1574	4767	3371	1724	1738
4	M $	2165	1575	2915	1575	1931	1745	1574	4767	3371	1724	1738
5	M $	2165	1575	2915	1575	1931	1745	1574	4767	3371	1724	1738
Dispersed Recreation												
Decade 1	M $	1418	1492	1271	1565	1430	1597	1545	697	871	1536	1512
2	M $	1768	1857	1596	1945	1788	1989	1929	858	1065	1918	1724
3	M $	1768	1857	1596	1945	1788	1989	1929	858	1065	1918	1724
4	M $	1768	1857	1596	1945	1788	1989	1929	858	1065	1918	1724
5	M $	1768	1857	1596	1945	1788	1989	1929	858	1065	1918	1724
Developed Recreation												
Decade 1	M $	310	415	225	439	358	254	310	269	359	326	439
2	M $	401	537	291	491	457	337	401	335	463	411	495
3	M $	401	537	291	491	457	337	401	335	463	411	495
4	M $	401	537	291	491	457	337	401	335	463	411	495
5	M $	401	537	291	491	457	337	401	335	463	411	495
Wildlife												
Decade 1	M $	2496	2258	2477	2496	2430	2458	2498	2493	2282	2444	2459
2	M $	3116	2803	3087	3116	3025	3065	3116	3110	2850	3050	3065
3	M $	3634	3392	3741	3650	3652	3593	3634	3676	3377	3682	3711
4	M $	4170	4050	4590	4224	4452	4156	4170	4311	3963	4512	4574
5	M $	4670	4157	5548	4786	5198	4598	4670	4971	4283	5289	5461
Anadromous Fish Commercial												
Decade 1	M $	380	377	387	378	386	380	382	382	377	377	385
2	M $	771	767	784	771	788	770	771	773	761	772	777
3	M $	1161	1154	1179	1161	1185	1160	1161	1163	1146	1166	1171
4	M $	1550	1541	1573	1549	1583	1547	1550	1553	1531	1556	1568
5	M $	1722	1712	1748	1721	1758	1719	1722	1725	1700	1727	1742
Anadromous Fish Sport												
Decade 1	M $	2620	2542	2667	2620	2618	2620	2621	2558	2526	2646	2631
2	M $	4332	4174	4410	4332	4290	4332	4332	4214	4150	4362	4347
3	M $	5984	5818	6082	5984	5970	5984	5984	5858	5787	6006	6006
4	M $	7671	7448	7799	7671	7644	7664	7671	7474	7381	7722	7722
5	M $	8529	8278	8657	8529	8510	8522	8529	8332	8232	8580	8580
Coldwater Fish												
Decade 1	M $	3261	3204	3306	3274	3324	3262	3261	3263	3115	3297	3270
2	M $	4252	4183	4315	4254	4128	4240	4252	4257	4061	4278	4265
3	M $	4890	5050	4957	5186	4988	5159	5111	4893	4697	4840	4915
4	M $	5528	5838	5601	5915	5764	5878	5889	5529	5333	5516	5546
5	M $	6699	7361	6786	7442	7267	7381	7392	6698	6502	6698	6728
Range												
Decade 1	M $	1584	1607	1582	1605	1596	1605	1605	1572	1573	1590	1596
2	M $	1592	1651	1539	1621	1613	1615	1615	1456	1510	1550	1610
3	M $	1577	1712	1493	1631	1628	1633	1633	1355	1450	1537	1624
4	M $	1577	1708	1493	1631	1624	1633	1633	1355	1449	1536	1624
5	M $	1577	1708	1493	1631	1624	1633	1633	1355	1449	1536	1624
Timber												
Decade 1	M $	1246	2331	736	3191	1748	896	359	736	1756	1390	1068
2	M $	1784	3585	751	4057	1784	915	366	751	1792	3816	1446
3	M $	1784	6307	748	4057	1784	915	366	748	1786	3553	1802
4	M $	1784	5070	745	3007	1784	915	366	745	1747	3529	2158
5	M $	1784	7125	715	2124	1784	915	366	715	1669	3815	2515
6-10	M $	1784	10,070	1132	3940	4093	4808	1271	1132	1751	3784	3578
11-15	M $	1614	8850	1022	5614	3820	4622	1202	1022	2743	3780	3123
16-20	M $	1605	8725	1022	5154	4898	5607	1116	1022	2485	4903	3012

TABLE II-7 RESOURCE OUTPUTS, ACTIVITIES, COSTS, AND BENEFITS BY ALTERNATIVES AND BENCHMARKS. (Continued)

Minerals												
Decade 1	M $	388	484	220	484	388	395	395	150	245	318	395
2	M $	490	619	302	619	490	498	498	200	337	391	498
3	M $	490	619	302	619	490	498	498	200	337	391	498
4	M $	490	619	302	619	490	498	498	200	337	391	498
5	M $	490	619	302	619	490	498	498	200	337	391	498

COSTS	UNIT OF MEASURE PER/YR	ALTERNATIVES 1	2	3	4	5	6	7	8	9	10	11
TOTAL FOREST BUDGET												
Decade 1	M $	3948	4909	4078	5116	4640	2780	4060	3922	4567	4587	4410
2	M $	4444	4895	4665	5090	4600	2760	4210	3860	4549	4447	4400
3	M $	4190	4720	4669	4744	4178	2733	3930	3860	4201	4267	4360
4	M $	4000	6029	4681	4831	4178	2730	3804	3860	4191	4267	4230
5	M $	4000	4710	4688	4824	4178	2730	3804	3860	4191	4267	4240
Fixed Costs												
Protection												
Decade 1	M $	617	740	732	740	617	307	617	497	740	617	589
2	M $	617	740	732	740	617	307	617	497	740	617	589
3	M $	617	740	732	740	617	307	617	497	740	617	589
4	M $	617	740	732	740	617	307	617	497	740	617	589
5	M $	617	740	732	740	617	307	617	497	740	617	589
GA												
Decade 1	M $	670	813	800	838	800	700	700	800	815	663	750
2	M $	701	780	900	655	664	700	700	735	807	645	750
3	M $	700	740	900	631	664	700	700	800	816	655	750
4	M $	701	739	900	630	664	700	700	800	816	655	750
5	M $	701	741	900	630	664	700	700	800	816	655	750
Variable Costs												
Investment Costs												
Timber Roads												
Decade 1	M $	50	94	43	130	71	36	14	29	71	36	48
2	M $	61	198	36	275	59	30	12	41	99	292	76
3	M $	70	593	46	424	105	31	12	68	173	171	160
4	M $	130	397	73	272	136	28	11	53	113	334	186
5	M $	169	363	104	148	171	52	11	29	58	97	322
Other Roads												
Decade 1	M $	270	400	500	400	460	60	460	400	400	460	330
2	M $	460	400	290	400	460	60	460	400	400	380	330
3	M $	260	70	290	70	70	60	70	70	70	90	270
4	M $	70	70	290	70	70	60	70	70	70	90	130
5	M $	70	70	290	70	70	60	70	70	70	90	130
Investment Other												
Decade 1	M $	440	645	427	859	522	279	306	288	460	505	608
2	M $	485	781	416	969	495	258	251	270	470	811	600
3	M $	726	1308	383	872	416	203	221	255	410	865	645
4	M $	722	2663	402	958	433	210	225	268	448	810	697
5	M $	689	1836	388	952	407	193	220	260	429	778	746
Total Investment												
Decade 1	M $	761	1139	970	1388	1053	375	780	717	930	1001	986
2	M $	1006	1379	742	1644	1015	348	723	711	969	1483	1006
3	M $	1056	1972	719	1366	591	394	303	392	654	1127	1075
4	M $	922	3130	764	1300	638	298	306	392	631	1331	1013
5	M $	928	2269	781	1169	648	304	301	358	557	964	1198
Operational Costs												
Decade 1	M $	2075	2485	2476	2565	2166	1551	2068	2040	2264	2165	2216
2	M $	2287	2485	2469	2771	2156	1551	2093	2047	2264	2190	2241
3	M $	2287	2485	2474	2571	2150	1551	2093	2046	2264	2170	2229
4	M $	2287	2485	2484	2571	2150	1551	2093	2046	2264	2170	2236
5	M $	2287	2485	2484	2571	2150	1551	2093	2046	2264	2170	2236
NON-FOREST SERVICE COSTS												
Decade 1	M $	858	1614	737	2217	1210	616	237	501	1211	949	733
2	M $	1214	2449	739	2774	1214	618	238	503	1215	2589	981
3	M $	1214	4856	739	2774	1214	618	238	502	1215	2583	1226
4	M $	1214	4971	739	2722	1214	618	238	502	1204	2740	1471
5	M $	1214	5810	739	2748	1214	618	238	529	1254	2998	1716
RETURNS TO TREASURY												
Decade 1	M $	968	1400	749	1657	1121	866	711	578	982	950	828
2	M $	1057	1962	851	2104	1259	984	821	633	1098	1805	1036
3	M $	1059	2288	848	2108	1262	981	821	622	1087	1547	1151
4	M $	1057	940	850	1113	1262	980	821	622	1059	1364	1264
5	M $	1054	2159	852	1809	1264	979	821	567	929	1392	1378

TABLE II-7A PRESENT NET VALUE AND PRICED OUTPUTS
ALTERNATIVE 1 - NO ACTION (CURRENT PROGRAM)
(DISCOUNTED AT 4%)

BENEFITS	UNIT OF MEASURE	TIME PERIODS (DECADES) 1	2	3	4	5	TOTAL
Wilderness Recreation	M $	15,473	11,864	8,011	5,413	3,659	44,420
Dispersed Recreation	M $	11,500	9,689	6,542	4,420	2,988	35,139
Developed Recreation	M $	2,514	2,197	1,484	1,003	678	7,876
Wildlife	M $	20,243	17,075	13,446	10,425	7,892	69,081
Anad Fish Commercial	M $	3,082	4,225	4,296	3,875	2,910	18,388
Anadromous Fish Sport	M $	21,248	23,739	22,141	19,178	14,414	100,720
Coldwater Fish	M $	26,447	23,301	18,093	13,820	11,321	92,982
Range	M $	12,846	8,724	5,835	3,943	2,665	34,013
Timber	M $	10,105	9,776	6,601	4,460	3,015	33,957
Minerals	M $	3,145	2,688	1,815	1,226	829	9,703

COSTS	UNIT OF MEASURE	TIME PERIODS (DECADES) 1	2	3	4	5	TOTAL
Total Forest Budget	M $	33,321	25,287	16,131	10,400	7,040	92,179
Fixed Costs							
Protection	M $	5,207	3,511	2,375	1,604	1,086	13,783
GA	M $	5,908	4,552	3,080	2,080	1,408	17,028
Variable Costs							
Investment Costs							
Timber Roads	M $	424	349	270	338	297	1,678
Other Roads	M $	2,279	2,617	1,001	182	123	6,202
Investment Other	M $	3,718	2,758	2,796	1,878	1,213	12,363
Total Investment	M $	6,422	5,725	4,066	2,398	1,633	20 244
Operational Costs	M $	17,513	13,013	8,805	5,946	4,025	49,302
Non-Forest Service Costs	M $	7,240	6,905	4,672	3,155	2,136	24,108

PNV (M $) = 321,815

PVC (M $) = 124,464

PVB (M $) = 446,279

TABLE II-7A PRESENT NET VALUE AND PRICED OUTPUTS
ALTERNATIVE 2 - MARKET EMPHASIS
(DISCOUNTED AT 4%)

BENEFITS	UNIT OF MEASURE	TIME PERIODS (DECADES) 1	2	3	4	5	TOTAL
Wilderness Recreation	M $	11,605	8,631	5,828	3,936	2,662	32,662
Dispersed Recreation	M $	12,100	10,176	6,871	4,643	3,138	36,928
Developed Recreation	M $	3,366	2,943	1,987	1,342	908	10,546
Wildlife	M $	18,312	15,360	12,550	10,125	7,025	63,372
Anad Fish Commercial	M $	3,057	4,203	4,270	3,583	2,893	18,006
Anadromous Fish Sport	M $	20,616	22,873	21,527	18,620	13,989	97,625
Coldwater Fish	M $	25,984	22,923	18,685	14,595	12,440	94,627
Range	M $	13,033	9,047	6,334	4,270	2,887	35,571
Timber	M $	18,902	19,645	23,336	12,675	12,041	86,599
Minerals	M $	3,928	3,394	2,292	1,548	1,047	12,209

COSTS	UNIT OF MEASURE	TIME PERIODS (DECADES) 1	2	3	4	5	TOTAL
Total Forest Budget	M $	41,432	27,855	18,172	15,675	8,290	111,424
Fixed Costs							
Protection	M $	6,246	4,211	2,849	1,924	1,302	16,532
GA	M $	7,596	5,121	3,465	2,340	1,584	20,106
Variable Costs							
Investment Costs							
Timber Roads	M $	797	1,128	2,285	1,031	639	5,880
Other Roads	M $	3,376	2,276	270	182	123	6,227
Investment Other	M $	5,441	4,443	5,037	6,924	3,231	25,076
Total Investment	M $	9,614	7,847	7,592	8,137	3,993	37.183
Operational Costs	M $	20,973	14,140	9,567	6,461	4,374	55,515
Non-Forest Service Costs	M $	13,623	13,937	18,697	12,925	10,226	69,408

PNV (M $) = 289,412

PVC (M $) = 198,733

PVB (M $) = 488,145

TABLE II-7A. PRESENT NET VALUE AND PRICED OUTPUTS
ALTERNATIVE 3 - NON-MARKET EMPHASIS
(DISCOUNTED AT 4%)

BENEFITS	UNIT OF MEASURE	TIME PERIODS (DECADES) 1	2	3	4	5	TOTAL
Wilderness Recreation	M $	20,462	15,974	10,786	7,288	4,926	59,436
Dispersed Recreation	M $	10,308	8,746	5,905	3,990	2,697	31,646
Developed Recreation	M $	1,825	1,594	1,077	728	492	5,716
Wildlife	M $	20,088	16,917	13,842	11,475	9,376	71,698
Anad. Fish Commercial	M $	3,139	4,296	4,362	3,933	2,954	18,684
Anadromous Fish Sport	M $	21,629	24,167	22,503	19,498	14,630	102,427
Coldwater Fish	M $	26,812	23,646	18,341	14,003	11,468	94,270
Range	M $	12,830	8,434	5,524	3,733	2,523	33,044
Timber	M $	5,970	4,115	2,768	1,863	1,208	15,924
Minerals	M $	1,783	1,654	1,117	745	510	5,809

COSTS	UNIT OF MEASURE	TIME PERIODS (DECADES) 1	2	3	4	5	TOTAL
Total Forest Budget	M $	42,016	26,546	17,976	12,171	8,251	106,960
Fixed Costs							
Protection	M $	6,178	4,165	2,818	1,903	1,288	16,352
GA	M $	7,596	5,121	3,465	2,340	1,584	20,106
Variable Costs							
Investment Costs							
Timber Roads	M $	364	206	179	189	183	1,121
Other Roads	M $	4,220	1,650	1,117	754	510	8,251
Investment Other	M $	3,604	2,368	1,473	1,045	682	9,172
Total Investment	M $	8,188	4,224	2,768	1,987	1,375	18 542
Operational Costs	M $	20,897	14,049	9,525	6,458	4,372	55,301
Non-Forest Service Costs	M $	6,219	4,206	2,846	1,922	2,301	16,494

PNV (M $) = 311,859

PVC (M $) = 126,795

PVB (M $) = 438,654

TABLE II-7A PRESENT NET VALUE AND PRICED OUTPUTS
ALTERNATIVE 4 - RPA 1980 PROGRAM
(DISCOUNTED AT 4%)

BENEFITS	UNIT OF MEASURE	TIME PERIODS (DECADES) 1	2	3	4	5	TOTAL
Wilderness Recreation	M $	11,605	8,631	5,828	3,938	2,662	32,664
Dispersed Recreation	M $	12,692	10,659	7,197	4,863	3,282	38,698
Developed Recreation	M $	3,560	2,691	1,817	1,228	830	10,126
Wildlife	M $	20,243	17,076	13,505	10,560	8,088	69,472
Anad Fish Commercial	M $	3,066	4,225	4,296	3,873	2,908	18,368
Anadromous Fish Sport	M $	21,248	23,739	22,141	19,178	14,414	100,720
Coldwater Fish	M $	26,552	23,312	19,188	14,788	12,577	96,417
Range	M $	13,017	8,883	6,035	4,078	2,756	34,769
Timber	M $	25,880	22,235	15,012	7,519	3,590	74,236
Minerals	M $	3,928	3,394	2,292	1,549	1,047	12,210

COSTS	UNIT OF MEASURE	TIME PERIODS (DECADES) 1	2	3	4	5	TOTAL
Total Forest Budget	M $	43,179	28,962	18,264	1,256	8,490	100,151
Fixed Costs							
Protection	M $	6,246	4,211	2,849	1,924	1,302	16,532
GA	M $	7,596	5,121	3,465	2,340	1,584	20,106
Variable Costs							
Investment Costs							
Timber Roads	M $	1,096	1,398	1,632	708	260	5,094
Other Roads	M $	3,376	2,036	269	182	123	5,986
Investment Other	M $	7,247	4,934	3,356	2,492	1,675	19,704
Total Investment	M $	11,719	9,354	5,258	3,381	2,058	31 770
Operational Costs	M $	21,649	15,767	9,898	6,685	4,525	58,524
Non-Forest Service Costs	M $	18,710	15,787	10,682	7,078	4,837	57,094

PNV (M $) = 304,640

PVC (M $) = 183,040

PVB (M $) = 487,680

TABLE II-7A PRESENT NET VALUE AND PRICED OUTPUTS
ALTERNATIVE 5 - MARKET & NON-MARKET MIX
(DISCOUNTED AT 4%)

BENEFITS	UNIT OF MEASURE	TIME PERIODS (DECADES) 1	2	3	4	5	TOTAL
Wilderness Recreation	M $	14,184	10,582	7,145	4,828	3,263	40,002
Dispersed Recreation	M $	11,597	9,798	6,616	4,470	3,022	35,503
Developed Recreation	M $	2,903	2,504	1,691	1,143	772	9,013
Wildlife	M $	19,707	16,577	13,512	11,130	8,875	69,711
Anad Fish Commercial	M $	3,130	4,318	4,385	3,958	2,971	18,762
Anadromous Fish Sport	M $	21,232	23,509	22,089	19,110	14,382	100,322
Coldwater Fish	M $	26,958	22,621	18,456	14,410	12,281	94,726
Range	M $	12,944	8,839	6,024	4,060	2,745	34,612
Timber	M $	14,179	9,789	6,602	4,461	3,016	38,047
Minerals	M $	3,145	2,688	1,815	1,226	829	9,703

COSTS	UNIT OF MEASURE	TIME PERIODS (DECADES) 1	2	3	4	5	TOTAL
Total Forest Budget	M $	26,400	26,176	16,085	10,863	7,353	86,877
Fixed Costs							
Protection	M $	3,511	3,511	2,375	1,604	1,086	12,087
GA	M $	4,552	4,552	3,080	2,080	1,408	15,672
Variable Costs							
Investment Costs							
Timber Roads	M $	403	339	404	353	300	1,799
Other Roads	M $	2,617	2,617	270	182	123	5,809
Investment Other	M $	2,972	2,818	1,602	1,125	716	9,233
Total Investment	M $	5,992	5,774	2,276	1,160	1,140	16 342
Operational Costs	M $	12,325	12,268	8,278	5,590	3,784	42,245
Non-Forest Service Costs	M $	6,884	6,905	4,672	3,155	2,136	23,752

PNV (M $) = 340,427

PVC (M $) = 109,974

PVB (M $) = 450,401

TABLE II-7A. PRESENT NET VALUE AND PRICED OUTPUTS
ALTERNATIVE 6 - CONSTRAINED (-25%) BUDGET
(DISCOUNTED AT 4%)

BENEFITS	UNIT OF MEASURE	TIME PERIODS (DECADES) 1	2	3	4	5	TOTAL
Wilderness Recreation	M $	12,806	9,563	6,456	4,363	2,949	36,137
Dispersed Recreation	M $	12,952	10,900	7,359	4,973	3,361	39,545
Developed Recreation	M $	2,060	1,847	1,247	843	370	6,567
Wildlife	M $	19,934	16,796	13,294	10,390	7,771	68,185
Anad. Fish Commercial	M $	3,082	4,220	4,292	3,868	2,905	18,367
Anadromous Fish Sport	M $	21,248	23,739	22,141	19,160	14,402	100,690
Coldwater Fish	M $	26,455	23,235	19,088	14,695	12,474	95,947
Range	M $	12,960	8,741	5,883	3,973	2,685	34,242
Timber	M $	7,270	5,013	3,384	2,287	1,546	19,500
Minerals	M $	3,207	2,730	1,843	1,246	842	9,868

COSTS	UNIT OF MEASURE	TIME PERIODS (DECADES) 1	2	3	4	5	TOTAL
Total Forest Budget	M $	23,463	15,704	10,522	7,098	4,805	61,592
Fixed Costs							
Protection	M $	2,532	1,707	1,155	780	528	6,702
GA	M $	5,908	3,983	2,695	1,820	1,232	15,638
Variable Costs							
Investment Costs							
Timber Roads	M $	304	172	119	73	91	759
Other Roads	M $	506	341	231	156	106	1,340
Investment Other	M $	2,352	1,466	782	546	339	5,485
Total Investment	M $	3,162	1,980	1,132	775	536	7 585
Operational Costs	M $	13,090	8,825	5,971	4,032	2,730	34,648
Non-Forest Service Costs	M $	5,198	3,515	2,379	1,606	1,087	13,785

PNV (M $) = 350,690

PVC (M $) = 78,358

PVB (M $) = 429,048

TABLE II-7A PRESENT NET VALUE AND PRICED OUTPUTS
ALTERNATIVE 7 - CURRENT PROGRAM, CONSTRAINED BUDGET
(DISCOUNTED AT 4%)

BENEFITS	UNIT OF MEASURE	TIME PERIODS (DECADES) 1	2	3	4	5	TOTAL
Wilderness Recreation	M $	11,605	8,626	5,824	3,9935	2,660	32,650
Dispersed Recreation	M $	12,530	10,571	7,137	4,823	3,260	38,321
Developed Recreation	M $	2,514	2,197	1,484	1,003	678	7,876
Wildlife	M $	20,259	17,076	13,631	10,425	7,892	69,283
Anad Fish Commercial	M $	3,098	4,225	4,296	3,875	2,910	18,404
Anadromous Fish Sport	M $	21,256	23,739	22,141	19,178	14,414	100,728
Coldwater Fish	M $	26,447	23,301	18,911	14,723	12,492	95,874
Range	M $	13,017	9,850	6,042	4,083	2,760	35,752
Timber	M $	2,914	2,007	1,355	916	619	7,811
Minerals	M $	3,207	2,730	1,843	1,246	842	9,868

COSTS	UNIT OF MEASURE	TIME PERIODS (DECADES) 1	2	3	4	5	TOTAL
Total Forest Budget	M $	34,266	23,955	15,131	9,890	6,695	89,937
Fixed Costs							
Protection	M $	5,207	3,511	2,375	1,604	1,086	13,783
GA	M $	5,908	3,983	2,695	1,820	1,232	15,638
Variable Costs							
Investment Costs							
Timber Roads	M $	116	67	46	28	19	276
Other Roads	M $	3,882	2,617	270	182	123	7,074
Investment Other	M $	2,586	1,431	850	584	387	5,838
Total Investment	M $	6,595	4,115	1,166	795	529	13 190
Operational Costs	M $	17,454	11,909	8,058	5,442	3,684	46,547
Non-Forest Service Costs	M $	1,999	1,353	915	618	418	5,303

PNV (M $) = 322,108

PVC (M $) = 94,459

PVB (M $) = 416,567

TABLE II-7A. PRESENT NET VALUE AND PRICED OUTPUTS
ALTERNATIVE 8 - MAXIMIZE WILDERNESS, AMENITY EMPHASIS
(DISCOUNTED AT 4%)

BENEFITS	UNIT OF MEASURE	TIME PERIODS (DECADES) 1	2	3	4	5	TOTAL
Wilderness Recreation	M $	32,043	26,123	17,638	11,918	8,056	95,778
Dispersed Recreation	M $	5,653	4,702	3,175	2,145	1,450	17,125
Developed Recreation	M $	2,182	1,836	1,240	838	566	6,662
Wildlife	M $	20,218	17,043	13,601	10,778	8,401	70,041
Anad. Fish Commercial	M $	3,098	4,236	4,303	3,883	2,915	18,435
Anadromous Fish Sport	M $	20,745	23,093	22,674	18,685	14,081	98,278
Coldwater Fish	M $	26,463	23,328	18,104	13,823	11,320	93,038
Range	M $	12,749	7,979	5,014	3,388	2,290	31,420
Timber	M $	5,969	4,115	2,768	1,863	1,208	15,923
Minerals	M $	1,214	1,098	741	501	339	3,893

COSTS	UNIT OF MEASURE	TIME PERIODS (DECADES) 1	2	3	4	5	TOTAL
Total Forest Budget	M $	33,102	21,963	14,861	10,036	6,794	86,756
Fixed Costs							
Protection	M $	5,195	2,828	1,913	1,292	875	11,103
GA	M $	6,752	4,552	3,080	2,080	1,408	17,872
Variable Costs							
Investment Costs							
Timber Roads	M $	248	223	260	139	50	930
Other Roads	M $	3,376	2,276	270	182	123	6,227
Investment Other	M $	2,431	1,537	980	698	457	6,103
Total Investment	M $	6,055	4,047	1,510	1,019	630	13,261
Operational Costs	M $	17,218	11,647	7,877	5,320	3,601	45,663
Non-Forest Service Costs	M $	4,229	2,860	1,934	1,305	932	11,260

PNV (M $) = 351,434

PVC (M $) = 99,159

PVB (M $) = 450,593

TABLE II-7A PRESENT NET VALUE AND PRICED OUTPUTS
ALTERNATIVE 9 - HIGH WILDERNESS, COMMODITY EMPHASIS
(DISCOUNTED AT 4%)

BENLFITS	UNIT OF MEASURE	TIME PERIODS (DECADES) 1	2	3	4	5	TOTAL
Wilderness Recreation	M $	26,187	18,571	12,473	8,428	5,697	71,296
Dispersed Recreation	M $	7,064	5,836	3,941	2,663	1,800	21,304
Developed Recreation	M $	2,911	2,537	1,713	1,158	782	9,101
Wildlife	M $	18,507	15,618	12,495	9,908	7,238	63,766
Anad Fish Commercial	M $	3,057	4,170	4,240	3,828	2,873	18,168
Anadromous Fish Sport	M $	20,486	22,742	21,412	18,453	13,912	97,005
Coldwater Fish	M $	25,263	22,254	17,379	13,333	10,988	89,217
Range	M $	12,757	8,725	5,365	3,623	2,449	32,919
Timber	M $	14,238	9,819	6,609	4,367	2,820	37,853
Minerals	M $	1,991	1,844	1,245	841	569	6,490

COSTS	*UNIT OF MEASURE*	*TIME PERIODS (DECADES)* 1	2	3	4	5	TOTAL
Total Forest Budget	M $	38,545	25,884	16,173	10,897	7,374	98,873
Fixed Costs							
Protection	M $	6,246	4,211	2,849	1,924	1,302	16,532
GA	M $	7,596	5,121	3,465	2,340	1,584	20,106
Variable Costs							
Investment Costs							
Timber Roads	M $	598	565	667	295	102	2,227
Other Roads	M $	3,376	2,276	270	182	123	6,227
Investment Other	M $	3,879	2,673	1,580	1,165	755	10,052
Total Investment	M $	7,853	5,514	2,516	1,642	980	18 505
Operational Costs	M $	19,108	12,882	8,716	5,886	3,985	50,577
Non-Forest Service Costs	M $	10,223	6,914	4,676	3,129	2,207	27,149

PNV (M $) = 314,250

PVC (M $) = 132,869

PVB (M $) = 447,119

TABLE II-7A. PRESENT NET VALUE AND PRICED OUTPUTS
ALTERNATIVE 10 - CURRENT PROGRAM,UNCONSTRAINED BUDGET
(DISCOUNTED AT 4%)

BENEFITS	UNIT OF MEASURE	TIME PERIODS (DECADES) 1	2	3	4	5	TOTAL
Wilderness Recreation	M $	12,725	9,546	6,445	4,310	2,914	35,940
Dispersed Recreation	M $	12,457	10,511	7,097	4,795	3,241	38,101
Developed Recreation	M $	2,644	2,252	1,521	1,028	695	8,140
Wildlife	M $	19,820	16,714	13,623	11,280	8,938	70,375
Anad. Fish Commercial	M $	3,057	4,231	4,314	3,890	2,919	18,411
Anadromous Fish Sport	M $	21,459	23,904	22,222	19,305	14,500	101,390
Coldwater Fish	M $	26,739	23,443	17,908	13,790	11,320	93,200
Range	M $	12,895	8,494	5,687	3,840	2,596	33,512
Timber	M $	11,274	20,910	13,145	8,822	6,447	60,598
Minerals	M $	2,579	2,145	1,448	979	661	7,812

COSTS	UNIT OF MEASURE	TIME PERIODS (DECADES) 1	2	3	4	5	TOTAL
Total Forest Budget	M $	38,714	25,303	16,428	11,094	7,510	99,049
Fixed Costs:							
Protection	M $	5,207	3,511	2,375	1,604	1,086	13,783
GA	M $	6,752	4,552	3,080	2,080	1,408	17,872
Variable Costs							
Investment Costs							
Timber Roads	M $	304	1,660	661	869	170	3,664
Other Roads	M $	304	2,162	347	234	158	3,205
Investment Other	M $	4,266	4,617	3,332	2,106	1,369	15,690
Total Investment	M $	8,453	8,439	4,338	3,461	1,697	26.388
Operational Costs	M $	18,273	12,461	8,355	5,642	3,819	48,550
Non-Forest Service Costs	M $	8,014	14,730	9,943	7,125	5,276	45,088

PNV (M $) = 315,798

PVC (M $) = 151,681

PVB (M $) = 467,479

TABLE II-7A. PRESENT NET VALUE AND PRICED OUTPUTS
ALTERNATIVE 11 - 1980 RPA MODIFIED (PREFERRED)
(DISCOUNTED AT 4%)

BENEFITS	UNIT OF MEASURE	TIME PERIODS (DECADES) 1	2	3	4	5	TOTAL
Wilderness Recreation	M $	12,725	9,524	6,431	4,234	2,937	35,962
Dispersed Recreation	M $	12,262	9,448	6,379	4,310	2,914	35,315
Developed Recreation	M $	3,560	2,713	1,832	1,238	837	10,180
Wildlife	M $	19,942	16,796	13,731	11,435	9,229	71,133
Anad. Fish Commercial	M $	3,122	4,258	4,333	3,920	2,944	18,577
Anadromous Fish Sport	M $	21,337	23,822	22,222	19,305	14,500	101,186
Coldwater Fish	M $	26,520	23,372	18,185	13,865	11,370	93,312
Range	M $	12,944	8,823	6,009	4,060	2,745	34,581
Timber	M $	8,661	7,924	6,667	5,395	4,250	32,897
Minerals	M $	3,203	2,729	1,843	1,245	842	9,862

COSTS	UNIT OF MEASURE	TIME PERIODS (DECADES) 1	2	3	4	5	TOTAL
Total Forest Budget	M $	37,220	25,036	16,786	10,998	7,462	97,502
Fixed Costs							
Protection	M $	4,971	3,351	2,268	1,531	1,037	13,158
GA	M $	6,330	4,268	2,888	1,950	1,320	16,756
Variable Costs							
Investment Costs							
Timber Roads	M $	405	432	616	484	567	2,504
Other Roads	M $	2,785	1,878	1,040	338	229	6,270
Investment Other	M $	5,132	3,425	2,483	1,812	1,313	14,165
Total Investment	M $	8,322	5,736	4,139	2,634	2,108	22,939
Operational Costs	M $	18,703	12,734	8,582	5,814	3,935	49,768
Non-Forest Service Costs	M $	6,187	5,582	4,720	3,825	3,020	23,334

PNV (M $) = 317,050

PVC (M $) = 125,955

PVB (M $) = 443,005

TABLE II-7B PRESENT NET VALUE AND NONPRICED OUTPUTS
(In 1982 Dollars) 4% Discount Rate

ALTERNATIVES		M$ PNV	M$ PVC	M$ PVB	TIMBER SUITABLE LANDS M ACRES	PROPOSED WLD. M ACRES	SEMI-PRIM. NON-MOTOR ROS CLASS M ACRES	ROAD MTCE. MI/YR	PROJECTED POP. ELK/YEAR M ANIM.	PROJECTED POP. DEER/YEAR M ANIM.	ANAD. FISH SPORT M LBS.
Alt. #1	No Action, (Current Program)	321,815	124,464	446,279	47.9	257.0	+22.7	480	8.3	58.6	870
Alt. #2	Market Emphasis	289,412	198,733	488,145	241.0	0	-23.0	560	7.0	54.8	845
Alt. #3	Non-Market Emph.	311,859	126,795	438,654	24.8	782.9	-124.0	730	8.6	59.9	884
Alt. #4	RPA 1980 Program	304,640	183,040	487,680	139.0	0	-50.0	560	8.4	58.6	870
Alt. #5	Market & Non-market Mix	340,427	109,974	450,401	114.0	164.0	+19.3	560	8.0	57.2	868
Alt. #6	Constrained (-25%) Budget	350,690	78,358	429,048	133.0	141.0	+4.2	300	8.0	57.2	870
Alt. #7	Current Program, Constrained Budget	322,108	94,459	416,567	43.0	119.6	-18.0	450	8.3	58.6	871
Alt. #8	Max. Wilderness, Amenity Emphasis	351,434	99,159	450,593	25.0	1,392.1	+72.5	560	8.6	58.5	850
Alt. #9	High Wilderness, Commodity Emphasis	314,250	132,869	447,119	61.0	1,048.8	+5.5	560	7.2	56.5	840
Alt. #10	Current Program, Unconstr. Budget	315,798	151,681	467,479	139.0	160.0	-20.8	560	8.7	61.2	876
Alt. #11	1980 RPA Modified (Preferred)	317,050	125,955	443,005	95.9	201.0	-20.8	560	8.7	59.9	876

TABLE II-7C PRESENT NET VALUE AND QUALITATIVE EFFECTS
(1978 Dollars) M$ 4% Discount Rate

	PNV	PVC	PVB	
BENCHMARKS				
Minimum Level	307,548	44,195	351,743	Timber losses due to insect and disease increase Range condition improves. Water quality remains stable, decrease in sediment to streams. Wildlife and fish habitat capability will be maintained.
Max PNV/Assigned Values	344,749	128,948	473,697	Timber losses due to insect and disease continue at moderate rate. Water quality improves. Moderate increase in wildlife and fish habitat. Range condition will improve slowly.
ALTERNATIVES				
Alt. #1 No Action, Current Program)	321,815	124,464	446,279	Timber losses due to insect and disease continue at a moderate rate Range conditions improve. Moderate increase in wildlife and fish habitat capability. Water quality improves.
Alt. #2 Market Emphasis	289,412	198,733	488,145	Decrease in timber losses due to insect and disease. Some decrease in wildlife and fish habitat capability. Decline in water quality. Greatest increase in sediment to streams.
Alt. #3 Non-Market Emphasis	311,859	126,795	438,654	Timber losses due to insect and disease increase slightly Greatest increase in wildlife and fish habitat capability. Water quality improves.
Alt #4 RPA 1980 Program	304,640	183,040	487,680	Some decrease in timber losses due to insect and disease Moderate increase in wildlife and fish habitat capability Water quality improves Increase sediment to streams
Alt. #5 Market & Non-market Mix	340,427	109,974	450,401	Timber losses due to insect and disease continue at a moderate level Slow increase in wildlife and fish habitat capability. Decline in water quality. Slow increase in sediment to streams.
Alt. #6 Constrained (-25%) Budget	350,690	78,358	429,048	Timber losses due to insect and disease increases slightly. Range condition improves. Wildlife and fish habitat capability maintained at current level. No change in water quality. Less sediment to streams.
Alt #7 Current Program, Constrained Budget	322,108	94,459	416,567	Timber losses due to insect and disease increase slightly Slow increase in wildlife and fish habitat capability. Water quality improves Sediment to streams will be with threshold limits.
Alt. #8 Maximize Wilderness, Amenity Emphasis	351,434	99,159	450,593	Timber losses due to insect and disease increase slightly. Range conditions improve. Slow increase in wildlife and fish habitat capability. Slow improvement in water quality Less sediment to streams, except along road corridors.
Alt. #9 High Wilderness, Commodity Emphasis	314,250	132,869	447,119	Timber losses due to insect and disease continue at a moderate rate. Wildlife and fish habitat capability maintained at current level. Decline in water quality and increase in sediment to streams in intensively managed areas.
Alt #10 Current Program, Unconstrained Budget	315,798	151,681	467,479	Some decrease in timber losses due to insect and disease. Slow increase in wildlife and fish habitat capability. Water quality improves. Sediment to streams will decrease
Alt. #11 1980 RPA Modified (Preferred)	317,050	125,955	443,005	Insect and disease continue at a moderate rate. Moderate increase in wildlife and fish habitat capability. Water quality improves. Sediment to streams will increase.

TABLE II-7D ACREAGE ASSIGNMENT BY MANAGEMENT AREA PRESCRIPTION (GOAL)

AREA	MGMT AREA ACRES	MGMT. PRESCR	AREA (GOAL)	EMPHASIS	ALT 1 NO ACTION CURRENT PROGRAM	ALT 2 MARKET EMPHASIS	ALT 3 NON-MARKET EMPHASIS	ALT 4 RPA 80 PROGRAM	ALT 5 MARKET & NON-MARKET MIX	ALT 6 CONSTR. -25% BUDGET	ALT 7 CURRENT PROGRAM CONSTR. BUDGET	ALT 8 MAXIMIZE WILD , AMENITY EMPHASIS	ALT 9 HIGH WILD., COMMODITY EMPHASIS	ALT 10 CURRENT PROGRAM, UNCONSTR. BUDGET	ALT 11 1980 RPA MODIFIED (PREFERRED)
1	782,255		6	Wilderness	782,255	782,255	782,255	782,255	782,255	782,255	782,255	782,255	782,255	782,255	782,255
2	37,684		1	Low Level Management			37,684			37,684			37,684		
			2	Current Trend	37,684						37,684				
			3	Current Trend Amenity		37,684		37,684	37,684			9,242		37,684	37,684
			6	Wilderness								28,442			
3	73,871		2	Current Trend	73,841			73,841		73,841	73,841				73,841
			4	High Level Amenity			73,841		73,841						
			5	High Level Commodity		73,841						18,887	18,887	73,841	
			6	Wilderness								54,954	54,954		
4	13,682		1	Low Level Management		13,682							1,546		
			2	Current Trend	13,682			13,682		13,682	13,682				13,682
			4	High Level Amenity			13,682		13,682						
			5	High Level Commodity								1,546		13,682	
			6	Wilderness								12,136	12,136		
5	43,923		1	Low Level Management									22,593		
			2	Current Trend	43,923			43,923	43,923	43,923	43,923				43,923
			3	Current Trend Amenity		43,923									
			4	High Level Amenity			43,923					22,593		43,923	
			6	Wilderness								21,330	21,330		
6	121,147		1	Low Level Management									42,947		
			2	Current Trend	121,147	121,147	121,147	121,147		121,147	121,147				121,147
			4	High Level Amenity					121,147			13,043		121,147	
			6	Wilderness								108,104	78,200		
7	84,135		1	Low Level Management			7,835					303	7,835	84,135	
			3	Current Trend Amenity	84,135			84,135	84,135	84,135	84,135				58,135
			5	High Level Commodity		84,135									
			6	Wilderness			76,300					83,832	76,300		26,000
8	30,007		1	Low Level Management			30,007			30,007		4,855	30,007	30,007	
			2	Current Trend	30,007	30,007		30,007	30,007		30,007				30,007
			6	Wilderness								25,152			
9	38,749		1	Low Level Management						38,749		11,622	38,749	38,749	
			2	Current Trend	38,749	38,749			38,749		38,749				
			3	Current Trend Amenity				38,749							38,749
			4	High Level Amenity			38,749								
			6	Wilderness								27,127			

TABLE II-7D ACREAGE ASSIGNMENT BY MANAGEMENT AREA PRESCRIPTION (GOAL)

AREA	MGMT AREA ACRES	MGMT PRESCR	AREA (GOAL)	EMPHASIS	ALT 1 NO ACTION CURRENT PROGRAM	ALT 2 MARKET EMPHASIS	ALT 3 NON-MARKET EMPHASIS	ALT 4 RPA 80 PROGRAM	ALT 5 MARKET & NON-MARKET MIX	ALT 6 CONSTR -25% BUDGET	ALT 7 CURRENT PROGRAM CONSTR BUDGET	ALT 8 MAXIMIZE WLD, AMENITY EMPHASIS	ALT 9 HIGH WILD, COMMODITY EMPHASIS	ALT 10 CURRENT PROGRAM, UNCONSTR BUDGET	ALT 11 1980 RPA MODIFIED (PREFERRED)
10	21,009		1	Low Level Management			21,009			21,009		10,846		21,009	
			2	Current Trend	21,009						21,009				
			3	Current Trend Amenity				21,009							21,009
			4	High Level Amenity					21,009						
			5	High Level Commodity		21,009							21,009		
			6	Wilderness								10,163			
11	245,972		1	Low Level Management								30,366			
			2	Current Trend	201,603		86,471		201,603		245,972				163,972
			3	Current Trend Amenity				245,972		245,972				201,972	
			4	High Level Amenity											
			5	High Level Commodity		245,972							86,471		
			6	Wilderness	44,369		159,501		44,369			215,606	159,501	44,000	56,000
12	30,439		1	Low Level Management		30,439			30,439			9,476	30,439		
			2	Current Trend	30,439			30,439		30,439	30,439				30,439
			4	High Level Amenity			30,439							30,439	
			6	Wilderness								20,963			
13	11,303		1	Low Level Management		11,303							11,303		
			2	Current Trend	11,303			11,303		11,303	11,303				11,303
			4	High Level Amenity			11,303		11,303			7,044		11,303	
			6	Wilderness								4,259			
14	79,981		1	Low Level Management		78,981	7,742		79,981	79,981		7,742	7,742	79,981	
			2	Current Trend	79,,981			79,981			79,981				79,981
			6	Wilderness			72,239					72,239	72,239		
15	105,155		1	Low Level Management									22,460		
			2	Current Trend	105,155		22,460	105,155	105,155	105,155	105,155	22,460			105,155
			4	High Level Amenity										105,155	
			5	High Level Commodity		105,155									
			6	Wilderness			82,695					82,695	82,695		
16	156,220		1	Low Level Management			26,639			115,220		26,639	26,639	40,220	
			2	Current Trend	36,545						36,545				
			4	High Level Amenity				156,220	36,545						37,220
			5	High Level Commodity		156,220									
			6	Wilderness	119,675		129,581		119,675	41,000	119,675	129,581	129,581	116,000	119,000
17	56,906		1	Low Level Management			12,289					12,289	12,289		
			2	Current Trend	56,906			56,906		56,906	56,906				56,906
			4	High Level Amenity					56,906					56,906	
			5	High Level Commodity		56,906									
			6	Wilderness			44,617					44,617	44,617		
18	81,783		1	Low Level Management		81,783	81,783		81,783	81,783		24,739	63,030	81,783	
			2	Current Trend	81,783			81,783			81,783				81,783
			6	Wilderness								57,044	18,753		

TABLE II-7D ACREAGE ASSIGNMENT BY MANAGEMENT AREA PRESCRIPTION (GOAL).

AREA	MGMT. AREA ACRES	MGMT. AREA PRESCR (GOAL)	EMPHASIS	ALT 1 NO ACTION CURRENT PROGRAM	ALT 2 MARKET EMPHASIS	ALT 3 NON-MARKET EMPHASIS	ALT 4 RPA 80 PROGRAM	ALT 5 MARKET & NON-MARKET MIX	ALT 6 CONSTR -25% BUDGET	ALT 7 CURRENT PROGRAM CONSTR BUDGET	ALT 8 MAXIMIZE WLD., AMENITY EMPHASIS	ALT 9 HIGH WILD., COMMODITY EMPHASIS	ALT 10 CURRENT PROGRAM, UNCONSTR. BUDGET	ALT 11 1980 RPA MODIFIED (PREFERRED)
		1	Low Level Management		65,692						15,943	65,692		
		2	Current Trend	65,692			65,692		65,692	65,692				65,692
19	65,692	3	Current Trend Amenity					65,692						
		4	High Level Amenity			65,692							65,692	
		6	Wilderness								49,749			
		1	Low Level Management			11,512			128,362		11,512		128,362	
20	128,362	2	Current Trend	35,362			128,362	128,361		128,362		11,512		128,362
		5	High Level Commodity		128,362									
		6	Wilderness	93,000		116,850					116,850	116,850		
		2	Current Trend	126,236						126,236		40,875		126,236
		3	Current Trend Amenity				126,236		126,236					
21	126,236	4	High Level Amenity			126,236					35,493		126,236	
		5	High Level Commodity		126,236			126,236						
		6	Wilderness								90,743	85,361		
		1	Low Level Management									23,970		
		2	Current Trend	64,265			64,265		64,265	64,265				64,265
22	64,265	3	Current Trend Amenity		64,265									
		4	High Level Amenity			31,486					23,970		64,265	
		5	High Level Commodity					64,265						
		6	Wilderness			32,779					40,295	40,295		
		1	Low Level Management					13,975						
		2	Current Trend	13,975			13,975		13,975	13,975				13,975
23	13,975	4	High Level Amenity			13,975							13,975	
		5	High Level Commodity		13,975									
		6	Wilderness								13,975	13,975		
24	9,191	1	Low Level Management			9,191			9,191		9,191		9,191	
		3	Current Trend Amenity	9,191	9,191		9,191	9,191		9,191		9,191		9,191
		1	Low Level Management			44,629					12,000		94,249	
25	94,249	2	Current Trend	94,249			94,249	94,249	94,249	94,249				94,249
		5	High Level Commodity		94,249							44,,629		
		6	Wilderness			49,620					82,249	49,620		

Trail mileages and/or condition of trails would decline under Alternatives 1 and 6. Trail conditions would improve under Alternatives 3, 8, and 9. Conditions and services would remain at about the same level or would improve slightly under the remaining alternatives.

Cultural Resources

Under Alternative 1, inventories of ground-disturbing projects would only be emphasized in high and moderate cultural resource sensitivity, areas based upon size and scope of the proposed project. Alternatives 3, 5, and 7 are basically the same as Alternative 1. Alternatives 2, 4, 8, 9, 10, and 11 (Selected) provide for cultural resource inventories of all ground- disturbing activities, regardless of sensitivity area, until comprehensive Forest surveys could be completed. Under Alternative 6, the Forest's ability to perform project clearance on ground-disturbing activities would be severely limited, and such projects would be delayed.

Under Alternative 1, the number of new sites found would increase gradually, but the Forest's ability to reduce the number of unevaluated sites through testing or research would be low; and monitoring of project effects to unevaluated sites would not be undertaken. Alternatives 2, 3, 5, 6, 7, and 11 (Selected) provide the same services as Alternative 1. Avoidance would be the preferred method of mitigation of project impacts to unevaluated sites. Under Alternatives 8, 9 and 11, the Forest would emphasize the identification and evaluation of prehistoric sites within the Frank Church--River of No Return Wilderness. Emphasis would also be placed on the stabilization and enhancement of significant historic sites.

Also, under these two wilderness Alternatives 8 and 9, a monitoring and evaluation program of recreational related impacts to sites within the Middle Fork Wild and Scenic River Corridor would be initiated.

The number of significant sites awaiting nomination to the National Register of Historic Places could be reduced under Alternatives 2, 4, 8, 9, 10, and 11 (Selected) at the rate of one or two per year. Under Alternatives 3, 5, 6, and 7, budget constraints would necessitate that nominations be handled by the State. Under Alternative 1, nominations of properties to the NRHP are handled jointly by the State and Forest.

Emphasis on the long-term stabilization and enhancement of significant sites has been relative to the amount of funding available for maintenance and interpretation at Custer and the Yankee Fork Dredge. This would be de-emphasized under Alternatives 3, 5, and 8, and no funding for protection and/or interpretation would be available under Alternatives 6, 7, and 9. Alternatives 2, 4, and 10 would allow the Forest to plan and implement identification, protection, interpretation, and management of NRHP sites. Under Alternative 11 (Selected), the Forest would attempt to manage Custer, Bonanza, and the Yankee Fork Dredge through a MOU with the State Historic Preservation Officer and concessionnaire-type organizations (similar to what the Yankee Fork Gold Dredge Association is presently doing). Funding for restoration and/or stabilization would still be dependent upon Forest budget or funding.

A comprehensive Forest-wide cultural resource overview would be completed under Alternatives 1, 2, 3, 4, 5, 8, 9, 10, and 11 (Selected). Alternatives 6 and 7 would not provide for an overview.

Wilderness

Existing wilderness accounts for 782,255 acres, or 31 percent of the land base comprising the Forest boundary. There are 28 roadless areas totaling 1,392,135 acres, or 86 percent of the Forest (including existing wilderness). Wilderness proposals range from the present acreage (no new wilderness) under Alternatives 2 and 4 to a high of all inventoried acres under Alternative 8. Proposals in the other alternatives are between these two extremes (refer to Table II-4).

Alternative 6 contains the Roadless Area that would have been designated as wilderness in the Idaho Forest Management Act introduced by Senator McClure in the 98th Congress.

Forest planning requirements for roadless areas shared by two or more Forests states that each roadless area will be evaluated for wilderness in its entirety in one EIS. The Regional Forester has designated forests in this situation to lead the evaluation. The following Roadless Areas are contiguous to the Challis National Forest:

ROADLESS AREA	FOREST	NUMBER	LEAD FOREST
Blue Bunch	Boise	02923	Challis
	Challis	06923	
Boulder/White Clouds	Sawtooth	14920	Sawtooth
	Challis	06920	
Camas Creek	Salmon	13901	Challis
	Challis	06901	
Diamond Peak	Targhee	04601	Challis
	Challis	06601	
Hanson Lakes	Boise	02915	Sawtooth
	Sawtooth	14915	
	Challis	06915	
Lemhi Range	Salmon	13903	Salmon
	Challis	06903	
Loon Creek	Sawtooth	14908	Challis
	Challis	06908	
Pioneer Mountains	Sawtooth	14921	Challis
	Challis	06921	
Railroad Ridge	Sawtooth	14922	Sawtooth
	Challis	06922	
Red Mountain	Boise	02916	Boise
	Challis	06916	
Taylor Mountain	Salmon	13902	Salmon
	Challis	06902	

Each lead Forest will present the evaluation for each entire Roadless Area and the proprosal for Wilderness, if any, in Appendix C and Chapter II of their EIS. Non-wilderness uses will be prescribed by the administering Forest in their evaluations.

Timber

The long term sustained yield (LTSY) for each alternative is as follows:

Alternatives	LTSY MMCF	LTSY MMBF
1. No Action	1.38	6.2
2. Market Emphasis	7.92	35.7
3. Non-market Emphasis	0.83	3.7
4. RPA 1980	4.60	20.7
5. Market and Non-Market Mix	3.76	16.9
6. Constrained (-25%) Budget	4.38	19.7
7. Current Prog.,Constrained Budget	1.33	5.99
8. Maximum Wilderness	0.83	3.7
9. High Wilderness, Commodity	2.05	9.2
10. Current Program, Unconstr. Budget	3.38	15.2
11. 1980 RPA Modified (Selected)	3.01	13.6

Alternative 2 would provide an average allowable sale quantity of 6.6 MMBF of live sawtimber for the first decade, increasing to 19.9 MMBF in 50 years, as shown in Table II-8 and Figure II-1, this would be the largest harvest under any alternative. Timber will be harvested in suitable Douglas-fir stands by both conventional tractor and aerial cable systems. Lodgepole pine would only be harvested by conventional tractor methods. The alternative would use 71 percent of the tentatively suitable commercial timber base. In 200 years, 241,312 acres will be under management (see Figure II-2 and Table II-9).

All other alternatives, except Alternative 4, have a reduced timber base (see Table II-9 and II-10, and Figure II-2 for a comparison of alternatives). The alternatives vary in the selection of roadless areas for wilderness. In four alternatives, proposed timber management utilizes between 40 and 46 percent of the tentatively suitable base. The remaining six alternatives utilize 9 percent, 13 percent, 16 percent, 29 percent, and 38 percent of the tentatively suitable timber base.

Timber stand improvement (TSI) was only estimated for the first decade in any alternative.

The availability of fuelwood and the need for a fuelwood roading program is directly proportional to the sawtimber harvest. Alternative 2 because of the higher harvest, will provide better access and reduce the need for roading for fuelwood. All alternatives, except Alternative 6, would meet the local demand for fuelwood through the planning period.

Insect and disease levels, under all alternatives except Alternative 2, will remain at about the current situation because of the slow rate of conversion of overmature stands to regenerated stands. Alternative 2, and to some extent Alternatives 4 and 6, decrease the volume losses by applying silvicultural management to larger areas of the overmature stands.

The biggest restriction to the management of timber on the Challis National Forest is economics. Economics limit management of lodgepole pine (both tractor and cable) and Douglas-fir cable areas to the later decades, before they become economically feasible.

TABLE II-8. COMPARISON OF ALTERNATIVES BY TIMBER OUTPUTS (MMBF ANNUALLY).

	Decade 1	Decade 2	Decade 3	Decade 4	Decade 5	50 Year Periods 6	7	8
Alt. #1	3.5	4.9	4.9	4.9	4.9	5.0	5.0	5.0
Alt. #2	6.6	10.0	20.0	20.0	20.0	30.0	30.0	30.0
Alt. #3	2.0	2.0	2.0	2.0	2.0	2.0	3.5	3.5
Alt. #4	9.0	11.3	11.3	11.3	11.3	11.3	17.9	17.9
Alt. #5	4.9	4.9	4.9	4.9	4.9	11.9	11.9	16.9
Alt. #6	2.5	2.5	2.5	2.5	2.5	13.8	13.8	19.3
Alt. #7	1.0	1.0	1.0	1.0	1.0	3.5	3.5	3.5
Alt. #8	2.0	2.0	2.0	2.0	2.0	2.0	3.5	3.5
Alt. #9	4.9	4.9	4.9	4.9	4.9	4.9	8.6	8.6
Alt. #10	3.6	9.9	9.9	9.9	9.9	9.9	11.6	15.2
Alt. #11	3.0	4.0	5.0	6.0	7.0	10.0	10.0	10.0

TABLE II-9. AREA OF SUITABLE LAND TREATED BY TIME PERIOD (IN ACRES) 1/

Alt. #	1	2	3	4	5	6 2/	7 2/	8 2/
1	6,436	4,173	5,210	4,155	4,593	44,239	27,471	28,195
2	12,109	9,009	28,336	15,076	25,235	255,189	207,096	192,279
3	3,759	4,000	3,078	1,691	2,009	77,230	67,227	85,928
4	16,631	8,263	12,762	5,876	7,044	91,962	127,315	131,980
5	9,076	2,414	6,383	3,374	5,113	99,676	83,285	118,686
6	4,620	1,229	3,249	1,788	2,603	117,121	104,499	140,554
7	1,777	473	1,250	661	1,001	29,323	27,684	23,882
8	3,759	1,000	3,078	1,691	2,009	17,088	24,253	23,894
9	9,088	2,417	7,031	4,247	5,295	39,938	59,835	62,014
10	6,705	12,506	9,247	10,611	8,383	90,278	112,431	133,431
11	5,500	3,172	5,958	5,276	6,894	88,833	69,468	56,855

1/ Periods 1-5 are decades; 6, 7 and 8 are 50 years each

2/ Periods 6-8 reflect re-entry on some areas

TABLE II-10 TIMBER MANAGEMENT AND CLASSIFICATION

Classification	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8	Alt. 9	Alt. 10	Alt. 11
1. Non-Forest Land	941,365	-- SAME AS ALTERNATIVE 1 --									
2. Forest Land	1,574,826	-- SAME AS ALTERNATIVE 1 --									
3. Forest Land Withdrawn from timber production											
- Frank Church--River of No Return Wilderness	782,255	-- SAME AS ALTERNATIVE 1 --									
- Other	38,434	-- SAME AS ALTERNATIVE 1 --									
4. Forest Land Phyically Unsuitable Irreversible Damage Likely to Occur or Not Restockable Within Five Years	22,800	-- SAME AS ALTERNATIVE 1--									
5. Forest land either not capable of producing crops of industrial wood or inadequate information is available to predict response to timber management or land which is not appropriate for timber production 1/	683,441	490,025	706,536	592,052	617,125	597,920	688,245	706,536	670,729	612,707	623,421
6. Unsuitable Forest Land (Items 3, 4 & 5)	1,526,930	1,333,514	1,550,025	1,435,541	1,460,614	1,441,409	1,531,734	1,550,025	1,514,218	1,456,196	1,478,910
7. Tentatively Suitable Forest Land	340,608	-- SAME AS ALTERNATIVE 1 --									
8. Total Suitable Forest Land	47,896	241,312	24,801	139,285	114,212	133,417	43,092	24,801	60,608	118,630	95,916
9. Total National Forest (Items 1 & 2)	2,516,191										

1/ Lands identified as not appropriate for timber production due to a) assignment to other resource uses to meet the Alternatives objectives, b) management requirements, and c) not being cost efficient in meeting the Alternatives objectives over the planning period.

FIGURE II- 1

TIMBER VOLUME (MMBF) AS AN ANNUAL CUT PER DECADE SHOWN OVER 50 YEARS*

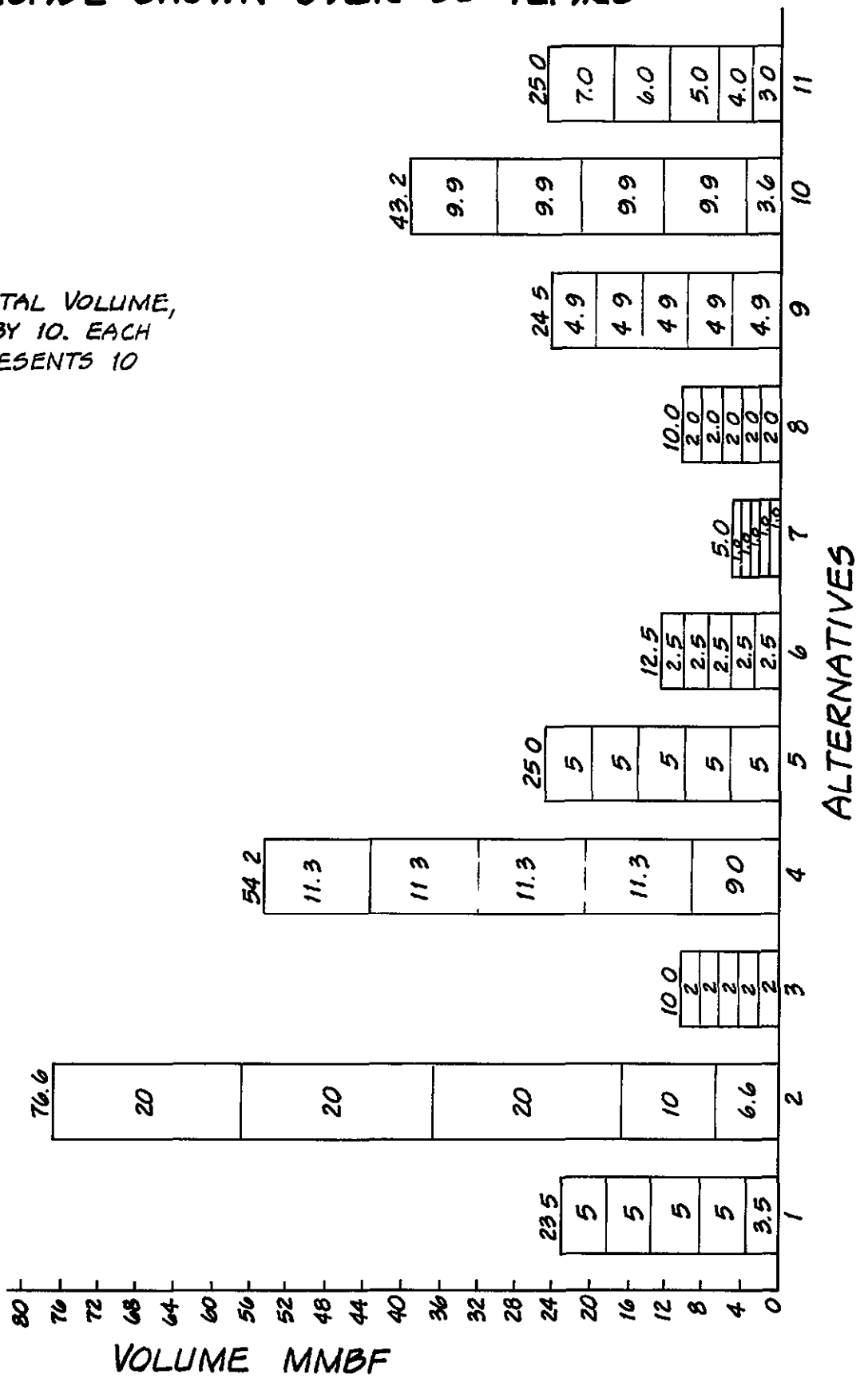
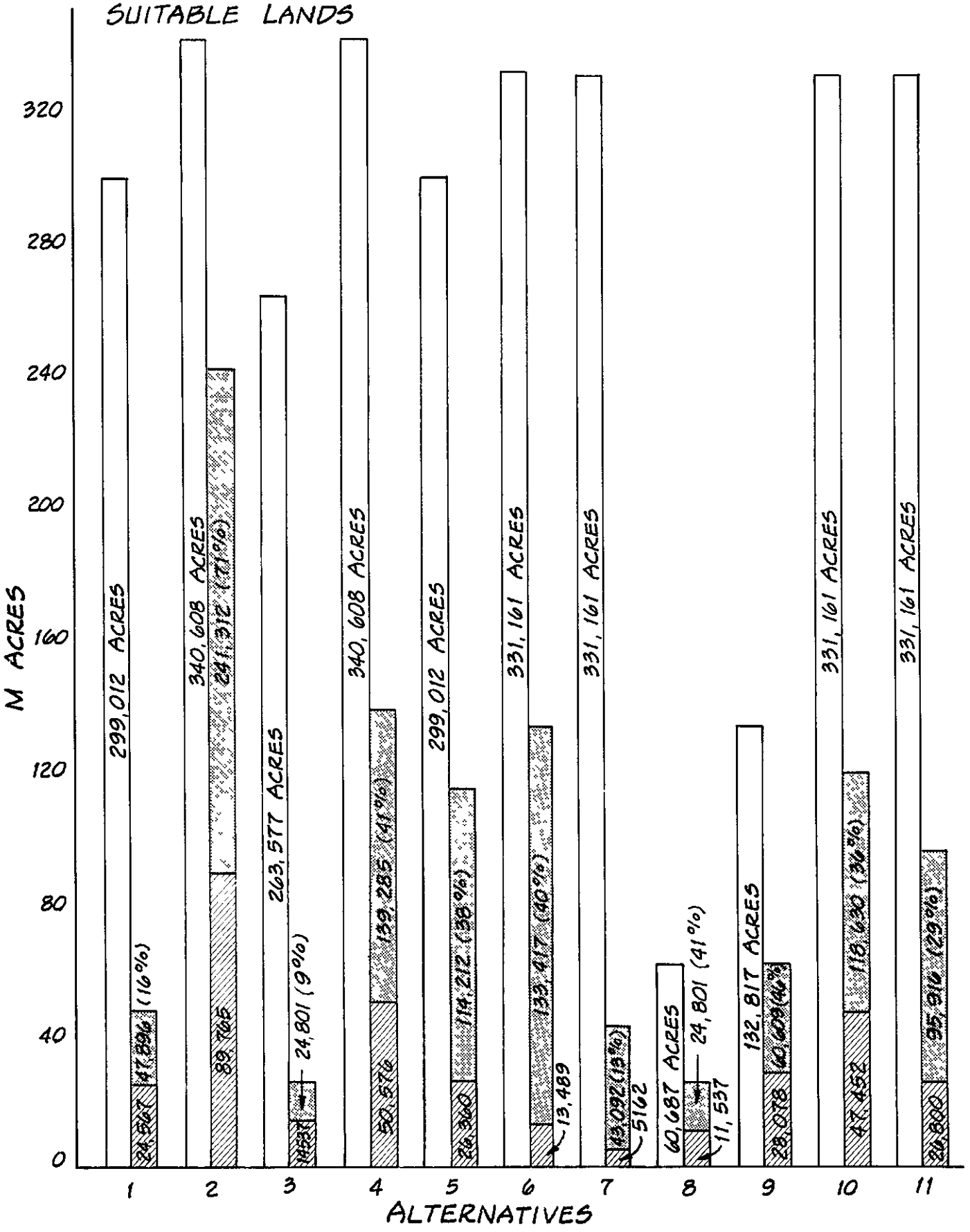


FIGURE II- 2

COMPARISON OF TENTATIVELY SUITABLE TIMBER ACRES OUTSIDE OF EXISTING OR PROPOSED WILDERNESS TO ACRES PROPOSED AS SUITABLE LANDS



☐ TOTAL TENTATIVELY SUITABLE ACRES OUTSIDE OF EXISTING OR PROPOSED WILDERNESS

▨ SUITABLE ACRES UNDER MANAGEMENT IN 50 YEARS

▫ ADDITIONAL SUITABLE ACRES UNDER MANAGEMENT AFTER 200 YEARS

Range

Alternatives 2 and 8 represents the limits of AUM's among the alternatives. Alternative 2 would provide the maximum AUM's whereas Alternative 8 would produce the least. A comparison of dollars and AUM's, by alternatives, is displayed in Figure II-3 and Figure II-4.

There are only minor differences among Alternatives 4, 5, 7, 10, and 11 (Preferred). Permittee cooperation and participation would be required to maintain the AUM output under all alternatives, but to a much greater extent under Alternatives 8 and 9. Also, the range administration dollars decrease slightly under Alternatives 3, 6, 8 and 9 and would increase slightly under Alternatives 10 and 11 (selected).

Alternatives 1 and 7 very similary in administration and range improvement..

Under Alternatives, 3, 8, and 9, AUM's would decrease. Under Alternatives 1 and 6, AUM's remain at about present levels. AUM's would increase under Alternatives 2, 4, 5, 7, 10, and 11 (Selected) (Figure II-5).

Based upon historical use, actual use would be 1-2 percent less than permitted use. The present estimated grazing capacity is 115,000 AUM's. Projected capacity, by end of the the 5th decade, for each alternative, is as follows:

PROJECTED GRAZING CAPACITY/ALTERNATIVE

Alternative:	1	2	3	4	5	6	7	8	9	10	11
AUM's:	115	124	108	119	117	113	117	98	105	118	117

Permitted grazing capacity would equal or exceed the estimated actual use through all time periods.

Estimated permitted and actual use by decade and alternative are shown in Tables II-6 (1) through II-6 (11).

Range conditions would improve more rapidly under Alternatives 1, 6, and 8. Under Alternatives 2 and 3, range condition would be maintained or would decline.

Alternatives 3, 8, and 9 would contribute the least to direct control activities for noxious farm weeds. Whereas Alternatives 2, 4, 7, 10, and 11 (Selected) provide the most control effort.

Under all alternatives, Forest Service Sensitive plant species would be maintained.

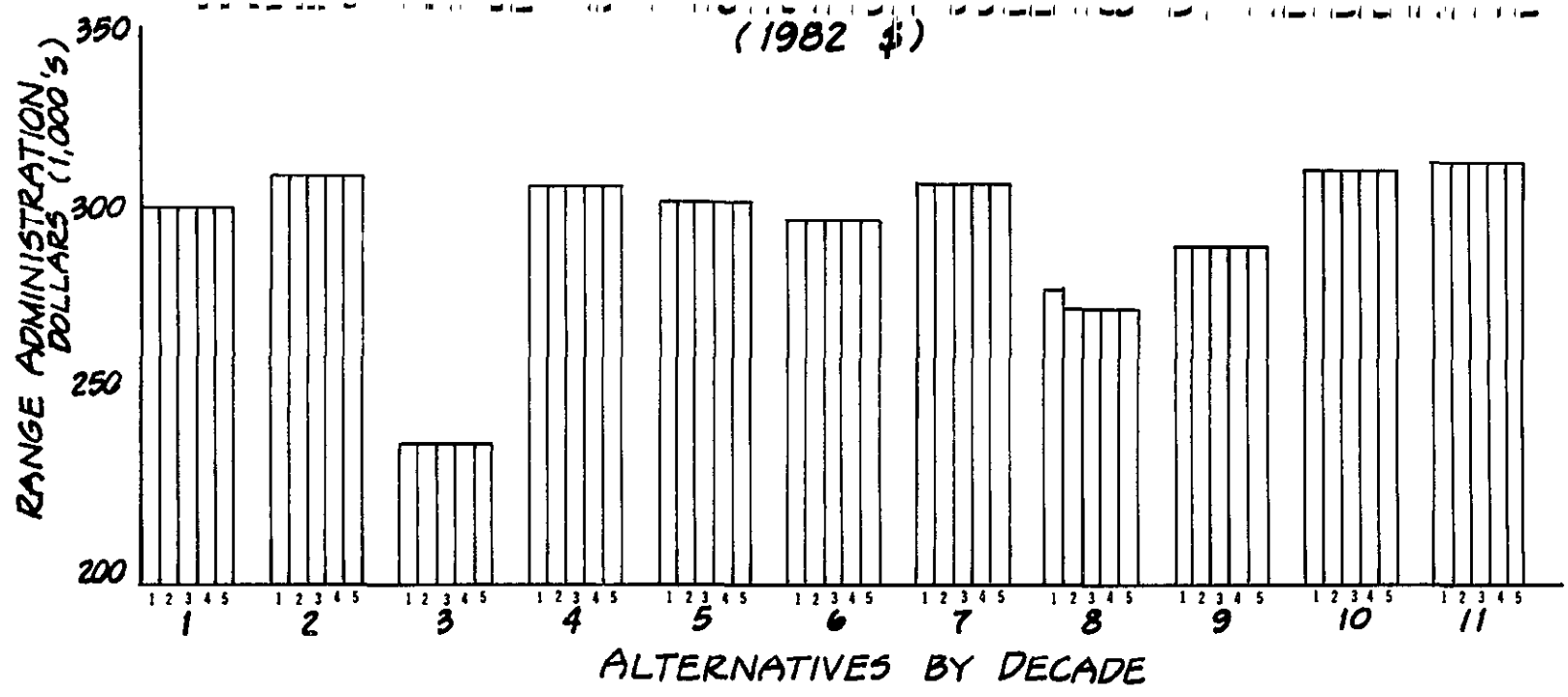


FIGURE II-4 RANGE IMPROVEMENT DOLLARS BY ALTERNATIVE
(1982 $)

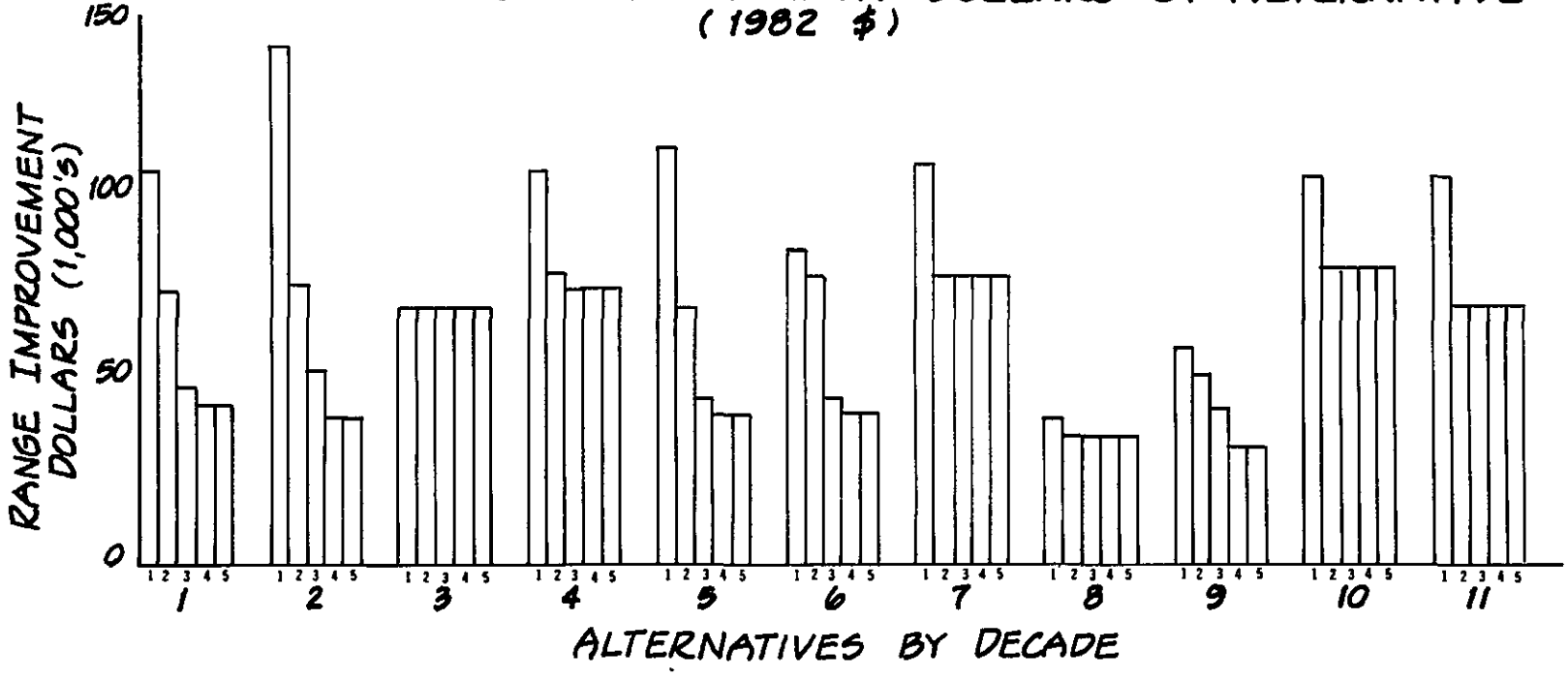
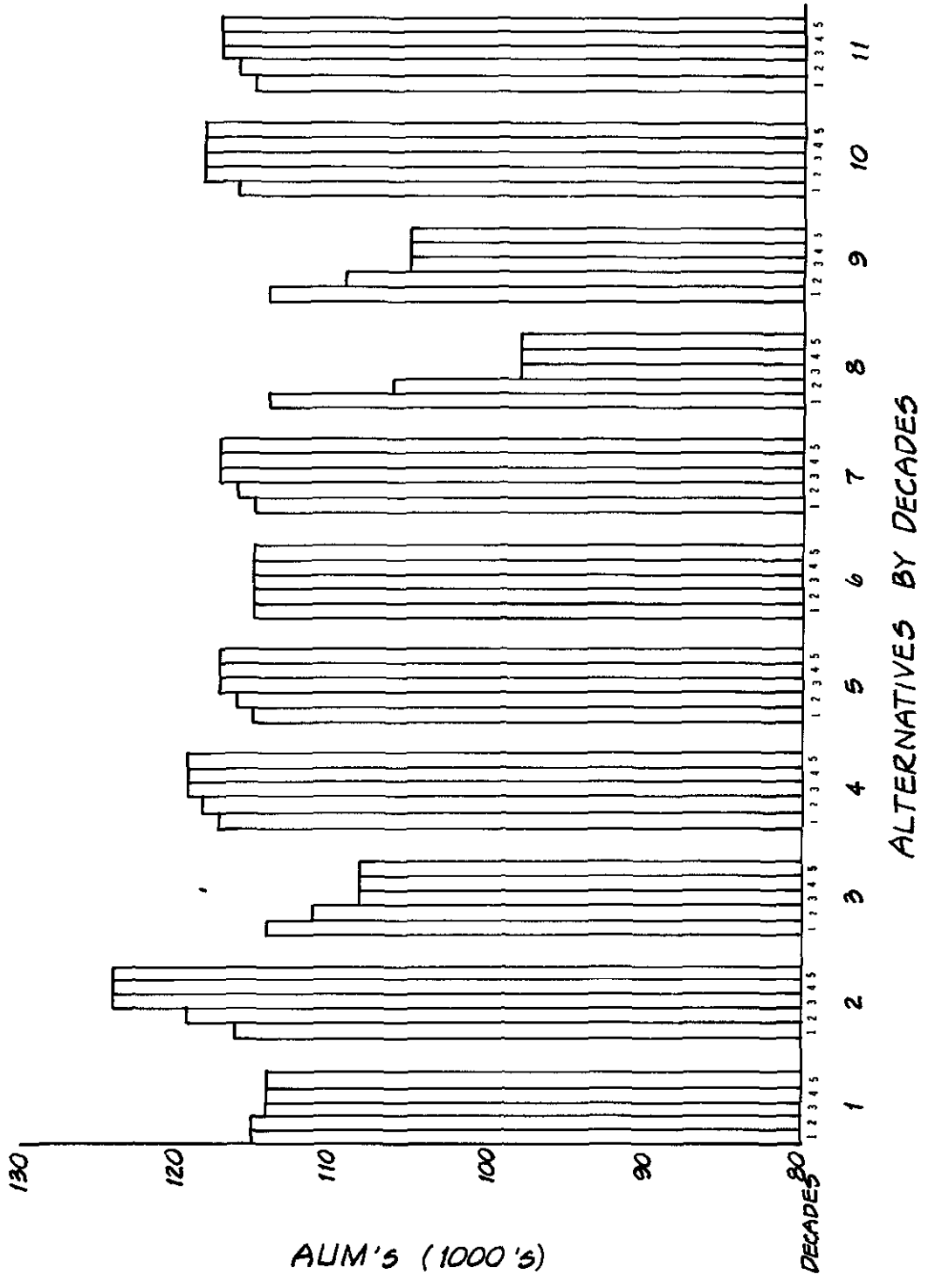


FIGURE II- 5

AUM OUTPUTS BY ALTERNATIVES (PERMITTED USE)



Wildlife and Fish

Under all alternatives, the habitat of threatened or endangered species would be managed so that present populations could increase.

Big-game and anadromous fish numbers would increase by varying degrees in all alternatives, primarily because the overall current habitat capability is significantly higher than existing populations. Changes in habitat capability are better indicators of the effects of the alternatives on wildlife and fish than existing population levels.

The greatest increase in habitat capability would occur in Alternative 3. There would be moderate increases in habitat capabilities under Alternatives 1, 8, and 11 (Selected), because of increased emphasis on habitat improvement and reduction of habitat disturbance from roading and grazing.

Slow increases in fish and wildlife habitat capability would occur in Alternatives 4, 5, 7, 9, and 10. Habitat capability would be maintained at current levels in Alternative 6, and would drop under Alternative 2.

Alternatives 3, 10, and 11 (Selected) would provide for the greatest increases in mule deer, elk, and fish populations. This would be directly related to increased levels of habitat improvement and coordinated management with the timber, range, and minerals resources.

The lowest fish and wildlife populations would occur in Alternatives 2, 6, and 9 because they provide low to moderate levels of habitat improvement, decreased wildlife coordination with timber, range and minerals, and because under Alternative 2 considerable habitat disturbance from expanded road development and livestock grazing would occur.

The highest WFUD and dollar outputs would be produced in Alternative 4, the lowest in Alternative 9. Figures II-6 and II-7 display the differences in WFUD's *and dollars for all alternatives, using the No Action Alternative as a base.*

Table . Total smolt habitat production capability (SHC) for anadromous fish, by species, for the Challis National Forest by Alternative.

	STEELHEAD		CHINOOK	
ALT.	DECADE 1	DECADE 3	DECADE 1	DECADE 3
1	403,000	1,229,000	515,000	1,570,000
2	398,000	1,219,000	508,000	1,557,000
3	408,000	1,245,000	522,000	1,590,000
4	398,000	1,229,000	508,000	1,570,000
5	408,000	1,253,000	522,000	1,599,000
6	403,000	1,224,000	515,000	1,563,000
7	403,000	1,227,000	515,000	1,567,000
8	403,000	1,227,000	515,000	1,567,000
9	398,000	1,211,000	508,000	1,547,000
10	398,000	1,232,000	508,000	1,574,000
11	406,000	1,237,000	518,00	1,580,000

FIGURE II-6

CHANGE IN AVERAGE NUMBER OF WFUD's/YEAR OVER 50 YEARS, BY ALTERNATIVE WITH NO ACTION ALTERNATIVE USED AS BASE (0 = 457.4 M WFUD's)

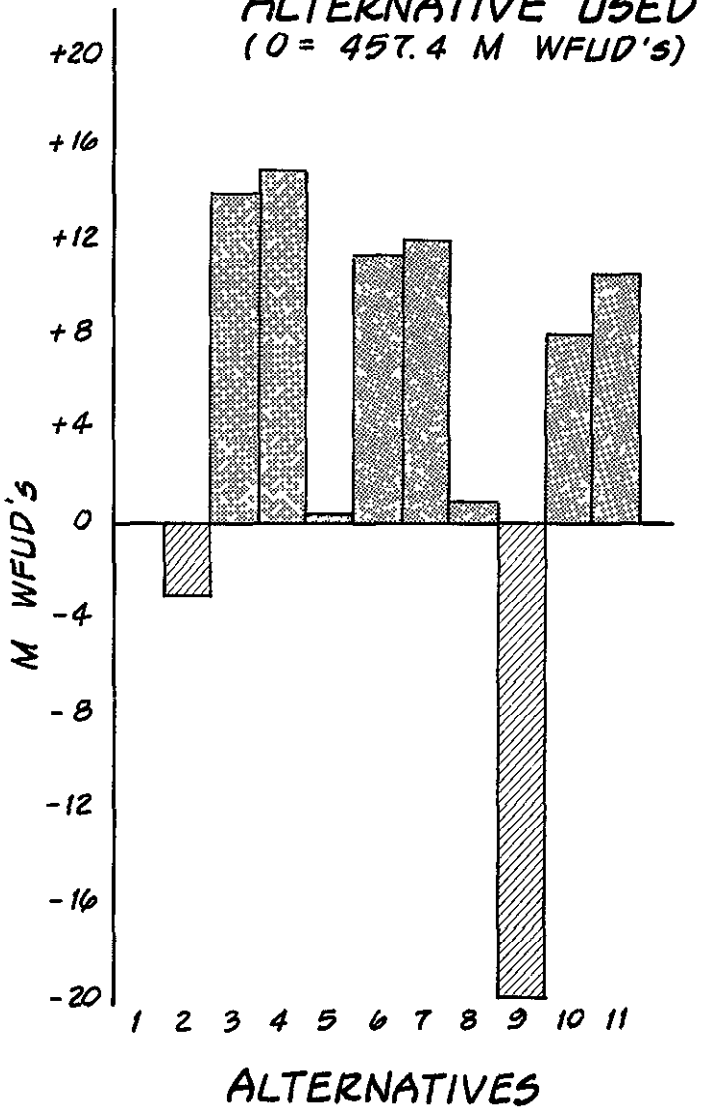
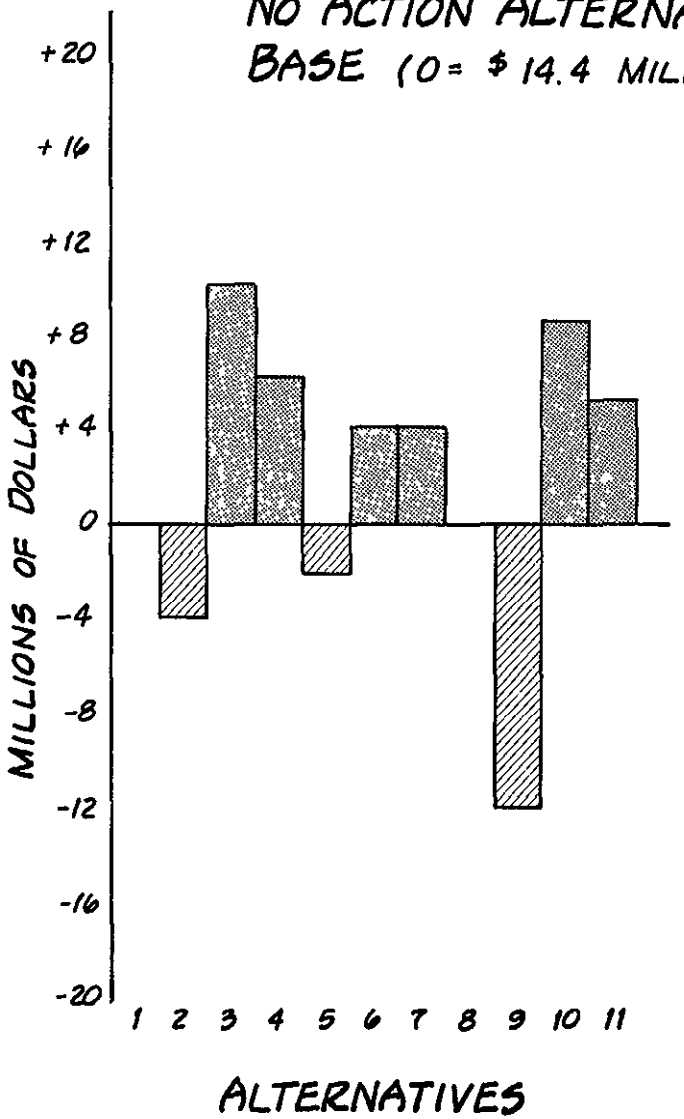


FIGURE II-7

CHANGE IN AVERAGE YEARLY VALUE OF WFUD's OVER 50 YEARS BY ALTERNATIVE WITH NO ACTION ALTERNATIVE AS BASE (0 = $ 14.4 MILLION)



The smolt habitat capability index used in this Forest Plan was based on the best available information at the time and was coordinated with the Idaho Department of Fish and Game. The index can be adjusted as new and better information becomes available. During the life of this plan, the Forest will schedule and conduct stream habitat surveys on anadromous fish-bearing streams on the Forest. The smolt habitat capability index will be refined, based on rearing habitat capability and density coefficients derived from site specific studies or from rearing habitat coefficients agreed to by fisheries and land management agencies within the Columbia Basin. Future habitat assessment procedures will be coordinated among Regions to provide a common method by which anadromous fish habitat capability can be evaluated and implemented in the Forest Plan.,

Minerals

The scope of locatable mineral activity allowed in an alternative is dependent upon the amount of land on which mining claims may be filed. Mining claims and mineral leases are restricted by administrative withdrawals and Federal legislation. These restrictions, except for the amount of proposed wilderness, are essentially the same for all alternatives. Since wilderness designation normally does not allow filing of new mining claims or activity on existing claims without valid discoveries, the locatable mineral activity is expected to vary among alternatives, depending on lands withdrawn for wilderness classification. Listed below are the wilderness acres, by alternative, on which locatable mineral activity will be restricted. In all cases, the Frank Church--River of No Return Wilderness, consisting of 782,255 acres, and mineral withdrawal areas, totaling 300 acres, have been included.

The following identifies Forest acres available for mineral development:

Alt. #	Available Acres of Moderate to High Potential for Minerals 1/	Percent of Area Currently Available for Development That Will Remain Available
1	550,635	96
2	571,951	100
3	427,408	75
4	571,951	100
5	556,538	97
6	567,530	99
7	567,530	99
8	160,839	28
9	195,638	34
10	563,530	98
11	563,530	98

1/ Since oil and gas leases or renewals would not be recommended in the proposed wilderness areas, the alternatives proposing large wilderness acreages would have the most impact on the oil and gas industry.

The following is a comparison, by alternative, of activity and services provided:

ALT. #	LOCATABLE MINERAL ACTIVITY	OIL & GAS ACTIVITIES
1	Responsive to minor increase	Applications will be processed, any drilling activity requires supplemental funding. 1/
2	Responsive to moderate increase	As in Alt. 1
3	Responsive to minor increase	As in Alt. 1
4	Responsive to moderate increase	As in Alt. 1
5	Responsive to moderate increase	As in Alt. 1
6	Limited coordination of new projects Limited monitoring of ongoing projects	As in Alt. 1
7	Responsive to minor increase	As in Alt. 1
8	Responsive to moderate increase	As in Alt. 1
9	Responsive to minor increase	As in Alt. 1
10	Responsive to minor increase	As in Alt. 1, and ensures monitoring
11	Responsive to minor increase	As in Alt. 10

1/ Supplemental funding options include: funding contributed by the proponent, special Regional appropriations, and adjustment of the Forest Program budget.

As can be seen by the Table above, all alternatives except Alternative 6 could respond in some degree to the expected increase in mineral activity.

Alternatives 10 and 11 (Selected) have the greatest capability of administering an energy program if that should develop on the Forest.

Areas totally restricted from oil and gas activity vary among alternatives primarily because of differences in number of acres proposed for wilderness classification. Alternatives 3 and 8 would have relatively greater restriction levels, because of the amenity emphasis, than the other alternatives.

Lands

Land Use requests come from private and Government sources. Demand for special use permits is expected to remain essentially the same under all alternatives, but administration of existing special use permits and evaluation of applications will vary by alternative.

Alternatives 1, 3, 5, 7 and 8 would provide for administration of special uses only to protect health and safety, or prevent damage to resources. These alternatives would allow new special uses for community service, public health and safety, and other essential services. Limited staffing would cause some delays in processing new applicants.

Alternatives 2, 4, 9, 10 and 11 would provide a higher level of administration for existing special uses. The time for processing applications would be shorter under these alternatives.

Alternative 6 would provide for administration of existing permits at a level that protects health and safety. Only energy-related permits would be acted upon, and only as time permited. Staffing would be greatly reduced.

Under all the alternatives compared below, the backlog of road and trail rights-of-way would be acquired, with the exception of under Alternative 6.

Alternative:	1	2	3	4	5	6	7	8	9	10	11
Cases Per Decade:	40	42	40	40	40	0	40	40	40	40	40

The backlog of road and trail rights-of-way should be completed by 2004.

Under Alternative 2, timber harvesting would require approximately two new rights-of-way cases per decade, or a total of 10 cases over the 50 year planning period.

Alternatives 1, 2, 4, 9, and 10 would meet Forest objectives for property boundary marking and posting. Alternatives 3, 5, 7, 8, and 11 (Selected), would not meet targets. Some corners would deteriorate, thus increasing the possibility of occupancy trespass cases. Alternative 6, will allow existing corners and posted line to deteriorate at a rapid rate. Possibility of occupancy trespass would rapidly increase. This Alternative would not meet the needs of other resource activities.The following identifies miles of boundary posted per alternative:

Alternative:	1	2	3	4	5	6	7	8	9	10	11
Miles/yr:	13	20	11	20	11	0	11	11	20	20	11
Miles over: 5 decades:	650	1000	550	1000	550	0	550	550	1000	1000	550

Evaluations of existing mineral withdrawals would likely result in some rescissions. Withdrawal review would occur in all alternatives.

Because of increased interest in the development of hydro-electric power, the Forest expects new applications for the development of hydropower on most of the larger perennial streams.

Soil, Water and Air

Water quality would meet State standards under all alternatives. However, water quality meeting Forest Service water quality goals would tend to decline significantly in Alternatives 2, 5, and 9. Alternatives 6 and 8 would show no significant change in water quality. Water quality improvement would occur in the remaining alternatives.

Alternatives 2 and 9, will not complete the improvement backlog during the planning period. Few improvement projects would be completed under Alternatives 6 and 8 and no watershed improvement projects would be conducted under Alternative 5. Alternatives 1, 3, 4, 7, 10, and 11 (Selected) will complete the watershed improvement backlog over 50 years.

Long term soil productivity does not vary greatly among alternatives, when related to the total Forest land base. Alternatives 2 and 4, would have the largest decline in soil productivity, while Alternatives 3, 7, and 11 would result in the least. The amount of soil productivity that would be maintained on the Forest under Alternative 10 is similar to the current situation.

Sediment values projected among all alternatives are amounts delivered to critical streams which may be significantly lower than the amounts actually produced at the source. Alternatives 2, 4 10 and 11 (Selected)produce the greatest production of delivered sediment over natural. In contrast, Alternatives 6, 7, and 8 would show the smallest increase in sediment over natural. Alternatives 3, 5, and 9 would generate sediment closely resembling Alternative 1.

Only Alternative 2 would increase water yield from the Forest. Increased timber harvesting would generate a small increase in water yield during the third, fourth, and fifth decade.

No significant change in current air quality is expected to occur among the alternatives.

Fire Management

Alternatives 1, 5, 7 and 10 would have current level fire protection consistent with the program selected from Level II Fire Planning. Commitments in interagency fire protection agreements would be met, and area fire management plans would be implemented in the Frank Church--River Of No Return Wilderness. With emphasis, area fire management plans would be developed and implemented during the first decade for other priority areas of the Forest outside the Frank Church--River of No Return Wilderness.

Alternatives 2, 3, 4 and 9 would be similar to 1, 5, 7, and 10, except funds would be available to develop, implement and monitor area fire management plans. The increase in dispersed recreation could result in increased fire occurrence in Alternative 9.

Alternatives 6 and 8 would have fire protection programs that are not cost effective. Area fire management plans would not be developed or implemented and current fire protection commitments to other agencies would not be met. Man-caused fire occurrence would increase because of decreases in the prevention program and increases in dispersed recreation. Total area burned and protection costs would increase significantly.
Alternative 11 (Selected) would provide a reasonable fire protection program that would be somewhat less cost effective than Alternatives 1, 5, 7, and 10. Area fire management planning would progress as described for Alternative 1, 5, 7, and 10, and committments to Interagency Fire protection agreements would be met.

Transportation

Alternative 6 would not provide for any road construction, or road reconstruction, not associated with timber. Inadequate funding would cause roads to further deteriorate, resulting in decreased safety and increased resource damage. All other alternatives would emphasize maintaining a safe, functional environmentally sound transportation system, through road reconstruction, to a maintainable level.

Alternatives 5 and 7 would provide for a road reconstruction program which would bring the system to a maintainable standard within the first 2 decades. Alternatives 1, 2, 7, and 11 (Selected) accomplish this standard in 3 decades. Alternatives 3, 4, 8, and 9 would accomplish 89 percent of road reconstruction needs in the first three decades. The completion of the road reconstruction program, to the degree shown above, is based upon an assumption of very limited new construction. Most new road construction would be associated with timber harvesting.

Alternatives 3 and 11 (Selected), would allow for deferred road maintenance and a small amount of road reconstruction to occur after the identified reconstruction needs were accomplished. All other alternatives would provide only for routine road maintenance past the 2nd or 3rd decades on roads not improved through the timber program. This low level funding in the last decades would result in some safety and resource problems.

Alternative 6 would provide for only 100 miles of road to be maintained per year (6 percent of total roads). In Alternatives 1 and 7, 450 to 500 miles per year (26 percent to 29 percent of the system) could be accomplished. All other alternatives, except Alternative 3, would allow for maintaining approximately 560 miles per year (32 percent of the system). Alternative 3 would allow maintenance on 730 miles of road per year (42 percent of the system).

FA & O Facilities

Alternative 6 would require the closing of sites, buildings, and water and sewer systems. The other alternatives would provide for a level of building maintenance that would arrest deterioration.

Alternatives 2, 4, 7 and 9 would provide for a program which could improve the state of repair on Forest buildings.

E. RESPONDING TO THE ISSUES, CONCERNS, AND OPPORTUNITIES

The significant issues, concerns, and opportunities (ICO's) identified during the planning process and analysis (see Chapter I, Section D) are addressed in each of the alternatives. The manner and degree to which each alternative addressed each ICO varies among alternatives. A detailed description of each ICO and the process used in identifying them are contained in Appendix A. Table II-11 displays the resolution of each of the 14 significant ICO's, expressed as planning problems, under each alternative.

TABLE II-11 SUMMARY OF PLANNING PROBLEMS - RESOLUTION BY ALTERNATIVE - 1ST DECADE

PLANNING PROBLEMS	ALT 1 NO ACTION CURRENT PROGRAM	ALT 2 MARKET EMPHASIS	ALT 3 NON-MARKET EMPHASIS	ALT 4 RPA 80 PROGRAM	ALT 5 MARKET AND NO -MARKET MIX	ALT 6 CONSTRAINED -25% BUDGET	ALT 7 CURRENT PROGRAM CONSTRAINED BUDGET	ALT 8 MAXIMIZE WILDERNESS, AMENITY EMPHASIS	ALT 9 HIGH WILDERNESS COMMODITY EMPHASIS	ALT 10 CURRENT PROGRAM, UNCONSTR BUDGET	ALT 11 1980 RPA MODIFIED (PREFERRED)
1 What is the relationship between all resource levels (timber, range, wildlife and fish, developed and dispersed recreation?	All alternatives provide for a good mix of resource outputs										
-Timber (MMBF/YR)	3 5	5 0	2 0	9 0	5 0	2 5	1 0	2 0	4 9	3 6	3 0
-Range (M AUMS)	113	114	113	114	114	114	114	111	111	115	114
-Wildlife & Fish (M WFUDs)	289	277	292	290	290	288	289	289	273	289	289
-Dev Recreation (M RVDs)	78	104	56	110	90	64	78	67	90	81	110
-Dis Wld Recr (M RVDs)	535	509	556	527	523	549	522	502	523	533	527
2 To what degree will the Forest manage for all resource uses in riparian areas to maintain or enhance the overall condition?	Maintain Condition	Each alternative was evaluated on the basis of what the expected use levels for all resources would do to overall condition Significant Decline	Moderate Improvement	Significant Improvement	Significant Decline	Moderate Decline	Moderate Improvement	Slight Improvement	Slight Decline	Significant Improvement	Significant Improvement
3 To what level will the Forest manage for wildlife and fish T&E habitat (in order to meet Fish and Game population objectives)?	Habitat exceeds needs for all species and T&E species		Habitat exceeds needs for all species & T&E except Bighorn sheep & elk	Habitat exceeds needs for all species and T&E species		Habitat meets existing need for elk and exceeds needs for all other MIS species and all T&E Species	Habitat exceeds the need for all species including T&E species				
4 What level of firewood will the Forest manage for to meet local demand?	Meets demand	Exceeds Demand	Meets demand	Exceeds Demand	Meets demand	Meets 80% of Demand	Meets demand	Meets demand	Exceeds Demand	Exceeds Demand	Meets demand.
5 To what degree will the Forest continue to allow for exploration and development of the mineral resource and to what degree should the Forest provide for the opportunity for oil and gas leasing?		Except for areas which may be withdrawn legislatively, the Forest will continue to be available for mineral activity Current administrative withdrawals will be evaluated during the first period to determine continuing need Adequate reclamation will be provided for in all alternatives									
-Acres of lands with moderate to high potential for locatable minerals outside of wilderness are proposed wilderness (M Acres)	566	572	428	572	559	572	570	161	196	566	566
-Oil and gas constraints		Levels of constraints are identified for each alternative by geologic potential for oil and gas									
6 How will Off-Road Vehicles (ORV) use be managed, including roads and trails proposed for closure?	Maintain current travel plan	Maintain current travel plan	Approx 783 000 acres of additional closure	Maintain current travel plan	Approx 165,000 acres of additional closure	Approx 41,000 acres of additional closure	Approx 120,000 acres of additional closure	Approx 1 4 million acres of additional closure	Approx 1 million acres of additional closure	Approx 160,000 acres of additional closure	Approx 160,000 acres of additional closure
7 To what degree are additional roads, trails and recreation facilities planned for?											
-Road construction (MI/YR)	1 8	3 3	1 5	4 5	2 5	1 3	5	1 0	2 5	1 3	1 3
-Increased developed recreation site capacity (PAOTS)	500	2,500	1 600	2,500	1,750	0	500	1,600	660	500	2,500
8 To what degree will the Forest maintain soil productivity, water quality and instream flow?		There will be no significant changes in soil productivity in any of the alternatives State water quality standards will be met in all alternatives, however some changes in water quality will occur									
-Changes in water quality	Significant Improvement	Significant Decline	Significant Improvement	Moderate Improvement	Moderate Decline	Maintains Present Quality	Significant Improvement	Slight Improvement	Moderate Decline	Moderate Improvement	Moderate Improvement
-Instream Flows	Maintain in all alternatives										
9 What level of timber harvest will be met by the forest, and will it meet the needs of locally dependent mills?											
-Timber output (MMBF)	Yes 3 5	Yes 6 6	No 2 0	Yes 9 0	Yes 5 0	No 2 5	No 1 0	No 2 0	Yes 4 9	Yes 3 6	Yes 3 0

TABLE II-11 SUMMARY OF PLANNING PROBLEMS - RESOLUTION BY ALTERNATIVE - 1ST DECADE
(Continued)

PLANNING PROBLEMS	ALT 1 NO ACTION CURRENT PROGRAM	ALT 2 MARKET EMPHASIS	ALT 3 NON- MARKET EMPHASIS	ALT 4 RPA 80 PROGRAM	ALT 5 MARKET AND NON-MARKET MIX	ALT 6 CONSTRAINED -25% BUDGET	ALT 7 CURRENT PROGRAM CONSTRAINED BUDGET	ALT 8 MAXIMIZE WILDERNESS, AMENITY EMPHASIS	ALT 9 HIGH WILDERNESS COMMODITY EMPHASIS	ALT 10 CURRENT PROGRAM, UNCONSTR BUDGET	ALT 11 1980 RPA MODIFIED (PREFERRED)
10 What level of fire protection (acres burned) would occur, and what degree of prescribed fire would be used for resource management needs?											
-Acres burned/Year	170	150	150	150	170	1200	170	660	150	170	170
- Fire Prescriptions	Prescriptions for the use of managed fire will be developed in Fire Area Management Plan for the selected alternative										
11 To what levels will grazing be managed in relation to maintaining *the locally dependent* ranching community?											
-Output AUMs	113	114	112	114	114	113	114	112	112	115	114
12. Can the Forest meet the expected demand for recreation?											
-Developed Sites	Yes	Yes	No Sites Deteriorate	Yes	Yes	No Sites Deteriorate.	Yes	No Sites Deteriorate	Yes	Yes	Yes
-Dispersed Use	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes except limiting motorized	Yes except limiting motorized	Yes	Yes
-Wilderness Use	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
13. What unroaded areas should be recommended to Congress for wilderness designation?	257,044 acres in 3 areas	0	782,935 acres in 7 areas.	0	164,044 acres in 2 areas	41,000 acres in 1 area	119,675 acres in 1 area	1,392,135 acres in 28 areas	1,064,704 acres in 15 areas	160,000 acres in 3 areas	201,000 acres in 3 areas
14. What should be the management for roadless areas not selected for wilderness nor presently needed for commodity production?	Specific direction will be provided by each management area in the Forest Plan for the selected alternative										

F. PLAN IMPLEMENTATIONS

The first decade costs for implementing each alternative have been constrained from a -25 percent to +50 percent of the Forest's average annual budgets between Fiscal Years 1974 and 1983, adjusted to 1982 dollars. Planning alternatives with costs outside of these parameters were judged to be generally unreasonable for maintaining a viable level of resource management and public service on the low end, or had a high probability of not being funded on the high end.

The preferred alternative identified in the proposed Forest Plan has costs projected over a 10 year period that are within the given constraints. These costs are necessary to meet the goals and objectives of the Plan. After the Forest Plan is approved, the Forest will submit annual budgets based upon the plan. These will be prepared and submitted for review at higher levels, approximately 18 months in advance of the fiscal year in which the funds are needed. When the actual budget is received, the Forest Supervisor will review the budget allocation and determine if it will achieve the implementation schedule originally shown in the Forest Plan. If there are differences between the appropriated funds and the planned costs of achieving the Forest Plan, the Forest Supervisor may adjust the implementation schedule. Adjustments in the schedule will impact the intensity or degree of management rather than the number of acres or units treated. The areas scheduled to produce goods and services will not change, rather the scheduling of the amount of goods and services produced will change. Such adjustments will be considered as an amendment to the Forest Plan and will not require the preparation of a new EIS.

CHAPTER III. AFFECTED ENVIRONMENT

CHAPTER III

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CHAPTER III

AFFECTED ENVIRONMENT

A. INTRODUCTION

This chapter describes the present condition of each Forest resource and the environment affected by implementing any of the alternatives. Future demand for Forest resources, the Forest's ability to supply that demand, and the expected future condition of the resources are summarized. Information in this chapter was drawn primarily from the Analysis of the Management Situation, approved in August 1982. 1/

B. PHYSICAL AND BIOLOGICAL SETTING

The Challis National Forest manages mountain lands located in central Idaho. National Forest lands are located in four major geographic areas:

-- Salmon River Mountains, which includes portions of the Frank Church--River of No Return Wilderness
-- West Side of Lemhi Range
-- Lost River and Pahsimeroi Mountains
-- Boulder, Pioneer, and White Knob Mountains

The Forest boundary encompasses 2,534,085 acres of which 2,516,191 acres are National Forest land. The remaining 17,894 acres are owned by state and local governments and private concerns.

The Forest is divided into four Ranger Districts:

-- Middle Fork District: Headquartered in Challis. Administers the Middle Fork of the Salmon River drainage below the mouth of Marsh Creek except Loon Creek drainage above Falconberry Ranch, including parts of Valley and Custer counties.

-- Challis District: Headquartered in Challis. Administers the main Salmon River drainage below the Birch Creek drainage, part of upper Loon Creek drainage, and the Pahsimeroi drainage, including parts of Custer and Lemhi Counties.

-- Yankee Fork District: Headquartered near Clayton. Administers the main Salmon River drainage above Garden Creek, the Marsh Creek drainage, and part of the Loon Creek drainage, all within Custer County.

-- Lost River District: Headquartered in Mackay. Administers lands within the Big and Little Lost River drainages, including parts of Lemhi, Butte, Custer, Clark, and Blaine Counties.

1/ The AMS is available for review at the Forest Supervisor's and District Rangers' Offices.

C. ECONOMIC AND SOCIAL SETTING

1. Zone of Influence

The Challis National Forest's Primary Zone of Influence (ZOI) comprises the communities and counties of central Idaho within and adjacent to the Forest.

There are three counties included in the Forest's ZOI (Custer, Lemhi, and Butte). These three counties are primarily influenced by the management practices that take place on the Challis National Forest, and the decisions that are made in connection with the various resources. There are six counties (Bonneville, Blaine, Twin Falls, Bannock, Valley, and Ada) that are secondarily influenced by the Forest's management activities.

The Primary ZOI had a population in 1980 of 14,187. The population of these counties increased by 24 percent from 1970 to 1980 (2.4 percent per year average). The counties' population in 1983 was 16,700 (an average growth rate per year of 5.9 percent since 1980).

In 1978, Boise State University and the Idaho Department of Water Resources prepared a forecast of future population by county. Projections for each county in the ZOI for selected years are:

County	1985	1990	1995	2000
Butte	2,953	2,960	2,966	2,953
Custer	4,025	4,296	4,420	4,581
Lemhi	7,998	8,591	9,027	9,313
Total	14,976	15,847	16,413	16,847

More recent preliminary data from the Bonneville Power Administration (BPA) projects slower growth in the three county area.

County populations have increased more rapidly than both sets of projections. The major cause of this increase has been recent mining development and the expansion of associated economic activity.

Actual historic population levels by county in the Primary ZOI are as follows:

	Population				
County	1950	1960	1970	1980	1983
Butte	2,772	3,498	2,925	3,342	3,492
Custer	3,318	2,996	2,967	3,385	5,106
Lemhi	6,278	5,816	5,556	7,460	8,090
Total	12,318	12,310	11,448	14,187	16,688

Details on the population economics, lifestyle, and community cohesion in the ZOI are included in Appendix B of the EIS, and in the Human Resource Unit descriptions maintained in the Forest planning files.

ECONOMIC INDICATORS, PAST TRENDS, AND BASELINE PROJECTIONS FOR PRIMARY ZONE OF INFLUENCE (1978 DOLLARS INFLATED TO 1/1/82 DOLLARS)

	Past Trends				Projections		
	1950	1960	1970	1980	1985	1990	1995
Years Population (M Persons)	12.3	12.3	11.4	14.2 1/	17.0 2/	17.7 2/	17.4 2/
	1978	1980	1981	1982	1985	1990	1995
Years Income (MM Dollars)	135 3/	103 1/	125 1/	136 1/	134	160	166
	1980	1981	1982		1985	1990	1995
Years Employment (M Persons)	5.5	6.8	8.0		7.9	8.2	8.6

1/ Data from Bureau of Economic Analysis, Department of Commerce.
2/ Based on growth projections from BPA preliminary study.
3/ From base year data in Forest Service Implan model.

Twenty-Five Percent Fund Payment and Payments in Lieu of Taxes

Lands administered by the Challis National Forest provide funding contributions to county government through two types of payments. Payments in lieu of taxes are distributed based on the amount of Federal land in a county. Payments in lieu average $146,000.00 per year for the five counties listed below.

The 25 percent fund payments represent 25 percent of the Gross Sales of the Forest outputs such as timber and grazing. The following table displays a breakdown of 25 percent fund payments by county. The 1980 figure includes the large volume of timber cut and removed from the Cyprus Mine site.

PAYMENTS TO STATE FROM LANDS WITHIN THE PROCLAIMED CHALLIS NATIONAL FOREST

County	Percent of Forest In County	1976	1980	1983
Blaine	0.1	$ 61	$ 158	$ 45
Butte	9.0	5,566	23,511	4,032
Clark	0.1	72	206	45
Custer	76.0	46,893	198,103	34,048
Lemhi	14.8	8,963	37,893	6,630
Total		$61,555	$235,996	$44,800

Disbursement of the 25 percent fund is based on the percentage of Challis National Forest in these counties.

	1976	1980	1982	1985 1/	1990 1/	1995 1/
Payments in Lieu of Taxes and 25 percent Fund Payments (in M dollars)	207.5	382.0	190.8	221.2	387.9	399.1

1/ Projected from planning model outputs

D. RESOURCE ELEMENTS

1. Recreation

The Challis National Forest provides a wide variety of outdoor recreation opportunities. Activities on the Forest include, but are not limited to, camping, picnicking, hunting, fishing, floatboating, hiking, cross-country skiing, snowmobiling, and sightseeing. In 1983, the Forest reported 609,200 visitor days total use.

a. Developed Recreation

Most of this use occurs on the Yankee Fork and Lost River Districts. Their sites are located along Forest roads and State Highway 21.

Many facilities were rehabilitated with two new units constructed in the early 1960's. In the years since, many sites have deteriorated to a point where rehabilitation is again necessary. Deterioration is occurring to comfort stations, tables, roads and spurs, water systems, and minor amounts of the vegetative component.

In recent years, construction and rehabilitation of recreational facilities have declined. The outlook for the next several years is for some reconstruction of recreational facilities. Locations of developed sites by district are as follows:

NUMBER OF EXISTING DEVELOPED PUBLIC RECREATION SITES

District	Campground	Trailheads	VIS
Middle Fork	2	1	0
Challis	5	8	0
Yankee Fork	15	9	2
Lost River	6	6	1
TOTAL	28	24	3

The capacity of developed sites is a measure of persons-at-one-time (PAOT), which is an estimate of the number of persons who can comfortably use a site at one time. Camping and picnic sites are estimated to have a capacity of five persons per unit. The current capacity of the Forest is as follows:

CAPACITY IN PAOTS

District	Campgrounds	Trailheads	VIS	TOTAL
Middle Fork	130	2	0	150
Challis	135	165	0	300
Yankee Fork	580	104	100	784
Lost River	510	85	0	595
TOTAL	1,355	374	100	1,829

The theoretical capacity of the above sites is 291,237 recreation visitor days. Theoretical capacity is calculated by taking the PAOT times season (in calendar days) times 2 (for camps and transfer camps) or times 1 for VIS sites. In 1983, we experienced 83,000 recreation visitor days use in our sites. Demand is expected to increase at approximately 3 percent per year. This is an overall average of 28 percent of theoretical capacity, and 13.6 percent of our total reported use. The remainder of the Forest use is in the dispersed areas, existing Wilderness, and the Middle Fork of the Salmon River.

Loristica organizational site and Bradley Boy Scout Camp are located on the Forest. Use at these organizational sites totaled about 3,500 visitor days in 1983.

Because of short season, limited recreation use, and availability of varied recreation opportunities on federal land very little interest has been expressed for developing privately owned recreational facilities in the area.

b. Dispersed Recreation

Dispersed recreation is use away from developed sites and outside of designated areas, such as the Frank Church--River of No Return Wilderness and Middle Fork Wild and Scenic River corridor.

Touring (auto), fishing, camping, hiking, and hunting are the most popular uses of the Forest.

Gathering firewood is becoming very popular as we provide roads to areas.

Dispersed use and its impacts are difficult to measure and manage. Dispersed recreation use usually occurs near water. Weekend and holiday use is higher than during the week.

The capacity of the Forest for dispersed recreation was calculated by using the Recreation Opportunity Spectrum (ROS). District and Forest recreation capacities are identified in the Analysis of the Management Situation, which can be reviewed at the Challis National Forest Supervisor's Office.

We expect current patterns of use to continue unless the economy changes drastically, or conditions change unexpectedly. Use will be most intense on areas served by high standard access roads.

We expect resource deterioration such as soil and vegetation loss to increase. Increased use of dispersed recreational areas for overflow camping and greater crowding will increase user's dissatisfaction. Greatest impacts will occur in areas adjacent to water.

Timber sales and mineral development will add a few miles to the Forest road system. Some of these roads will be closed to motorized recreational use. Travel on roads remaining open will increase.

Competition for choice hunter camp locations will create social conflict and may deteriorate sites.

Opportunities exist for improving the dispersed recreation experience and reducing conflicts between user groups.

c. Trails

The Forest has about 1,600 miles of trails. Of this, approximately 800 miles are within the Frank Church--River of No Return Wilderness. There are 178 miles of trails outside of the Wilderness, closed to motorized bikes, thus leaving 622 miles open. The Forest needs 15 trail rights-of-way across private or State lands. Most trail use is in the summer and fall. The majority of trail use is by hikers. Lesser amounts of use occur from horseback riding and motorized bike riding.

Trail conditions within the Forest vary. Some trails continue to deteriorate because of lack of maintenance and/or improper location. Private landowners may close additional trails where rights-of-way have not been obtained. Conflicts between types of trail users will increase in number and intensity. The ability of our trail system to serve the public will decline while demand continues to increase. This is especially true of trails leading into the Wilderness and popular lake basins. The following is a list of Forest trail miles, including trails within the Frank Church--River of No Return Wilderness:

	TRAIL MILES				
DISTRICT	MIDDLE FORK	CHALLIS	YANKEE FORK	LOST RIVER	TOTAL
Total Miles	609	307	487	197	1,600
Open to Bikes	3	142	339	138	622
Closed to Bikes	606	165	148	59	978

There are two signed snowmobile and cross-country ski trails on the Forest, although the majority of the use occurs on roads, trails, and cross-country. Currently, this type of dispersed use is increasing.

Two trails, the Knapp Creek-Loon Creek Trail and the Mill Creek Lake Trail have been designated as National Recreation Trails.

d. Cultural Resources

The Forest has recorded 460 cultural resource sites. Of these, 161 are within the Frank Church--River of No Return Wilderness on land administered by the Challis National Forest. These cultural resource sites include prehistoric campsites, lithic scatters, hunting blinds, and rock art sites. In addition, there are historic cabins, stage stations, mines, mining towns, cemeteries, Forest administrative sites, and many miscellaneous sites. One site, the townsite of Custer is listed on the National Register of Historic Places. Bonanza, Bonanza Cemetery, Boothill Cemetery, Bonanza CCC Camp, Bonanza Guard Station, and the Yankee Fork Gold Dredge have been nominated for inclusion on the Register as a historical district. Additional sites having prehistoric and historic interest are on State and private lands within the Frank Church--River of No Return Wilderness, in the Yankee Fork drainage, in the White Knob Mountains, and at various other sites located within the Forest. Maps of recorded sites and information on their condition are on file at the Forest Supervisor's Office, and are only available to professional archaeologists and historians.

The Forest has file records of 160 site surveys covering 10,112 acres. These figures do not include two systematic surveys supported by the Forest along the Middle Fork Wild and Scenic River Corridor. A Forest-wide inventory of cultural resources has not been done. Current management will continue to meet the requirements of Federal and Forest Service cultural resource protection and preservation laws.

The Forest has a program for interpreting historic mining and dredging for the public at the Custer Interpretive Site and at the Yankee Fork Gold Dredge. This interpretive plan will be revised as needed.

e. Visual Resources

An inventory of the visual resources on the Forest has been nearly completed.

The approximate number of acres meeting Quality Objectives are as follows:

Classification	Acres
Preservation	1,203,000
Retention	133,000
Partial Retention	525,000
Modification	459,000
Maximum Modification	196,000

f. Wild and Scenic Rivers

The Middle Fork of the Salmon Wild and Scenic River, designated with the original Wild and Scenic River Act of 1968, is administered by the Challis National Forest. The U.S. Department of Interior study, "A Report on Natural and Free-Flowing Rivers in the Northwestern

United States" of 1980, did not identify any additional rivers on the Challis National Forest with potential for classification as wild, scenic, or recreational. Using the revised Guidelines for Eligibility, Classification, and Management of River Areas (Federal Register, 9/7/82), an interdisciplinary team made a review of rivers and streams on the Forest, but did not identify any candidates for addition to the system.

2. Wilderness

The emphasis of wilderness management is to protect wilderness resource while allowing human use. A primary concern is the heavy human impact on popular sites.

Locally, interest is very high on both sides of the wilderness issue. This Forest currently administers 782,255 acres, about one-third of the 2,353,739 acre Frank Church--River of No Return Wilderness.

A national assessment called Roadless Area Review and Evaluation (RARE II) was completed and documented in a final environmental statement in January of 1979. Three areas on the Challis National Forest were proposed for wilderness classification through this process. The approximate acres and names follow:

Area	Acres
Borah Peak	119,675
Lemhi	93,068[1/]
Pioneer Mountains	44,369[1/]
TOTAL	257,112

1/ Challis portion of these recommended areas. Total acres are: Lemhi 168,965 acres including lands on the Salmon National Forest; Pioneer Mountains 104,639 acres including lands on the Sawtooth National Forest.

RARE II also identified one area which should receive further study prior making the decision for proposed wilderness: the Boulder-White Cloud area which contains about 39,700 acres on the Challis National Forest and 242,688 acres on the adjacent Sawtooth National Forest.

The RARE II decision was challenged by the State of California. The legal challenge resulted in a Ninth Circuit Court of Appeals decision that the RARE II Environmental Statement was inadequate. On February 1, 1983, the U.S. Department of Agriculture, after evaluating the court decision, decided that all roadless areas, both those proposed for wilderness and non-wilderness, would be subject to re-evaluation through the Forest Planning process. Table III-1 lists the roadless areas and acres evaluated, and the revised sizes as of 1984. A detailed description on each area is containted in Appendix C of the DEIS.

TABLE III-1

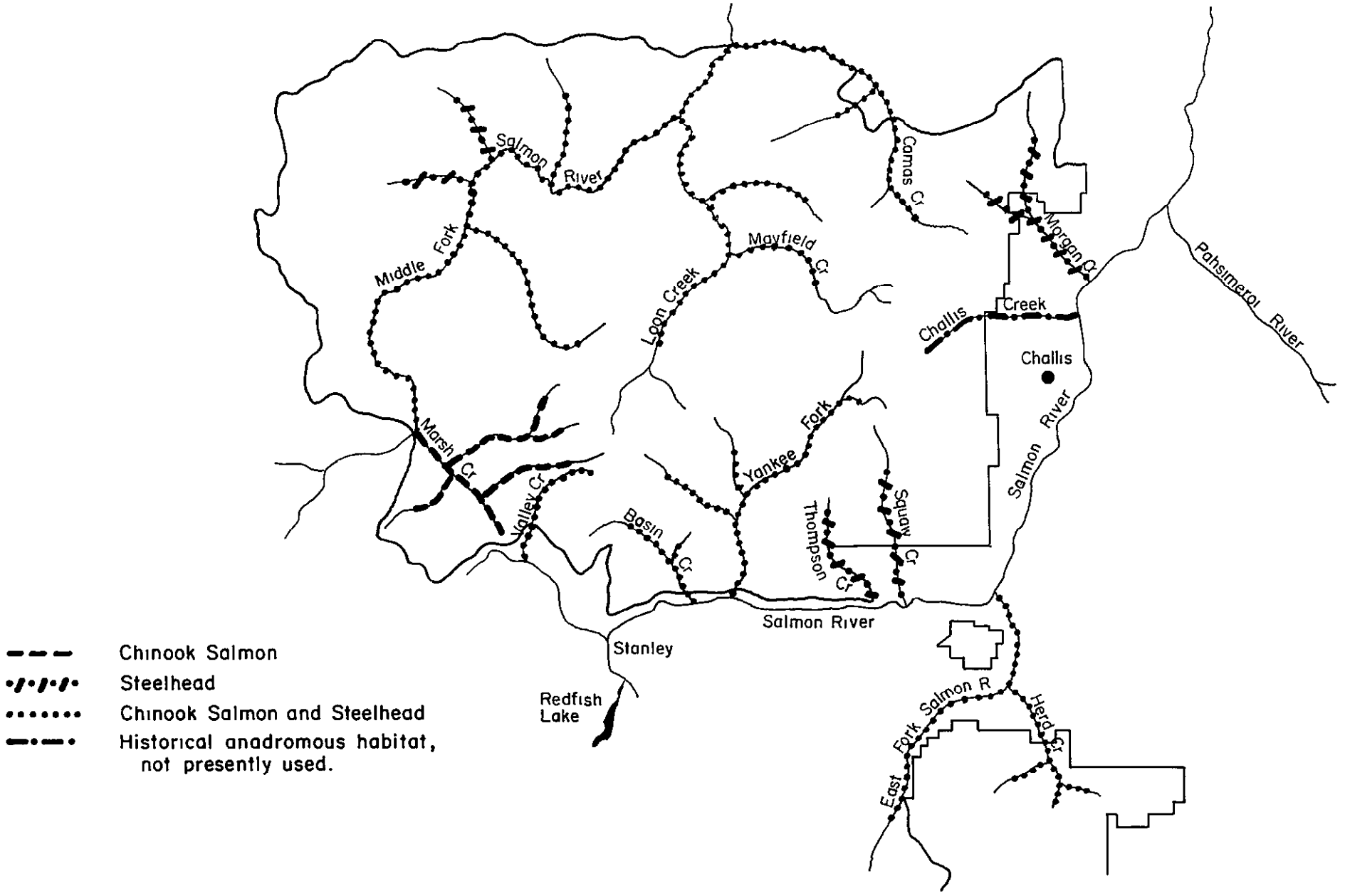
ROADLESS AREAS ON THE CHALLIS NATIONAL FOREST
BY ROADLESS AREA NUMBER AND NAME 1/

ROADLESS AREA NUMBER 2/	ROADLESS AREA NAME	ROADLESS AREA ACREAGE
004	Challis Creek	41,354
005	Squaw Creek	96,987
006	Spring Basin	5,000
007	Greylock	12,605
009	Seafoam	28,442
010	Grouse Peak	7,985
011	Pahsimeroi Mountains	72,107
012	Borah Peak	129,581
013	King Mountain	82,695
014	Jumpoff Mountain	13,337
017	Porphyry Peak	45,273
019	Copper Basin	10,402
024	Warm Creek	7,516
025	White Knob	62,416
026	Cold Springs	8,934
027	Red Hill	14,274
028	Wood Canyon	7,626
601	Diamond Peak	72,239
901	Camas Creek	63,949
902	Taylor Mountain	14,940
903	Lemhi Range	149,629
908	Loon Creek	106,758
915	Hanson Lakes	13,719
916	Red Mountain	5,189
920	Boulder-White Clouds	134,754
921	Pioneer Mountains	169,420
922	Railroad Ridge	7,532
923	Blue Bunch Mountain	7,472
Total Roadless Area Acres		1,392,135

1/ Acres were recalculated as part of the current planning process.
2/ Roadless areas with 600 or 900 numbers extend into adjacent National Forests.

3. Wildlife and Fish

Challis National Forest provides for important and diverse wildlife populations, and resident and anadromous fisheries in the State of Idaho. Although the majority of recreation use occurs with resident fisheries, big-game hunting draws a larger concentration of use, over a shorter period of time.



ANADROMOUS FISH HABITAT ON THE CHALLIS N.F.

Figure III-1