United States
Department of
Agriculture

Forest
Service

Northern
Region

September 1987

RECORD OF DECISION

Bitterroot National Forest Plan

RECORD OF DECISION
FOR
USDA FOREST SERVICE

BITTERROOT NATIONAL FOREST

ENVIRONMENTAL IMPACT STATEMENT
LAND AND RESOURCE MANAGEMENT PLAN

RAVALLI AND MISSOULA COUNTIES,
MONTANA

AND

IDAHO COUNTY, IDAHO

September 1987

BITTERROOT NATIONAL FOREST
RECORD OF DECISION
FOREST PLAN
TABLE OF CONTENTS

I. INTRODUCTION

What is being decided?

This Record of Decision documents my decision and rationale for selecting an alternative for the land and resource management of the Bitterroot National Forest That alternative, known as Alternative E2 is the best strategy for management of the Forest over the next 10 to 15 years

Alternative E2, the selected alternative, is contained in the document titled *Forest Plan*, Bitterroot National Forest (September 1987). It provides direction in the form of goals and objectives, standards, guidelines, monitoring requirements, and probable schedule of management practices. The analysis of alternatives and public comments I considered in this decision can be found in the Final Environmental Impact Statement on the Forest Plan dated September 1987

What is the goal of the Forest Plan?

The Forest Plan is part of the long-range resource planning requirement established by the National Forest Management Act of 1976 (NFMA), an amendment to the Forest and Rangeland Renewable Resources Planning Act (RPA).

My goal in selecting Alternative E2 is to provide the greatest total benefit to the public (net public benefit). In determining net public benefit, I considered public comments, other agency goals, environmental quality, as well as the production of resources upon which dollar values can be placed (priced) and resources upon which dollar values cannot be placed (nonpriced) In Section VII of this Record of Decision entitled, "Rationale for the Decision," I discuss how I considered these factors in my decision.

What will happen to existing plans on the Bitterroot National Forest?

All previous resource management plans will be superseded by the Forest Plan, once it is adopted Changes from previous plans are subject to existing rights, contracts, leases, and specific authorities for special areas such as Wilderness and National Recreation Trails

What is the duration of the Forest Plan, and can it be changed?

The Forest Plan is a 10 to 15 year Plan. It will normally be revised every 10 years, but by law must be revised every 15 years.

The Forest Plan can be changed at any time by either amendment or revision Such changes will respond to changing needs and opportunities, Congressional land designations, catastrophic events such as major flood, fire, windstorm, insect epidemic, disease, etc , monitoring results, or major new management or production technology

In making changes, the Forest Supervisor will follow amendment or revision procedures outlined in the National Forest Management Act and planning regulations (36 CFR Part 219.10(f)(g)).

What is not being decided?

The Forest Plan contains general resource management direction. It does not cover, except in a broad manner, projects or actions on specific sites. Site-specific environmental analysis will be done at the project level and this analysis will follow National Environmental Policy Act procedures

The Forest Plan does not address day-to-day management For example, personnel matters, internal organization, and equipment and property management are not included.

In addition, I am not making management recommendations in this Record of Decision for those portions of contiguous roadless areas located on adjacent Forests Recommendations for those areas have already been made, or soon will be made, in the Forest Plan Records of Decision for those National Forests

The projected production levels presented in the Forest Plan for various resources are maximum resource output levels. As such, they are not decisions in and of themselves While all outputs in the Forest Plan can be accomplished from a physical, biological, economic, and legal perspective, the Forest Plan does not guarantee that the maximum levels will be accomplished For instance, the projected timber output of 334 million board feet over the next decade is dependent upon several external factors beyond the scope of the Forest Plan Local demand for raw material, timber imports, national housing starts and home mortgage rates all influence the timber volume that will be actually sold. Similarly, the Forest Plan's projected elk population is dependent upon factors as diverse as hunting regulations and the severity of winter weather

II. MAJOR FEATURES OF THE FOREST

The Bitterroot National Forest lies on both sides of the Montana-Idaho State line in north Idaho and west central Montana About 71 percent of the 1 6 million-acre Forest is in Montana, the remainder in Idaho The Idaho portion is classified wilderness, except for a 600-foot wide corridor along the Darby-Elk City Road, the Hells Half Acre Lookout Road and the Selway River Road to Paradise The area includes the Selway River headwaters and the Salmon River Breaks The Salmon River is the south boundary of the Forest in Idaho All of the Selway and Salmon Rivers within the Forest are classified Wild and Scenic Rivers The Idaho portion of the Forest is entirely in Idaho County

In Montana, about 250,000 acres of the upper slopes of the spectacular Bitterroot Range are classified as the Selway-Bitterroot Wilderness, and a portion of the Anaconda-Pintler Wilderness is on the east side of the Forest.

In all, wilderness and Wild and Scenic Rivers classifications make up practically one-half the Forest, as follows

Selway-Bitterroot Wilderness	512,000 acres
Frank Church-River of No Return Wilderness	190,000 acres
Anaconda-Pintler Wilderness	41,000 acres
Total Wilderness	743,000 acres
Selway & Salmon Wild & Scenic Rivers	16,000 acres

Practically all of the wilderness consists of very rugged, mountainous terrain featuring outstanding natural beauty, clear mountain streams, and abundant and diverse wildlife

The Forest surrounds the scenic Bitterroot Valley, the charm of which depends largely upon management of the adjacent National Forest land. The nonwilderness part of the Forest (all in

Montana) consists of the lower east slopes of the Bitterroot range, the west slope of the Sapphire range, and the East and West Fork Bitterroot River drainages on the south. Much of the Forest is highly visible from the valley.

Roads have been built into roughly 25 percent of the Forest Some areas have very extensive road systems--a mark of the earlier short-line jammer logging systems.

The Bitterroot Range is the eastern edge of a vast wilderness complex and also the Idaho batholith The latter consists of 14,000 square miles of granitic rocks and soils. Some 20 clear mountain streams flow out of this range on the Montana side down spectacular U-shaped glaciated canyons featuring towering solid rock canyon walls. The range has many alp-like peaks, including 10,000-foot Trapper Peak. Snow patches generally remain all year adding to the scenic beauty. This Bitterroot range contrasts sharply with the northern end of the Sapphires to the east of the valley, where lower elevations and more rolling terrain persist The Sapphires are more rugged to their southern end, where they join the sheer, towering Pintlers.

The wildlife values of the Forest are extremely high. Many species of birds, small mammals and fur-bearers frequent the Forest, and the Bitterroot elk herd is of national significance. There is also a native bighorn sheep herd which inhabits the Nez Perce face in the summer and winter along the Selway River in Idaho There are also large populations of moose, mountain goats, mountain sheep, white-tailed and mule deer, and bear.

Forest cover consists largely of Douglas-fir and lodgepole pine, with occasional stands of stately old-growth ponderosa pine, particularly in the Selway River headwaters and along the steep, southerly slopes in the Bitterroot Valley Riparian areas and moist north slopes generally support spruce-fir forests.

One of the key recreation features of the Forest is the Selway River whitewater float program. Experts say it is the best float opportunity left in the United States The Bitterroot is rich in cultural resources and history. The area was prehistorically occupied by the Salish Indians, who first met Lewis and Clark and the Corps of Discovery in Ross Hole near where the Sula Ranger Station now stands. The Lewis and Clark expedition traveled the length of the Bitterroot Valley to the mouth of Lolo Creek on their trek to the Pacific "Travelers Rest," a spot near the town of Lolo, is so named because the expedition spent a day's rest there on both legs of the journey.

Some 70 years later, Chief Joseph and his band of Nez Perce traveled the same route pursued by the Army

III. THE RELATIONSHIP OF PEOPLE TO THE FOREST

These lands, however, cannot be described without including their context with people: those who reside close by or those who have a tie--be it financial or through the heart. The natural environment and people are not separate entities, but an integral part of life

The Bitterroot Forest and valley were home to the Salish Indians, probably for centuries The Nez Perce and other tribes from the west traveled through the Bitterroot and over the Nez Perce Trail on their way to and from the buffalo grounds to the east The first white visitors to the Bitterroot were fur trappers and traders Large expeditions were sent here by the Hudson Bay Company and other fur traders. The first permanent white residents arrived in about 1850, when Major John Owen established a trading post and settlement at Fort Owen near Stevensville, the first town in Montana

As the population increased, agriculture became established in the valley The mild climate and rich soil of the Bitterroot produced fruits and vegetables in quantities enough to supply Big Hole residents and Butte miners.

Late in the 1800's, logging and lumbering became a major industry and remains so today. The industry depends almost entirely on National Forest timber since the supply of private timber is limited in this area

Through the years, particularly the last two decades, the valley population has increased very rapidly, and lifestyles and needs are changing from dependence on the use of natural resource products to amenities such as scenery, natural landscapes, the solitude of wilderness and recreation, including hunting and fishing Many outfitters and guides are making a living using these amenity values Many of the new inhabitants are retired.

Water quality, quantity and timing are vital to valley residents and downstream users About 100,000 acres of agricultural land in the valley depend on water originating on the Forest for irrigation. Early settlers developed dams in most of the west-side canyons. Most are still in use, storing water for use late in the growing season The lakes formed by these dams, though generally small, are an important recreation attraction.

The Forest Plan seeks to recognize the uniqueness of this area and opportunities it presents for the future by combining the peoples' needs with those of future generations. This is being done with objectives, goals, and standards to ensure the best management possible at this time.

IV. A VISION OF THE FUTURE

The Forest Service's vision of the Bitterroot National Forest is that of a Forest managed to benefit the public in harmony with nature Management direction responds to comments received from the public, to the potential effects on people's lives and to the capability of the land. As Gifford Pinchot, founding father of the Forest Service, noted, "The challenge of the agency is to serve the people -- within that to provide the greatest good for the greatest number in the long run."

The Forest Planning process tailors National and Regional direction to provide a combination of opportunities and uses from the diverse variety of Forest resources, both now and in the future The basic mission of the Forest is caring for the land and serving people It requires a balanced consideration of all Forest resources in meeting the present and future needs of society It relies on the application of scientific knowledge, conservation leadership and wise stewardship in partnership with other public agencies, Native American Tribes, and others interested in and affected by the Forest's program.

The Bitterroot National Forest will continue to present an attractive, varied landscape dominated by rugged mountain peaks, high alpine lakes, sheer-walled canyons and clear streams and rivers Evidence of roads and timber management activities will be readily visible from secondary roads throughout the Forest, but the major travel corridors will be managed to make man's activities less noticeable

Congress may add to the current 743,000 acres of wilderness An additional 214,000 acres of the Forest will be managed without roads, and other areas available for development will remain without roads during the planning period A full range of recreational opportunities will be provided from developed recreational sites, to wilderness and semiprimitive areas that provide isolation from the sights and sounds of most human activity Opportunities to pursue semiprimitive recreation will be reduced in the future as roads are constructed into currently undeveloped areas

The Forest will continue to provide high quality water and excellent cold water fisheries There is potential for anadromous fish populations on the Selway River There will be short-term increases in sediment from road construction activities, but mitigation measures, soil and water conservation practices, and practices to reduce sediment from existing roads are intended to maintain existing fish habitat. The future capacity to support big game will be maintained by managing for optimum cover/forage relationships on winter range and by controlling vehicle travel, with cooperation from the Montana Department of Fish, Wildlife and Parks, and support from private wildlife organizations

Riparian areas will be managed to protect water quality, fisheries and recreation and other resources that are associated with these important streamside zones These areas will also provide a low level of timber production

When traveling about the Forest, there will be a discernible difference in management for different areas In some areas, timber management activities and open roads will be common. These roads will be designed and managed to support the large hauling equipment associated with intensive harvest operations, and will provide for public travel. Road surfaces, however, may be rough and irregular Road management, including road closures, will be utilized in big-game winter range and security areas to protect wildlife In many areas, public vehicular travel will be restricted

A variety of special management areas has been identified because of unique features. They include trail and road corridors and candidates for Research Natural Areas The trails are National Historic, Recreational, and Scenic, and the road corridor includes the Nez Perce Trail Road Research Natural Areas are set aside for observation and research

Cultural resources will be defined, inventoried, protected and interpreted to the extent practical for future generations to study and enjoy Some cultural resources may need to be protected to reduce potential for damage from public use or development.

The total mission, as described here, will be accomplished by listening to the public and by responding to desires promptly with courtesy and fairness

Our mission requires high ethical standards. It envisions a dedication to being good neighbors, working cooperatively, inviting the involvement of others and extending recognition for accomplishments

V. PUBLIC PARTICIPATION

The Notice of Intent to prepare a Forest Plan and Environmental Impact Statement was published in the Federal Register on December 3, 1980 The Bitterroot National Forest began its public involvement for the Forest Plan with public meetings in Hamilton, Stevensville, and Darby Public involvement was basic to the development of Forest Plan issues and alternatives At the start of the planning process, all past planning input was reviewed to help define issues Subsequently, the Forest Supervisor and planning team met with many individuals, local and regional groups and organizations, other agencies, and State and local government Native American Tribal Councils and about 600 adjacent landowners were invited to participate.

Additional public involvement was initiated in September 1983 to aid in resolving the question of roadless designation This became an issue because of the Ninth Circuit Court decision in October 1982 concerning roadless area evaluation (RARE II) This decision resulted in revision of 36 CFR 219.17, which requires an evaluation of roadless areas in the Forest Planning process

After the proposed Forest Plan was released for public review in March 1985, over 35 meetings were held around the Forest to discuss the Plan with the public We received nearly 1,000 comments.

More information about public involvement and the development of issues is found in Chapter VI and Appendix A of the Environmental Impact Statement.

Public hearings were held on the Blue Joint and Sapphire Montana Wilderness Study Act areas (P.L. 95-150), on December 11 and 12, 1985 as required by the Act

The key issues and management concerns used in selecting the Forest Plan from the various alternatives are discussed in the following Section VI, Decision.

VI. DECISION

My decision is to implement Alternative E2 to guide the management of the Bitterroot National Forest for the next 10-15 years. This alternative establishes a basis to resolve the issues and concerns identified for the Bitterroot National Forest, and in my opinion, maximizes net public benefit These benefits are summarized in this decision

Analysis of public comments on the Draft Environmental Impact Statement and Proposed Forest Plan provided additional information that caused me to make adjustments in Alternative E I conclude the magnitude of change from the DEIS Alternative to Alternative E2, the Selected Alternative, was within the range of alternatives discussed, and that the environmental effects disclosed are adequate to make an informed decision (refer to Section VIII (Alternatives) of this document for changes).

The decision considers the land and its many resources. Underlying these decisions are some basic philosophies I recognize people as a part of the environment, and want the decision and direction to minimize disruption to people's lives and values. As well, I want to ensure a caring for the land and provide choices for future generations

In making this decision, I recognize the limitations of the physical and biological systems, and that the Bitterroot National Forest cannot provide everything each individual or group would like.

Some of the major aspects of the decision are:

Allowable Sale Quantity

I have decided to establish an allowable sale quantity of 33.4 million board feet (MMBF) which can be sold the first decade. This volume consists of 31.2 MMBF of green sawtimber, and 2.2 MMBF of dead material and posts, poles and pulp. This is a reduction of 2 6 MMBF from the Draft, and practically identical to current direction. It is approximately 3 MMBF over the average annual volume purchased during the past 10 years. (EIS, Chapter II and Chapter III). I have decided the species composition of the sale program will be more nearly proportional to the available volume by species, i e , less ponderosa pine and more lodgepole pine. The projected second decade harvest level will remain the same as the first decade level

About 29.4 MMBF can be harvested from currently roaded lands. The roadless ASQ is 4 0 MMBF and almost half, 1 9 MMBF, comes from Montana Wilderness Study Act areas; 2 7 MMBF is dependent on the demand for sales requiring helicopter yarding of low value species and 5 7

MMBF is dependent on our ability to meet fish habitat goals in areas of sandy, decomposed granite soils (Forest Plan, Chapter II).

The 389,200 acres suitable for timber management are a 60,000-acre reduction from the Proposed Forest Plan.

The timber sale program quantity includes the ASQ (chargeable volume) and any estimated additional material (nonchargeable volume) planned for sale.

Silvicultural Systems

The principles of Integrated Pest Management (IPM) with emphasis on biological controls will be used to prevent or control insect or disease outbreaks Additional National Environmental Policy Act (NEPA) analysis will precede any use of pesticides. (Forest Plan, Chapter II).

The selection of the silvicultural system will be based on site-specific evaluation of biological and management factors at the project level Even-aged management, which includes shelterwood, seed tree, and clearcut silvicultural systems, will predominate Clearcutting will be used only where it is determined to be the optimal method to meet the objectives and requirements of the Forest Plan. Uneven-aged management will be used where it is biologically feasible and consistent with management objectives. Refer to Section IV of the EIS and Appendix B, "Vegetative Management Practices" in the Forest Plan for further information

Road Management

Management and use of the timber resources will necessitate construction of about 25 miles of roads annually Restrictions on the use of roads will be applied to protect elk habitat and sensitive soils but will provide for uses that require road access Road and off-road vehicle (ORV) use restrictions will be shown on the Bitterroot Forest Travel Map, which will be reviewed annually and updated as needed.

Roads will impact less than 5 percent of the inventoried roadless area over the next decade.

Visual Quality

I have decided to maintain a generally high level of visual quality on those portions of the Forest that are adjacent to or readily visible from Highway 93, major Forest access roads and population centers (Forest Plan Chapter III) Management activities will not be evident to the casual observer, *the retention visual quality objective (VQO), in the foreground on the east face of the Bitterroot* Range visible from Highway 93 and Forest access roads Management activities will be subordinate to the landscape, the partial Retention VQO, in the middleground on the east face of the Bitterroot Range and foreground and middleground areas along the East Fork, West Fork, Nez Perce, Skalkaho, and Sleeping Child Roads

Water Quality and Fish Habitat

I have decided to maintain the present high level of water quality and the current fish habitat capacity throughout the Forest This will be accomplished by applying road construction, road maintenance, and timber harvest practices and standards that avoid or minimize adverse effects (Forest Plan, Chapter II). Some roads will be surfaced and drainage improved. On new road construction sediment control measures such as placing slash or other material at the toe of fillslopes to form a sediment barrier, and diverting road surface water away from stream channels

will be applied (Forest Plan, Chapter II). Habitat to support the existing high fish population will be maintained by providing old growth and trees for debris dams, and will be improved where possible by deliberate debris recruitment. Studies to determine sediment impact and to calibrate the R1/R4 sediment and fish models will continue in cooperation with the Montana Department of Fish, Wildlife and Parks (Forest Plan, Chapter IV).

Prime spawning areas for anadramous fish will be maintained in the Selway River in hope that steelhead and salmon runs will occur in the future.

We will manage riparian areas primarily to maintain wildlife, water quality and fisheries values (EIS, Chapter II) (Forest Plan, Chapter III)

Wildlife

I have decided to manage most winter range to optimize cover/forage relationships and the capacity of the habitat to support elk. Winter range will be managed to provide diversity of forage and hiding cover with at least 25 percent of the area in thermal cover at all times. Road closures will be utilized to maintain 50 percent elk habitat effectiveness on lands currently developed and at least 60 percent on currently undeveloped lands (Forest Plan Chapter II) About 1,400 acres will be harvested annually to maintain and improve habitat for elk and deer Over the long-term, this alternative will provide a nearly even distribution of forest age classes and hence a wide diversity of wildlife habitat.

Old growth will be distributed over each management area in stands 40 acres and larger to meet the needs of species dependent on this habitat, for example pileated woodpecker and pine marten (EIS Chapter IV, Forest Plan, Chapter III) The minimum level on intensively managed timberland will be 5 percent of each third order drainage To meet the minimum level within each old growth area, nonfisheries riparian areas will be maintained at 25 percent old growth, fisheries riparian areas at 50 percent and 3 percent outside of riparian areas.

Recommendations from the "Coordinating Elk and Timber Management" report and the Montana Fish and Game Commission's Road Management Policy will be incorporated in project plans (Forest Plan, Chapter II).

The Forest has no known population of threatened or endangered species, but the grizzly bear, gray wolf and perhaps the peregrine falcon and bald eagle once occupied the Forest (EIS, Chapter III). The Forest will cooperate in recovery efforts (Forest Plan, Chapter II). Consultations with the U.S Fish and Wildlife Service on the selected alternative resulted in a "non-jeopardy" biological opinion (June 17, 1985, and September 26, 1986).

Wilderness and Roadless Areas

I am recommending wilderness classification for 48,300 acres to be added to the Selway-Bitterroot Wilderness, and 28,500 acres of the Blue Joint drainage to be added to the adjacent Frank Church-River of No Return Wilderness or managed as a separate wilderness. Until Congress determines otherwise, my wilderness recommendations and the remaining Montana Wilderness Study Act (MWSA) acreage will be managed to maintain the present potential for inclusion in the National Wilderness Preservation System (Forest Plan, Chapter III). With these additions, the existing and recommended wilderness amounts to about 52 percent of the Forest.

The disposition of inventoried roadless areas including the MWSA areas follows:

Montana Wilderness Study Act Areas

The Montana Wilderness Study Act (P L 95-150, May 23, 1977) required that nine areas be studied for wilderness and recommendations made to Congress for their classification One of these study areas, the 66,000-acre Blue Joint area, lies entirely on the Bitterroot Forest and another, the 117,000-acre Sapphire area, lies partly on the Deerlodge Forest with about 44,000 acres on the Bitterroot Forest It was decided that recommendations for classification of these study areas be part of the Forest Plan My recommendations are for the Bitterroot Forest portion of the Sapphire study area.

I am recommending the following disposition of Montana Wilderness Study Act areas.

Blue Joint: I have decided to recommend 28,500 acres for wilderness classification. Nineteen thousand and three hundred acres will be assigned to semiprimitive recreation. Sixteen thousand and two hundred acres are assigned to management areas suitable for timber harvest, with 6,200 suitable acres planned for entry during the Plan period, pending Congressional action (EIS, Appendix C).

Sapphire: I have decided not to recommend any wilderness Twenty-seven thousand and five hundred acres will be assigned to semiprimitive recreation Twelve thousand acres are suitable for timber harvest, but only 500 acres are scheduled for entry during the Plan period (EIS, Appendix C).

Roadless Areas

The disposition of the roadless resource is shown in Table 1.

Table 1
Roadless Areas

Area Name	RARE II Acres	1986 Acres 1/	Semiprimitive Recreation	Wilderness	Available for Development
Allan Mountain	111,200	102,300	72,500	0	29,800
Blue Joint	126,500	65,300	19,300	28,500	17,500
Lolo Creek	0	587	587	0	0
Needle Creek	1,100	1,085	0	0	1,085
North Big Hole	3,800	3,691	2,956	0	735
Sapphire	42,300	44,100	27,500	0	16,600
Selway-Bitterroot	221,700	115,200	48,300	48,200	18,700
Sleeping Child	23,600	21,400	12,200	0	9,200
Stony Mountain	49,800	43,700	30,700	0	13,000
Swift Creek	700	744	0	0	744
Tolan Creek	9,400	7,088	0	0	7,088
Black Bear	7,500	0	0	0	0

1/ - 1983 Roadless Inventory updated to show the addition of timber sale areas advertised but never sold

About 214,000 acres of roadless lands are designated for motorized and nonmotorized semiprimitive recreation use and wildlife security (Forest Plan, Chapter III) Barring possible entry for the exploration and/or development of mineral or energy resources, all options for management will be maintained for reconsideration at the end of the Plan period. In the meantime, vegetation treatment is not precluded as a means to accomplish the management goals of these areas

Approximately 114,000 acres or 28 percent of the current roadless area is scheduled for eventual development, but less than 20,000 acres are expected to be entered for timber harvest and associated road development during the Plan period (EIS, Chapter II)

Six hundred acres in the headwaters of Bear Creek on the Nez Perce National Forest are recommended as an addition to the Selway-Bitterroot Wilderness The area was evaluated as a part of the 115,000-acre Selway-Bitterroot roadless area in the Bitterroot National Forest's Environmental Impact Statement

Cultural Resources

The Final Forest Plan strengthens management direction to identify, protect and enhance the Forest's cultural and historical resources, including sites important to Native Americans as required by law and regulation.

Minerals

Leasable Minerals - All lands on the Bitterroot National Forest are available for mineral leasing unless formally withdrawn.

The consent decision or recommendation for lease applications, permits and licenses will be formulated in compliance with NEPA and processed in a timely manner based on the direction in the Plan, including standards in the Management Area prescriptions

Oil and Gas: I have identified lands available for leasing, land available for leasing with No Surface Occupancy (NSO) stipulations and lands where conditions may lead to recommendations not to lease (EIS, Chapter II) (Forest Plan, Appendix N).

a Areas that are available for leasing using the stipulations in the Forest Plan are Management Areas 1, 2, 3a, 3c, 5, 8a, and 8b, totaling 682,000 acres. Exceptions are riparian areas shown in "b", below.

b Areas available for leasing with NSO stipulations are Management Areas 3b and all riparian areas in 3c, 5, 8a, and 8b, totaling 76,000 acres In these areas, surface disturbance is incompatible with surface resource values.

c. Areas where leases are not compatible with long-term goals or are formally withdrawn are Management Areas 6, 7a, 7b, and 7c, totaling 823,000 acres

Locatable Minerals - All lands on the Bitterroot National Forest are available for entry unless formally withdrawn About 835,000 acres on the Forest are open to mineral entry. Significant surface disturbing activities on mining claims, mill sites and tunnel site locations will require a Notice of Intent and/or a Plan of Operations under 36 CFR 228 to assure orderly development of the mineral resource and protection of surface resources Decisions on submittals for development will be formulated in compliance with NEPA and processed in a timely manner based on direction in the Plan, including standards identified in Management Area prescriptions About 748,360 acres of wilderness areas, campgrounds and administrative sites are withdrawn from mineral entry.

Common Variety Minerals - Lands on the Bitterroot National Forest are available for development of common variety resources. Decisions on proposals for development will be formulated in compliance with NEPA and processed in a timely manner based on direction in the Plan, including standards identified in Management Area prescriptions. About 829,900 acres are withdrawn or development is not permitted by direction in the Forest Plan.

Wild and Scenic Rivers

I have identified Lost Horse and Blodgett Creeks in the rugged, glaciated valleys of the Bitterroot Mountains as eligible for study for inclusion in the National Wild and Scenic Rivers System. Existing rivers and potential classifications are shown in the following table (Forest Plan, Chapter III).

River Segment	Present Status	Status Under Plan
Middle Fork Clearwater (Selway River)	Wild and Scenic	Wild and Scenic
Salmon River	Wild and Scenic	Wild and Scenic
Lost Horse Creek	Semiprimitive recreation with a primitive road paralleling the stream and a small segment of retention prescription	Eligible, potential classification is "scenic"
Blodgett Creek	Wilderness and roadless, recommended for wilderness, except for Blodgett Campground	Eligible, potential classification is "wild", except for Blodgett Campground which is "recreational"

Wild and scenic values for the eligible segments will be protected until suitability studies have been completed.

Research Natural Areas (RNA's)

The Forest meets the goals for each target assigned in the Regional Guide, except for the "fresh marsh-deep" target which is met by the Kootenai Forest. Specific areas have been identified, mapped, and will be recommended to the Chief for formal establishment as studies are completed. The areas are described in Table 2

Table 2
Research Natural Area Location, Size, and Ecosystem Targets

Research Natural Area	Acres	Mgt. Area	Ecosystem (Habitat Type Code)
East Fork	480	7a	Beaver ponds and Abla/Vaca(640).
Bass Creek	2,088	6	Abgr/Clun(520), Abla/Gatr(630), Abla/Libo(660), and Abgr/Libo(590)
Bitterroot Mtn Snow Avalanche	1,623	5	Abla/Mefe(670) and Abla/Xete(690)
Bitterroot River	40	9	Rivers.
Boulder Creek	1,042	6,9	Psme/Vagl(280), Psme/Phma(260), Abla/Clun(620), and Type I streams
Lower Lost Horse Canyon	1,561	5	Psme/Libo(290), Psme/Syal(310), Psme/Caru(320), and Thpl/Clun(530).
Salmon Mountain	2,267	7b	Scree, Abla/Caca(650), Abla/Luhi(830), Pial/Abla(850), Laly/Abla(860), Pial(870), Fevi, Type II streams, cold springs, low production potential lake, and lakes without fish
Sapphire Divide	628	5	Pial(870), Pial/Abla(850), Laly/Abla(860), Abla/Luhi(830), and lakes without fish
Sawmill Creek	245	9	Pipo/Agsp(130), Pipo/Feid(140), Psme/Agsp(210), Feid/Agsp, and Fesc/Feid.
Upper Lost Horse Canyon	2,180	5	Abla/Vasc(730) and Low production potential lake

VII. RATIONALE FOR THE DECISION

The factors I have used to determine which alternative maximizes net public benefit include response to issues, concerns, and opportunities; environmental quality, economic efficiency; and compatibility with the goals of other agencies and Indian Tribes

Of critical importance is the minimization of disruptions to people's lives and values. By this, I mean to contribute to a predictable, orderly and manageable rate of change in the local communities. Any significant short-run changes caused by this decision would be viewed as undesirable. This knowledge allows community leaders, businesses, and people sufficient time to react to those changes

While the Forest Plan is a decision which shapes and affects communities and people, other

factors are also at work Variables include national supply and demand, changes in preferences, and social changes within communities close to home as well as nationally and world-wide

My reasoning for making the decision follows.

A. Response to Issues, Concerns and Opportunities

One of the major reasons I chose to implement Alternative E2 is because it responds positively and thoroughly to public issues and management concerns on the Bitterroot National Forest. Since many issues and concerns conflict, it is not possible to resolve them all. Following is my evaluation of the selected alternative's response to each issue.

1. Allowable Sale Quantity

Timber supply is the key issue in the planning process due to the effect of timber harvest and accompanying road construction on other resources Some people view utilization of the timber resource as vital to the local and Regional economy, but others believe timber harvesting and road building have a detrimental effect on most other resources, particularly fish populations and enjoyment of the natural landscape. They question the wisdom of a timber production level that is not economically efficient and threatens other resources Some of these feelings are influenced by the controversial large clearcuts and terracing practices of the past A preponderance of steep slopes and slow growth (EIS, Chapter III) of newly established forests limit our options and ability to mitigate all adverse affects, consequently, road construction and timber harvest will have some adverse affect on visual quality, fish, wildlife, and water quality.

Mills in the Bitterroot Valley and some in Missoula traditionally obtain a portion of their raw materials from the Bitterroot Forest (EIS, Chapter III) From 1976 through 1985, sawlog volume offered averaged 34 0 MMBF/year, sawlog purchases averaged 30 1 MMBF/year and harvest averaged about 27 5 MMBF/year The selected alternative's allowable sale quantity of 33.4 MMBF/year compares favorably with past supply levels Industry officials estimate future needs from the Forest at 45 MMBF/year (EIS, Chapter III) and strongly disagree with use of past levels as an indicator of future need

During this same 10-year period, average total purchases of 40.6 MMBF/year by these mills came from the Bitterroot, Beaverhead, Salmon and Lolo National Forests supply area. The timber volume level from the four Forest preferred alternatives (EIS, Chapter II) indicates the supply potential will remain at or slightly above the past average of 40 6 MMBF, assuming mills remain competitive for their traditional shares and if most offered volume is purchased. I also realize that increased mill efficiency, reductions in private timber offerings, Canadian imports and other factors may complicate the timber supply picture. However, increasing National Forest supplies at the expense of economic efficiency would lead to more sales that are below-cost and/or not affordable EIS Chapters II and III contain a timber supply and demand analysis

The public, in their review of the Draft Environmental Impact Statement, raised questions about the timber supply and what effect changes in demand would have on the Preferred Alternative. New information became available from a recently completed study, "Montana Timber Supply An inquiry into possible futures," USDA, Forest Service, March, 1987.

The study indicates an increase in demand and reduced supplies from private industrial owned lands in a few years When the State-wide information is disaggregated on a market share basis, the potential demand for Bitterroot National Forest timber will likely be over 40 MMBF per year in 1990, and 50 MMBF per year by 2030, as mills continue to modernize and expand production.

From 1976 through 1986, the Forest sold an average of 30.1 MMBF per year The Proposed Forest Plan proposed an allowable sale quantity of 36 MMBF. The public, in their comments on the Proposed Forest Plan, seriously questioned this level of harvest, primarily because of the possible effect on water quality and fish population In response, the Final Forest Plan identifies an allowable sale quantity of 31.2 MMBF green sawtimber, and 2.2 MMBF of dead material and posts, poles and pulp, for a total of 33 4 MMBF. This volume is an increase in the Bitterroot Forest contribution over the past few years, but includes components such as the volume from Montana Wilderness Study Act (MWSA) areas which may not be available It will not provide raw material for continued expansion of timber industry.

In my opinion, Alternatives A, B, and C which provide the amount of timber sought by the timber industry will have an unacceptable effect on scenery, fisheries, water quality, wildlife and recreation opportunities, and economic efficiency (EIS, Chapter II) Selection of any of these would sharply alter the lifestyles of Valley residents (EIS, Chapter II). On the other hand, I evaluated alternatives with lower timber sale objectives and do not believe they are adequate to support the local economy.

The Preferred Alternative approximates the timber volume offered for sale over the past 10 years Except for one other alternative, it takes the least money to implement (EIS, Chapter II) and is therefore consistent with declining budget expectations and our national resolve to balance the Federal budget.

2. Suitable Lands

Further analysis was done on the amount of suitable timber acres in the Preferred Alternative The results are shown in the following Table 3 - Timber Resource Land Suitability. Tentatively suitable timberlands are identified in Section II of Appendix B in the FEIS. Table 3 displays acres classified as "Not Suited" and "Tentatively Suitable." Tentatively suitable acres are further separated into "Suitable" and "Tentatively Not Suited." Under the suitable category, the total acres were separated into these additional categories The analysis indicates there are 363,331 acres of tentatively suitable lands on the Bitterroot Forest where returns for the timber are above the anticipated operating costs, including the cost of roads. These lands will contribute 24.0 MMBF to the ASQ.

Table 3

TIMBER RESOURCE LAND SUITABILITY

BITTERROOT NATIONAL FORESTS

FORESTED and NON FORESTED

NOT SUITED	ACRES
Not Capable & Non Forest	499,610
Irreversible Soil and Watershed Damage	0
No Assurance of Adequate Restocking	34,533
Withdrawn from Timber Production	457,408
Subtotal of Above	991,551

Note: * Volume figures include
- Chargeable Volume Only
- Non-Interchangeable components to meet management objectives

TENTATIVELY SUITABLE

SUITABLE

* LANDS COST EFFICIENT	ACRES	EFFECTS 1st Decade Acres	EFFECTS 1st Decade MMBF	EFFECTS LTSY MMBF
Direct Benefits Exceed Direct Costs	363,331	2,180	24.0	-
Direct Costs Exceed Direct Benefits				
Meet Non Timber M.U. Objective	0	0	0	-
Local Jobs/Income	26,489	938	9 4	
Subtotal of Above	389,820	3,118	33 4	42 1

TENTATIVELY NOT SUITED

	ACRES	RESOURCE OPPORTUNITY 1st Decade Acres	RESOURCE OPPORTUNITY 1st Decade MMBF	RESOURCE OPPORTUNITY LTSY MMBF
Lands Not Cost Efficient to Meet Objectives- Future Timber Production Possible	28,642	150	1.7	2.0
Multiple-Use Objectives Preclude Timber Production				
Other Uses	143,170	-	-	-
Proposed Wilderness	24,700	-	-	-
Subtotal of Above	196,512	150	1.7	2 0
TOTAL NATIONAL FOREST LANDS	1,577,883			

Effective Period: from 1987 thru 1996

The other 26,489 suitable acres are assigned to timber management to provide opportunities for local jobs Sales on these lands will be "below cost" but are planned to help support two mills in the Darby area and, to a lesser extent, three mills in Missoula which provide local employment and income to those communities. These "below cost" sales are the least cost method of accomplishing the Forest Plan goals and objectives. The allowable sale quantity from these lands averages 9.4 MMBF per year for the first decade

About 28,642 acres of land in the category "Tentatively Not Suited" and under the item "Land Not Cost-Efficient to Meet Objectives - Future Timber Production Possible," lie within ecological settings that are sensitive to timber management activities and difficult to harvest. These lands lie in generally small parcels interspersed with suitable lands throughout the lower and middle elevations. They are on steep slopes, sometimes rocky, with low volumes per acre. Significantly higher costs occur to access and operate on these areas If demand develops, there is an opportunity to increase the harvest by 1.7 MMBF per year through amendment of the Forest Plan. While identified as an opportunity, no change is proposed in the Preferred Alternative because of the very high timber prices that would be required before these lands would become economically suitable

There are 143,170 acres that are "Tentatively Not Suited" because of the high cost of harvesting timber on them and their value for "Other Uses". These lands are designated to remain roadless for the life of the Plan due to their high watershed, scenic, wildlife and recreation values. In this respect, roadless area is treated as a valuable resource.

3. Silvicultural Systems

In determining the appropriate silvicultural systems, I considered three factors: (1) major forest cover types, (2) the nontimber resource objectives and the ways they are affected by silvicultural systems, and (3) the standards for silvicultural systems established in the Northern Regional Guide.

The first consideration was the major forest cover types found on the Forest and individual stand conditions. The three major forest cover types are Douglas-fir/ponderosa pine, lodgepole pine, and spruce/fir State-of-the-art silvicultural information indicates that either even-aged or uneven-aged management can be used on any of these types, however, individual stand conditions are critical to the decision Lodgepole pine, Douglas-fir and spruce/fir types normally develop naturally in even-aged stands as a result of wildfire or other natural mortality Insect and disease problems, particularly the western spruce budworm and dwarf mistletoe, are widespread and often associated with heavy fuel accumulations and/or steep slopes Clearcutting is often the optimum silvicultural system in these timber types and stand conditions Converting these types and conditions to uneven-aged management often results in extensive windthrow, carryover of insect and disease problems to new stands and excessive fuels Uneven-aged management is often suited and is considered for the ponderosa pine habitat type and riparian areas. (EIS, Chapter IV; Forest Plan, Appendix B, "Silvicultural Systems for Mayor Forest Types of the United States," Agricultural Handbook 455, USDA Forest Service, and Northern Regional Guide)

The second factor I considered was the nontimber resource objectives and the ways they are affected by silvicultural systems Included were the amount of wildlife disturbance due to logging and related activities, the economic efficiency of timber harvesting and transportation system, the impact on visual quality; ability to meet riparian-dependent resource needs; and the growth rate of regenerated stands

Even-aged management maximizes the volume of timber per unit of road and enhances the

economics of harvesting This is an important consideration in maintaining water quality and fish habitat without severely affecting timber harvest Even-aged management usually requires only one to three harvests and/or thinnings during a rotation of trees, even though it has a more immediate impact on wildlife than uneven-aged management

I did consider uneven-aged management for those areas where resource objectives can be met by stand conditions and harvest associated with selection harvest. Uneven-aged management generally provides continuous tree cover resulting in hiding and thermal cover for some wildlife species, and maintaining less apparent visual change. However, uneven-aged management also requires frequent harvests over a larger land area to harvest the same volume of timber It is my opinion that minimizing disturbance to wildlife is more important than continuous tree cover. In most instances, cover is desirable in certain areas to maintain wildlife cover and stream shading for fisheries. Uneven-aged management may be used in big-game winter range areas that support ponderosa pine and riparian areas depending on the site-specific silvicultural prescriptions.

The third factor I considered was the standards for silvicultural systems established in the Northern Regional Guide This includes the ability to create stand conditions required to meet other resource objectives in the Forest Plan; the ability to promptly regenerate the site and maintain adequate stand production; the ability to create stand conditions that minimize risk of damage from pests, animals and fire, and the compatibility of the system with acceptable logging methods

I have decided that, in general, even-aged management is the appropriate silvicultural system to use on the Bitterroot Forest However, since a wide variety of site-specific conditions exists on the Forest, all vegetative management practices will be preceded by a silvicultural examination, an on-the-ground analysis of the area, and a site-specific prescription.

Clearcutting and shelterwood are the primary regeneration harvest methods used in even-aged management Under certain physical and biological conditions, clearcutting is also the optimum harvest method when considering other multiple resource objectives The conditions under which clearcutting will be considered are: favorable moisture and temperature on the cleared site for tree regeneration, disease and/or insect conditions in the existing stand that can best be treated by complete removal, and overall resource objectives for the stand See Chapter IV of the EIS for further discussion on shelterwood and clearcutting methods I estimate that clearcutting will be the optimum harvest system on approximately 60 percent of the acres harvested during the Plan period

The Selected Alternative provides standards that I believe will make even-aged management acceptable (Forest Plan, Chapters II and III) Included are limiting the size of openings to 40 acres, dispersing harvest units with requirements for vegetative recovery prior to removal of adjacent stands, designing cuttings to approximate natural landscape patterns, extending cutting cycles past the normal, and applying a high visual quality objective to areas adjacent to, or readily visible from, major travel and recreation routes and population centers

The final decision on which harvest method will be used will be based on a site-specific silvicultural prescription and interdisciplinary review. The prescription will detail the actual silvicultural system or vegetative manipulation method to be implemented on a case-by-case basis. Additional discussion on the impacts of even-aged and uneven-aged silvicultural systems and an evaluation of each can be found in Appendix B "Vegetation Management Practices" of the Forest Plan.

All of these silvicultural considerations will facilitate the opportunity to maintain needed wildlife diversity and distribution to meet specific wildlife and fish habitat objectives.

4. Visual Quality

Although few people commented specifically on objectives to achieve visual quality, the preservation of natural scenery has the strong and longstanding support of most people It was a prime issue in the controversy regarding clearcutting 15 years ago In comments on the Forest Plan, I believe the desire for visual quality was often expressed as opposition to timber harvesting, especially clearcutting and more road construction, or support for more wilderness or semiprimitive designations I constantly receive comments regarding "scars on the mountain" from past practices. Consequently, I believe the most important issue to many people on a short-term, day-to-day basis is how the Forest looks Some people will accept no reduction in visual quality. Others believe that we, as managers, are overreacting to the adverse effects of past practices and that the increased costs of timber production resulting from measures required to protect visual quality are unwarranted

Forest land contributes greatly to the charm and scenic beauty of the Bitterroot Valley Of the nonwilderness part of the Forest, 46 percent is highly visible from residential areas in the valley and major travel routes (EIS, Chapter III). In addition, the preponderance of steep slopes and slow vegetative recovery limit our options and ability to mitigate all adverse effects of timber harvest and road construction on visual quality (EIS, Chapter III) (Forest Plan, Chapters II and III).

Alternative E2 provides a high level of visual quality on the portions of the Forest that are readily visible from population centers, Highway 93 and the West Fork, Nez Perce Fork, East Fork, Sleeping Child and Skalkaho Roads (Forest Plan, Chapter III, MA's 3a, 3b, and 3c). High visual quality will also be retained in areas adjacent to secondary recreation travel routes, mostly fishing streams, that receive significant recreation use (Forest Plan, Chapter II, MA1). The intent is to provide pleasing surroundings adjacent to favorite campsites, trails, and attractions such as meadows, and to meet the general expectations of recreationists.

I accept some reduction in timber volumes and the increased costs associated with dispersal of timber harvests to maintain pleasing landscapes in these portions of the Forest.

5. Water Quality and Fish

Clean water and protection of fish habitat from sediment emerged as the most important issue after the Proposed Forest Plan was issued. People were concerned about projected fish population reductions, whether the proposed activities would meet State water quality standards, and whether monitoring would receive adequate financial support. Some people believe the current and projected water quality is just fine and others believe we should eliminate all resource uses which might affect water quality

I realize the cumulative effects on water quality and aquatic habitat come from many uses in many different places, and that trends are difficult to assess and quantify and may not be apparent until serious consequences have occurred. Therefore, until predictive tools (EIS, Chapter III) (Forest Plan, Chapter IV) are refined, calibrated for local use and can be consistently applied with results that are professionally acceptable, I am taking a conservative approach.

I am not willing to accept the projected loss of fish in alternatives with more development than E2 (EIS, Chapter II), even though fish habitat improvement projects could recover a portion of the potential loss On the other hand, I will not make a no-risk decision on water quality by precluding management or use of other resources I believe Alternative E2 achieves the middleground Predicted sediment delivery to streams for the selected alternative are near the point where sediment is expected to affect fish populations (EIS, Chapter II) Current efforts to gather data to

calibrate the models for local use will provide the time to amend or revise the Forest Plan well before the projected threshold is reached (Forest Plan, Chapter IV)

The Forest Plan, Alternative E2, includes explicit standards called soil and water conservation practices to protect water quality and fisheries (Forest Plan, Chapters II and III) It sets clear direction to meet State water quality standards, includes measures to mitigate sediment, and has an adequate monitoring system (Forest Plan, Chapter IV). Riparian areas, which are acknowledged as the most important portion of the Forest for water quality, fisheries, wildlife, recreation and timber values and therefore deserve special attention, have been placed in a riparian management area (Forest Plan, Chapter III, MA 3b). I accept the resultant reductions in timber volumes, grazing and economic efficiency to accommodate and protect the aquatic environment. I also view fisheries habitat improvement as desirable to correct some past practices or natural habitat deficiencies However, protection which does not require extensive habitat improvement as a mitigation measure is the best management, and I believe this alternative provides that level of protection About 5 acres per year of fisheries habitat improvement will be done on streams where substantial improvements in habitat can be expected, including the East Fork and West Fork (Forest Plan, Appendix G)

6. Wildlife

I believe wildlife values on the Forest are important to the lifestyles of most users. It is also clear from responses to the Forest Plan that the big-game resource, especially elk, is highly valued locally and nationally and is important to the State's economy and tourism industry Elk, a management indicator species, will be monitored to assure that elk and deer habitat is maintained

The elk population is at the desired level throughout most of the Forest but its maintenance is dependent in part on two factors under Forest control, winter habitat and security. Winter range will be managed in accordance with the Winter Range prescription which optimizes the cover/forage ratio and the Partial Retention prescription which provides for up to 50 percent cover Prescribed fire, pruning and thinning are also planned on 285 acres per year to maintain desirable habitat.

Security on winter and summer range is necessary to protect elk during the hunting season and maintain current hunter opportunities. Semiprimitive recreation and wilderness areas will provide security in some areas but road closures will be utilized to meet the habitat effectiveness standards in the Forest Plan (Forest Plan, Chapter II).

Even though 66 percent of the Forest will remain roadless, other wildlife species will be provided for on their traditional ranges in the suitable timber base by assuring habitat diversity. Diversity will be assured by maintaining old growth for viable populations of old growth dependent species on land designated for intensive timber management, such as Management Area 1. The most critical old-growth habitats, riparian areas, will be managed to sustain 25 to 50 percent old growth levels and will be monitored through changes in the population of cutthroat trout, an indicator species Pileated woodpecker and pine marten management indicator species, which are associated with dead and defective tree habitat, will be monitored to assure maintenance of viable population levels

Although the Forest has no known population of threatened or endangered species, it does have potential habitat The Selway-Bitterroot ecosystem has been identified as a possible recovery area for grizzly bear and gray wolf. The cliffs along the east edge of the Bitterroot Mountains may also be suitable for peregrine falcon All the potential recovery areas are in management areas that protect suitability for threatened and endangered species. (Forest Plan, Chapter III, MA's 5, 6, 7b and 7c). Plants identified as rare will be protected pending study and proposal as threatened and endangered

7. Wilderness and Roadless Areas

About 405,000 acres in 11 different areas are in the Forest's roadless inventory (EIS, Chapter III) People's comments covered the range of management possibilities from wilderness or roadless designation to opening the area for timber harvest and road construction Many were opposed to more wilderness saying that existing wilderness covers almost half the Forest, and the remaining land is needed to support the timber industry and local economy. Others favored roadless designations with provisions for mechanized use, since so much of the Forest is existing wilderness and not available for such use Many favored wilderness designation for all, or portions of, the roadless area, citing wilderness as a boon to the State's burgeoning tourism industry and as the best protection for watersheds, wildlife habitat and a vanishing roadless resource. The wisdom of placing other resources at risk by perpetuating a timber program that does not recover costs was questioned. Those favoring more wilderness generally mentioned specific roadless areas The most often mentioned were the Blue Joint and Sapphire, Montana Wilderness Study Act areas, and the Selway-Bitterroot, Stony Mountain and Allan Mountain roadless areas.

In evaluating roadless lands to determine the appropriate management designations, I considered the Governor's recommendations to the congressional delegation, prior legislative proposals, people's comments, the Montana Wilderness Study Act hearing record for the Blue Joint and Sapphire roadless areas, the extent and proximity of existing wilderness, other resource values, the roadless inventory, and the analysis contained in Appendix C of Environmental Impact Statement.

My recommendations for wilderness and my decision for roadless area designations pertaining to areas shared with the Bitterroot National Forest are contained in the Records of Decision of the respective Forests Appendix C of the EIS contains a description and analysis for each area The Bitterroot Forest roadless areas and my management recommendations are shown on Table 1 in the "Decision" section and are discussed below

My wilderness recommendations are preliminary administrative recommendations and are not appealable under 36 CFR 211 18. They will receive further review and possible modification by the Chief of the Forest Service, the Secretary of Agriculture and the President of the United States. Final decisions on wilderness designation have been reserved to the Congress Until Congress determines otherwise, areas recommended for wilderness will be managed to protect their wilderness values

Congress is currently considering new wilderness legislation that will effect the Bitterroot National Forest The Forest Plan will be amended to incorporate any differences between my recommendations and legislative acts by Congress

Blue Joint - A Montana Wilderness Study Act Area (65,370 gross acres, 65,370 net acres)

Of the Forest's roadless areas, I believe the Blue Joint Montana Wilderness Study Act area has the most support for wilderness. I am recommending wilderness classification for the portion of the area having exceptional wilderness attributes, the 28,500-acre Blue Joint drainage (about 43 percent of the roadless area) I believe this portion of the roadless area has the greatest public support for wilderness. The drainage could be added to the adjoining Frank Church-River of No Return Wilderness in Idaho or administered as a separate unit. About 19,300 acres are recommended for semiprimitive management to provide wildlife security and retain the option for mechanized recreation opportunities in a semiprimitive setting Governor Schwinden's Wilderness Advisory Committee recommends wilderness for 42,500 acres incorporating most of the above

recommendations I am not recommending wilderness or a semiprimitive designation for the remaining 17,500 acres because of timber values and the proximity of existing development

Present wilderness characteristics in the entire roadless area will be maintained pending action by Congress.

Sapphire - A Montana Wilderness Study Act Area (44,416 gross acres, 44,116 net acres)

The Bitterroot and Deerlodge Forests share in the management of this area. This Montana Wilderness Study Act area has support for designation as wilderness. A portion of the area in the headwaters of Skalkaho Creek and the Ross Fork of Rock Creek on the Deerlodge Forest has high wilderness attributes Governor Schwinden's Wilderness Advisory Committee has recommended wilderness for this core area, about 6,000 acres are on the Bitterroot Forest. I strongly considered and could support a similar recommendation; however, at this time I favor the 27,500-acre semiprimitive designation in Alternative E2 which maintains the option for mechanized recreation use and includes the Governor's committee core area. Also, a good share of the roadless area and adjoining land with roads is a favorite snowmobiling area due to reasonable access, terrain, snow depths and open areas Few other areas on the Bitterroot side have similar attributes A corridor through the roadless area is used by snowmobilers for travel across the Sapphire Divide to Rock Creek and vicinity.

I am not recommending wilderness or a semiprimitive designation for the remaining 16,600 acres because of timber values and generally lower wilderness attributes

Present wilderness characteristics in the entire roadless area will be maintained pending action by Congress

Selway-Bitterroot and Lolo Creek - (115,331 gross acres, 115,151 net acres)

Portions of these roadless areas, primarily the canyon mouths, have exceptional wilderness attributes The upper portions of the drainages are in the Selway-Bitterroot Wilderness None of the canyons along the eastern front of the wilderness are wilderness in their entirety. However, most canyon mouths are considered an integral part of the existing wilderness by many users Consequently, there is strong and long-standing support to round out this wilderness by adding the canyon mouths to the existing wilderness I am recommending 16 of the canyon mouths, about 48,200 acres, be classified wilderness. I believe these additions will complement the existing wilderness and enhance its manageability. My selections include those canyon mouths which contribute toward a better topographically defined boundary, are major travel routes to the present wilderness or are best protected from outside influences. I believe this recommendation substantially meets the expectations of wilderness interests

I am also recommending a 600-acre addition to the existing wilderness in the headwaters of Bear Creek on the Nez Perce Forest This area was evaluated in the Bitterroot Forest's Environmental Impact Statement as a part of the Selway-Bitterroot roadless area. It also has high wilderness attributes and will markedly improve the wilderness boundary

People have also expressed the desire to maintain the roadless nature of some canyons, e g , Lost Horse, but without the use restrictions imposed by wilderness Most of the remaining canyon mouths, along with the 587-acre Carlton Lake portion of the Lolo Creek roadless area, are in the 48,300 acres designated for semiprimitive management. The Carlton Lake area will be managed for semiprimitive recreation because of an existing dam and jeep trail

I am not recommending wilderness or designating semiprimitive management for the remaining 18,700 acres because wilderness attributes are generally low and timber values moderate.

Stony Mountain (43,720 gross acres, 43,720 net acres)

The Bitterroot, Lolo and Deerlodge Forests share in the management of this area. People's comments were either pro-development or pro-wilderness for the 43,720-acre area on the Bitterroot Portions of the area have moderate to high wilderness attributes Governor Schwinden recommended wilderness for slightly more than half the Bitterroot portion of the roadless area I am not recommending wilderness because I want to retain the option for mechanized use in a roadless setting, and because roads, timber harvest and a dam intrude into the core of the area, thereby reducing wilderness attributes of the adjoining roadless land I agree that development opportunities are limited due to poor sites, extensive areas of rock and steep terrain, so about 30,700 acres will be designated for semiprimitive management.

I am not recommending wilderness or a semiprimitive designation for the remaining 13,000 acres because wilderness attributes are low and timber values moderate

Allan Mountain (102,386 gross acres, 102,286 net acres)

The Bitterroot and Salmon Forests share in the management of this area As with other roadless areas, comments were mixed, either for or against development. Pristine conditions in the center of the roadless area have been compromised by mining claim locations, dozer and jeep trails, and drill pads. I am not recommending wilderness because of mineral potential and the apparent support for a less restrictive semiprimitive designation. About 72,500 acres, 70 percent of the Bitterroot Forest's share of the roadless area, is designated for semiprimitive management

I am not recommending wilderness or a semiprimitive designation for the remaining 29,800 acres because of low wilderness attributes, proximity of existing development and moderate timber values.

Needle Creek, Swift Creek, and the Forest's Portion of the North Big Hole

These are small roadless areas totaling about 5,500 acres that adjoin the Anaconda-Pintler Wilderness. I am not recommending wilderness for these areas since they would add little to the existing wilderness and would compromise the current topographically defined ridgetop boundary Approximately 3,000 acres in the Forest's portion of the North Big Hole roadless area are designated for semiprimitive management

Sleeping Child (22,243 gross acres, 21,423 net acres)

As with other roadless areas, comments were mixed, either for or against development A semiprimitive designation is viewed as the best way to provide an island of security for elk in an area that is highly developed by roads and timber harvest. I am not recommending wilderness because of the apparent support for a less restrictive semiprimitive designation, and am designating 12,200 acres of the 21,400 acre area for such management.

I am not recommending wilderness or a semiprimitive designation for the remaining 9,200 acres because of low wilderness attributes, the proximity of developed land and moderate timber values.

Tolan Creek (7,128 gross acres, 7,088 net acres)

As with most other roadless areas, comments were mixed, either for or against development A semiprimitive designation is viewed as the best way to provide an island of security for big game in an area that is highly developed by roads and timber harvest. Many people encouraged the use of helicopter yarding if timber had to be removed I am not recommending wilderness or a semiprimitive designation because of low wilderness attributes, moderate timber values, and the expense of helicopter yarding

8. Minerals

Public comments were few on this issue, however, industry felt that we did not give enough emphasis to minerals

The Forest Plan does not approve locatable and leasable mineral exploration and development, but does provide a system to analyze applications on a case-by-case basis and provides stipulations to guide mineral exploration and development activities (Forest Plan, Appendix N). Before mineral activities take place, site-specific analysis of possible adverse effects to other resource values and uses will be made.

I believe direction in the Forest Plan provides for mineral, oil, gas and geothermal exploration and development in a manner which will provide adequate environmental safeguards The effects on other resources will be evaluated on a case-by-case basis utilizing the National Environmental Policy Act analysis process

9. Wild and Scenic Rivers

Wild and Scenic River eligibility has been included to respond to Forest Service policy and direction The direction requires the identification of eligibility and proposed classification in Forest Plans

Blodgett Creek was deemed eligible because of its outstanding scenic value and because it is an outstanding representation of glaciated valleys

Lost Horse Creek is very similar to Blodgett Creek but contains outstanding recreational values which result from a primitive road paralleling the stream to the Idaho State boundary.

The management areas which include these streams will protect their character (Forest Plan, Chapter III, MA's 3c, 5, 6 and 7c).

10. Research Natural Areas

I believe I have met Regional RNA targets, except for the "fresh marsh-deep" area which has been met by the Kootenai Forest (Forest Plan, Chapter II and Chapter III, MA 9) (EIS, Chapter III). The total area included in the 10 candidates is 12,154 acres; however, 11,666 acres of the total are in management areas 5, 6, 7a and 7b which are not suitable for timber management.

East Fork is located in the Anaconda-Pintler Wilderness and represents beaver ponds

Bass Creek represents the grand fir/queencup beadlily and other moist site habitat types, and is located in one of the Selway-Bitterroot recommended wilderness additions.

Bitterroot Mountain Snow Avalanche, Lower Lost Horse Canyon and Upper Lost Horse Canyon are located in a semiprimitive recreation area and represent many vegetative habitat types from the drier Douglas-fir series to the moist western redcedar/queencup beadlily, and a "low production potential lake "

Bitterroot River is an isolated 40-acre parcel along the lower Bitterroot River and represents a river.

Boulder Creek represents old-growth ponderosa pine stands on Douglas-fir habitat types and a "Type 1 stream".

Salmon Mountain is in the Frank Church-River of No Return Wilderness and represents many high elevation targets including subalpine fir, whitebark pine and alpine larch habitat types and stream, spring and lake ecosystems

Sapphire Divide is in a semiprimitive recreation area and is an outstanding example of alpine larch types.

Sawmill Creek represents various grass types, and ponderosa pine, and Douglas-fir/bunchgrass types.

B. Social and Economic Stability

I considered the social and economic consequences of the various alternatives as I arrived at my decision. The effects are displayed in the Environmental Impact Statement

From a social perspective, I believe Alternative E2 is the most desirable. It makes available for sale the volume of timber important for community stability. At the same time, it maintains amenities important to local residents as well as visitors. I believe the Forest Plan provides for the continuation of lifestyles that are dependent upon existing use and management of the Forest. Consideration of these factors was an important part of my decision to balance the needs for jobs and economic stability with environmental values I believe Forest Plan Alternative E2 provides the balance.

C. Environmental Quality

Environmental quality was a major consideration in selecting Alternative E2 as the basis for the Forest Plan. I compared the magnitude of environmental consequences among the alternatives and individual management activities Air quality will be maintained within legal limits. Water quantity, during the summer, will be maintained. Water quality will meet or exceed State water quality standards Soil erosion will be minimized and long-term soil productivity maintained. Visual quality will be maintained. Aquatic habitat will be protected and fish populations maintained. Forest management will improve the health, vigor and diverse mosaic of the Forest and reduce the risk of insect and disease epidemics and catastrophic wildfire.

The management standards developed to protect environmental quality are displayed in Chapters II and III of the Forest Plan. These standards provide the specific direction and mitigating measures to assure that long-term productivity is not impaired by the application of short-term management practices

The environmental consequences of the various alternatives are discussed in Chapter IV of the Environmental Impact Statement. Environmental consequences will be monitored to ensure compliance with the Forest Plan and applicable laws and regulations (Forest Plan, Chapter IV) The adverse effects that cannot be avoided are identified by resource activity in Chapter IV of the Environmental Impact Statement.

Although the application of Forest-wide standards is intended to limit the number and duration of adverse effects, the following are associated to some extent with all alternatives.

Potential short-term increase in sediment during road construction and minor changes in peak flow associated with timber harvest activities.

Short-term reduced air quality from dust, smoke, and automobile emissions resulting from recreational use, timber, wildlife and range management activities

Consideration of all these factors led to my selection of Alternative E2 as the Forest Plan I believe this alternative improves the environmental quality of the Forest over the current direction, Alternative F, and the Proposed Action, Alternative E, displayed in the Draft Environmental Impact Statement

D. Economic Efficiency

In determining the most economically efficient alternative, the Forest Service uses an estimate of present net value, which is the difference between all present and future benefits and costs discounted to the present. Values for outputs are determined in the marketplace for resources, such as timber or assigned for resources that do not produce revenue, such as recreation Present net value cannot be used to value some resources, such as a scenic view, so I used a criterion called maximization of net public benefits, which includes the present net value for resources that produce revenue and subjective consideration for those that do not, to aid in selecting the Forest Plan

Related to the issue of economic efficiency is the controversy over below-cost sales which has become a National concern In the past 3 years, overall timber related costs have not been recovered by Forest-wide timber sale receipts. This has been a management concern, and emphasis is being placed on reducing timber management and related costs Regional direction requires additional project level analysis of each timber sale over one million board feet to assure that the sale has been designed with the most cost-effective measures possible in keeping with environmental concerns. Therefore, "below-cost" sales that may occur are the least cost method of accomplishing the Forest Plan goals and objectives.

Since it is impossible to meet the desires of all people simultaneously, I felt it was necessary to evaluate how opportunities change, by alternative, under varying combinations of criteria This helped my understanding of the interactions among resources, and aided in my decision of which alternative best maximizes net public benefit Table 4 displays each alternative arranged in order of decreasing present net value (PNV) It also shows estimated outputs for a select group of values relating to the major issues used in my selection of the Alternative E2, the Forest Plan Detailed discussion of the calculation of PNV is found in Appendix B of the Environmental Impact Statement Chapter II of the Environmental Impact Statement also has an expanded discussion of the reasons for changing PNV among the alternatives.

Present net value is a measure of long-term economic efficiency. I also evaluated short-term

economic efficiency (first decade) of the timber program (EIS, Chapter II and Appendix B) since it is both a Forest and a national issue and is by far the biggest portion of potential budgets. A short-term analysis is fiscally prudent in this era of declining budgets and a national resolve to balance the federal budget.

The following discussion presents the differences among the alternatives that have a higher present net value than the Selected Alternative (Alternative E2).

Table 4
Alternatives and Outputs Arranged by Decreasing PNV

	Unit 1/	Benchmark	ALTERNATIVES									
		Max PNV	A	B	C	H	F	E2	E	G	E1	J
PNV												
Present Net Value 4%	MM$	206	148	143	125	103	103	99	96	91	85	62
EFFICIENCY												
Avg annual receipts minus costs Decade 1 2/	MM$	-2 1	-4 8	-3 9	-3 7	-4 0	-4 5	-3 2	-4 5	-4 3	-5 8	-4 2
Avg annual timber receipts minus timber costs 3/	MM$	+0 5	-1 8	-0 8	-0 4	-0 7	-1 9	+0 5	-1 2	-0 5	-2 4	-0 6
BUDGET												
To implement Forest Plan, Decade 1 2/	MM$	4 0	7 3	7 3	7 2	6 0	6 0	5 6	6 7	6 6	8 0	5 5
EMPLOYMENT												
Change from current Forest related employment Decade 1	%	78	133	125	121	96	102	99	108	106	120	84
INCOME												
Change from current Forest related income Decade 1	%	74	137	126	121	95	100	100	105	105	121	79
TIMBER												
Suitable timberland	M acres	586	570	569	518	366	451	390	449	464	449	316
Allowable Sale Quantity	MMBF	16	58	51	49	27	33	33	36	35	44	18
DIVERSITY												
Seedlings - Suitable base at end of 100 years	%	42	37	40	34	33	30	24	28	26	31	24
Poletimber - Suitable base at end of 100 years	%	34	29	29	27	27	25	26	25	23	24	20
Sawtimber - Suitable base at end of 100 years	%	12	25	20	21	22	21	29	29	24	25	24
Old Growth - Suitable base at end of 100 years	%	11	9	11	11	18	19	24	21	26	20	33
VISUAL												
High visual quality objective as a % of suitable timber base	%	0	0	16	16	17	28	30	24	39	24	61

FISH/WATER												
Riparian area assigned to riparian prescription	%	0	0	17	18	21	28	100	36	38	36	NA
Nonwilderness catchable fish compared to current, end Decade 1	%	100	85	92	85	86	86	100	86	86	76	100
Nonwilderness catchable fish compared to current, end Decade 10	%	61	70	91	77	84	83	100	85	83	85	100
Sediment level above current, end Decade 1	%	4	11	12	11	6	8	5	9	8	13	4
WILDLIFE												
Elk winter range assigned to winter range prescription	%	0	0	41	62	22	32	51	41	40	41	39
ROADLESS												
Recommended for Wilderness	M Acres	0	0	50	98	296	50	77	77	172	77	401
Designated to remain roadless	M Acres	133	133	100	111	66	242	214	197	95	197	0
ROADS												
New roads, annual average, Decade 1	Miles	15	42	51	49	30	35	25	40	31	61	18
Total new roads needed	M Miles	33	30	29	26	17	18	18	20	21	20	10

1/ MM$ = Millions of dollars
% = Percent
MMBF = Millions of board feet
M Acres = Thousands of acres
M Miles = Thousands of miles

2/ Excludes Job Corps but includes fire protection, road maintenance, etc

3/ Excludes fire protection, road maintenance, etc

Alternative A has the highest PNV and with B would be the second most expensive to implement. PNV is $58 million less than the maximum PNV benchmark The reduction is primarily due to scheduling a high level of timber harvest in the first decade and continuing that level on land that does not become economically efficient for timber production until later decades when timber values are expected to be higher, dispersal of timber harvest to achieve a minimum visual quality objective, and increasing recreation management from a low to moderate level.

The alternative maintains a high level of timber production accompanied by high costs Costs exceed receipts by $4.8 million per year in the first decade Few specific objectives to resolve other resource issues such as visual, wildlife, fish, water and roadless areas are addressed I find the alternative deficient in these respects and believe the lower PNV of Alternative E2 is justified to resolve these issues. Further, I do not believe the high implementation costs or disparity between timber receipts and costs are in line with declining budgets and our national resolve to balance the federal budget

Alternative B has the second highest PNV and with A would be the second most expensive to implement. The $5 million reduction between Alternatives A and B is primarily due to increasing the visual quality objective adjacent to major travel routes to a moderate level and maintaining optimal cover/forage relationships on the most heavily used portions of elk winter range

The alternative maintains a high level of timber production accompanied by high costs. Costs exceed receipts by $3 9 million per year in the first decade. A high resolution of the timber issue is achieved. Objectives to minimally resolve visual, wildlife, fish, water and wilderness issues are addressed, but not to the degree that I feel is necessary to respond to these issues I accept the lower PNV of Alternative E2 as a necessary tradeoff to resolve these issues. I also believe the high implementation costs and disparity between timber receipts and costs are contrary to the prospect of declining budgets and our national resolve to balance the Federal budget.

Alternative C has the third highest PNV and would be the fourth most expensive to implement The $18 million reduction between B and C is primarily due to reducing the suitable timber base to 88 percent of the tentatively suitable timberland This reduction in PNV is somewhat offset by eliminating the high costs of providing access to isolated pockets and stringers of timberland removed from the suitable base Increasing the area managed for optimal cover/forage ratios on elk winter range also contributes to the reduction in PNV.

The alternative maintains a high level of timber production accompanied by high costs Costs exceed receipts by $3 7 million per year in the first decade. A high level of resolution of the timber issue is achieved Objectives to resolve visual, wildlife, fish, water and roadless/wilderness issues are addressed, but not to the level that I believe maximizes net public benefits I believe Alternative E2 achieves a substantially better resolution of visual, fish and water quality, wilderness and semiprimitive recreation issues, and I accept a lower PNV necessary to achieve these goals I also believe the high implementation costs and disparity between timber receipts and costs are contrary to the prospect of declining budgets and our national resolve to balance the federal budget

Alternative H has the fourth highest PNV and would be much less expensive to implement than Alternatives A, B or C since development is confined to currently roaded land The $22 million reduction in PNV between C and H is primarily due to reducing the suitable timber base to 62 percent of the tentatively suitable timberland The reduction is partially offset by decreasing the area managed for optimal cover/forage ratios to the most heavily used portion of elk winter range.

The alternative provides timber production somewhat below the sales level in the past 10 years.

Costs exceed receipts by $4.0 million per year in the first decade. Objectives partially resolve timber, visual, wildlife, fish and water issues and nearly maximize wilderness and semiprimitive designations, but not to the level that I believe maximizes net public benefits I believe Alternative E2 achieves a better balance between primitive and semiprimitive recreation and resolution of timber, visual, and fish and water quality issues I accept the reduction in PNV necessary to achieve these goals. Although implementation costs are more in line with declining budgets, I do not believe the disparity between timber receipts and costs reflect our national resolve to balance the federal budget.

Alternative F and Alternative H have the fourth highest PNV and a moderate cost of implementation There is no reduction in PNV between Alternatives H and F. A potentially higher PNV is due to the assignment of 77 percent of the tentatively suitable land to the suitable base and reduction of the level of recreation management, but this is offset by higher costs associated with optimizing elk winter habitat, helicopter removal of timber from unroaded big-game security areas, and achievement of a high level of visual quality adjacent to major travel and recreation corridors.

The alternative provides for timber sales somewhat above the levels of the past 10 years Costs exceed receipts by $4.5 million per year in the first decade. Objectives substantially resolve visual, wildlife and roadless designation issues with partial resolution of timber, fish, water and wilderness issues. I believe Alternative E2 achieves a better resolution of fish and water quality, and economic issues, and I accept the lower PNV to achieve these goals. Although costs are more in line with declining budgets, I do not believe the disparity between timber receipts and costs reflect our national resolve to balance the federal budget

E. Compatibility With Other Public Agencies' and Indian Tribe Goals

Efforts were made to ensure that the selected alternative was responsive to the goals of other public entities (EIS, Appendix A). Four coordination meetings were held with the Governor's Interagency Planning Task Force, and three with Region 2 of the Montana Department of Fish, Wildlife and Parks. Several discussion sessions were conducted with the Ravalli County Conservation District Board of Supervisors. The Ravalli County Commissioners, the Division of Forestry and the Water Quality Bureau were contacted in person or by mail. Personal or mail contact was established with other Federal agencies having jurisdiction by law, or expertise regarding water quality, threatened or endangered species, historic trails, cultural resources and mineral and energy resources Comments, plans and goals from these public agencies were used to develop alternatives and management standards.

Contact with Idaho agencies was not extensive since there were few decisions to be made Except for several narrow road corridors, the Idaho portion of the Forest is wilderness

The Salish Tribe's culture committee identified several sites of religious or historic significance and mentioned that others might be present. A standard has been included in Chapter II of the Forest Plan requiring coordination with the tribe during the planning for ground-disturbing activities

Montana Department of Fish, Wildlife and Parks biologists conducted fish population surveys, assisted in the identification of important wildlife habitat and in the development of management standards for elk winter range, big-game security areas, riparian habitat, and Forest-wide road management standards. Recommendations from the "Coordinating Elk and Timber Management" report and the Montana Fish and Game Commission's road management policy have been included as Forest-wide standards in Chapter II of the Forest Plan.

A primary concern of the Montana Department of Health and Environmental Sciences centered on

projected fish reductions and the State water quality standards which include fish as a beneficial use. In the selected alternative, present fish populations will be maintained (EIS Chapter II) by reducing sediment and expanding the riparian management area. In addition, soil and water conservation practices as identified in draft Forest Service Handbook ("Soil and Water Conservation Practices", FSH 2509 22), will be incorporated into all management activities that could affect water quality.

The Fish and Wildlife Service of the U S Department of Interior has identified the Selway-Bitterroot ecosystem (boundaries undefined) as a possible recovery area for the grizzly bear and gray wolf (EIS, Chapter III) Interagency efforts to identify potential habitat have begun. I believe existing and recommended wilderness and semiprimitive designations provide adequate interim protection pending identification of suitable habitat and establishment of recovery goals The Fish and Wildlife Service has issued a non-jeopardy opinion (June 17, 1985 and September 26, 1986) on the effect of the Selected Alternative on the bald eagle and peregrine falcon

F. Contributions to the Community

I believe my decision maximizes net public benefits by providing levels of market and nonmarket outputs that minimize unwanted change in the existing social and economic structure, land use patterns, and resource values Implementation will result in a substantial contribution to the local and regional economy and quality of life. Forest products, including timber, firewood, livestock forage and possibly minerals will be provided at about the same levels as in the past 10 years A rich variety of recreation attractions and opportunities is provided in support of sustained growth in tourism and as a contribution to the unique and high quality lifestyle expectations of Bitterroot Valley residents and other Forest users.

G Anticipated Budgets

Declining budgets and the prospect of further reductions were a factor in my decision to select Alternative E2 as the Forest Plan. It is in line with, but somewhat higher than, budgets in the last few years and is significantly lower than most other alternatives (EIS, Chapter II)

H. Summary of Reasons for Selecting this Plan

As described in the preceding pages, I believe the Forest Plan provides a management strategy for the Forest that maximizes net public benefit. This is achieved by providing a balance among commodity outputs, thus providing for a historic level of local employment while maintaining or enhancing the wildlife, fish, scenic quality and diverse recreation values that are important to Forest users. Management is within the physical and biological capability of the land.

I am confident the Forest Plan provides for demands on the Forest resources for the next 10 to 15 years Many divergent opinions were considered in the development and selection of the Plan It was not possible to meet all requests and desires, however, I believe the Plan achieves a balance between commodity and amenity values, considering the range and intensity of the concerns expressed by the public on the various resources.

I made the decision to adopt Alternative E2 in light of the Forest Service mission as defined by the legislative mandate of the Multiple-Use Sustained Yield Act of 1960, and the Forest and Rangeland Renewable Resources Planning Act of 1974, as amended by the National Forest Management Act of 1976. The Forest Plan, to the best of my knowledge, complies with the legal requirements and policies applicable to the Bitterroot National Forest

Analysis of public comment on the Draft Environmental Impact Statement produced additional information that prompted us to make adjustments in Alternative E, the Proposed Action. These adjustments have been incorporated into Alternative E2. I considered the significance of the adjustments made and find no significant new information has been added or substantial changes made. I conclude that the magnitude of the change in Alternative E2 is within the range of alternatives discussed in the Draft Environmental Impact Statement and no supplement to the Draft EIS is needed.

VIII. ALTERNATIVES

Alternatives were developed to display the array of land management options and to provide analytical data to help make comparisons and to determine the relative effects of various ways of addressing the issues The planning team developed 10 alternatives including the current management direction, Alternative F. Each alternative represents a technically feasible option for management of the Forest and considers multiple resource uses in both the short and long term Each alternative ensures that the minimum management requirements discussed in Appendix B of the Environmental Impact Statement are met

All alternatives that were addressed are briefly described below. More detailed information on alternatives and alternative development can be found in Chapter II and Appendix B of the Final Environmental Impact Statement.

Alternative A emphasizes timber outputs. The most extensive road system of any alternative enhances opportunities for roaded natural recreation and mineral exploration. Visual quality is at the minimum level and no new wilderness is recommended. Practically all tentatively suitable timberland is managed for timber production. Viable populations of wildlife and fish are maintained, but on less than optimum habitat. This is the only alternative that meets the Resource Planning Act (RPA) target assignments.

Alternative B emphasizes timber outputs but responds to wilderness, visual quality, and elk and fish habitat issues that can be achieved with the least effect on market outputs. It has an extensive road system which enhances opportunities for roaded natural recreation A moderate level of visual quality is maintained in the foreground visible from major travel routes. Canyon mouths adjoining the Selway-Bitterroot Wilderness are recommended for wilderness Most tentatively suitable timberland is managed for timber production Nearly optimal habitat is maintained on heavily used elk winter range and for fish along major streams

Alternative C provides a mix of resource outputs emphasizing timber, but responds to wilderness, semiprimitive, visual quality, and elk and fish habitat issues that can be achieved with minimal effect on market outputs. High elevation areas with diverse scenery, vegetation, wildlife, geology, and lakes are designated for semiprimitive management to enhance roadless recreation opportunities A moderate level of visual quality is maintained in the foreground visible from primary and some secondary travel routes. Wilderness recommendations include those identified in Alternative B, plus additions to the Frank Church-River of No Return and Anaconda-Pintler Wildernesses About 90 percent of the tentatively suitable timberland is managed for timber production Nearly optimal habitat is maintained on most of the elk winter range and for fish along most of the larger streams.

There is no Alternative D

Alternative E provides a mix of market and nonmarket outputs with substantial resolution of roadless, wilderness, elk and fish habitat, visual quality and timber issues. Roadless recreation and security for elk are enhanced by semiprimitive management designation for widely dispersed areas with diverse scenery, vegetation, wildlife, geology and lakes. A high level of visual quality is maintained in the foreground and middleground visible from primary travel routes Canyon mouths adjoining the Selway-Bitterroot Wilderness and the Blue Joint drainage are recommended for wilderness About 75 percent of the tentatively suitable timberland is managed for timber production. Nearly optimal habitat is maintained on most elk winter range and along all fishery streams.

Alternative E1 is the same as Alternative E, except for very high timber production in the first decade It provides for accelerated road development and harvest of lodgepole pine on the premise that mountain pine beetle infestation will reach epidemic levels

Alternative E2 (Selected Alternative) provides a mix of market and nonmarket outputs. It is a modification of Alternative E, but with better protection of water quality, fish and elk habitat, and moderate resolution of roadless, wilderness, visual quality and timber issues. Roadless recreation and elk security are enhanced by semiprimitive management designations for widely dispersed areas with diverse scenery, vegetation, wildlife, geology, and lakes. A high level of visual quality is maintained in the foreground and middleground visible from primary travel routes and the immediate foreground adjacent to the larger streams. Canyon mouths adjoining the Selway-Bitterroot Wilderness, and the Blue Joint drainage are recommended for wilderness About 65 percent of the tentatively suitable timberland is managed for timber production

Summary of changes between the Proposed Action in the Draft, Alternative E, and the Selected Alternative are

Approximately 60,000 acres of the least efficient lands are not required to meet the first decade timber goal and have been removed from the suitable timber base. Much of this area is characterized by steep slopes and/or low-site quality, the same factors that would contribute to adverse affects on other resources if the land remained in the suitable base

The pace of entry and development of roadless areas will slow down. About 1 9 MMBF of timber production is attributable to Montana Wilderness Study Act areas in the first decade (Forest Plan, Chapter II and EIS, Appendix C) This compares with a 4.0 MMBF average annual decrease in ASQ for Alternative E (DEIS, Proposed Action), because of timber volume attributable to these areas Slowing the pace of development also minimizes the need for capital investment funds (EIS, Table II-26) which are used to build some roads in areas where timber receipts could pay for the road system over time, but not on the first entry.

Timber production is at a level (EIS, Chapter II) resulting in timber sale receipts that are expected to nearly recover timber-related costs Continued concern over below-cost sales has resulted in more emphasis on reducing costs and implementing efficient projects. Direction for economic analysis of individual timber sales is included in the Forest Plan to minimize below-cost sales; however, some will inevitably occur in order to achieve short- and long-term management goals

The management area emphasizing timber production has been changed to provide a better balance of multiple uses. Approximately 6,000 acres adjacent to secondary travel routes and major

streams will be managed for the partial retention visual quality objective since this area has a relatively high concentration of recreation users Some of these more popular areas include Sleeping Child Creek above the hot springs, Meadow Creek, Overwhich Creek, and Soda Springs Creek These corridors vary in width, have not been mapped, and will generally include not more than the immediate foreground (less than 300 feet) on either side of the stream or travel route. Interdisciplinary teams will identify recreation values at specific sites and map these corridors The remainder of the management area will be managed to meet modification and maximum modification visual quality objectives.

Slowing the pace of road development reduces road needs in the first decade by 42 percent. Corresponding reductions in sediment help maintain existing fisheries habitat (EIS, Chapter II)

Riparian area standards for small streams have been strengthened to provide for continual debris recruitment, filter strips, longer timber rotations and additional old growth. This will help to maintain optimal channel and riparian conditions and minimize the risk of adversely affecting downstream fisheries.

Opportunities for reducing sediment entering streams from existing roads were overlooked in the Draft Forest Plan. We have scheduled surface and ditch stabilization, and additional cross-drainage for road sections immediately adjacent to or crossing streams where sustained grades are 10 percent or more or where roads are considered high-risk for erosion.

Sediment/fish monitoring has been increased within major land and soil types that are subject to road building and development

The Winter Range prescription has been expanded to include pockets and stringers of steeper winter range that are lightly used as resting and security areas and are virtually surrounded by prime winter range.

Road management has been strengthened to provide better security for big-game animals and to provide standards that can easily be monitored.

The preamble to the monitoring plan has been reworded to describe better our intent that the level of activity be balanced by an appropriate level of monitoring

Management standards developed to protect environmental quality are displayed in Chapters II and III of the Forest Plan. These standards provide the specific direction and mitigation measures to ensure that long-term productivity is not impaired by the application of short-term management practices.

Alternative F (Current Program) continues the current program and provides resource outputs consistent with current budget constraints This is the "no action" alternative required by the National Environmental Policy Act. Management direction is provided by land management plans (Unit Plans) completed in the mid-1970's as modified by congressionally designated wilderness study areas (P.L. 95-150, November 1, 1977), wilderness legislation (P.L. 96-312, July 23, 1980), and the RARE II Final Environmental Impact Statement (January 1979). It provides a mix of market and nonmarket outputs and is responsive to issues that predate the current planning process. Roadless recreation is enhanced by semiprimitive management designations for widely dispersed areas with diverse scenery, vegetation, wildlife, geology, and lakes A high level of visual quality is maintained in the foreground and middleground visible from primary travel routes Canyon mouths adjoining the Selway-Bitterroot Wilderness are recommended for wilderness. About 75 percent of the tentatively suitable timberland is managed for timber production. Nearly optimal habitat is maintained on most elk winter range and for fish along major streams

Alternative G provides a mix of uses and outputs that respond to all major issues but with emphasis on nonmarket resources It achieves a high resolution of wilderness, elk habitat and visual quality issues, and moderate resolution of roadless, fish habitat and timber issues. Roadless recreation and elk security are enhanced by semiprimitive management designations for widely dispersed areas with diverse scenery, vegetation, wildlife, geology and lakes. A high level of visual quality is maintained in the foreground and middleground visible from primary and secondary travel routes. Areas recommended for wilderness include canyon mouths adjoining the Selway-Bitterroot Wilderness, portions of the Stony Mountain roadless area, and Blue Joint and Sapphire Montana Wilderness Study Act areas About 80 percent of the tentatively suitable timberland is managed for timber production. Nearly optimal habitat is maintained on all elk winter range and for fish along most streams

Alternative H generally limits market outputs to land that currently has roads Wilderness is recommended for most roadless area. On land with roads, the alternative responds to visual quality and elk and fish habitat issues that can be achieved with little effect on market outputs A moderate level of visual quality is maintained in the foreground visible from major travel routes. About 65 percent of the tentatively suitable timberland is managed for timber production. Nearly optimal habitat is maintained on heavily used elk winter range and for fish along major streams

There is no Alternative I

Alternative J emphasizes nonmarket values, especially wilderness, visual quality, wildlife and fish habitat, and water quality. Market opportunities are provided where consistent with these objectives Roadless recreation and elk security are enhanced by wilderness recommendations. A very high level of visual quality is maintained on all land visible from primary and secondary travel routes. Practically all roadless area is recommended for wilderness About 55 percent of the tentatively suitable timberland would be managed for timber production and no roadless area would be developed Optimal habitat for elk and fish is maintained

IX. COMPARISON OF THE ENVIRONMENTALLY PREFERRED ALTERNATIVE AND THE SELECTED ALTERNATIVE

Alternative J was determined to be the environmentally preferred alternative Implementation of this alternative would cause less physical and biological change than any of the other alternatives because ground disturbance would occur on the fewest acres Alternative J would ensure that the greatest amount of acreage on the Forest is preserved through wilderness classification and that additional development would occur only in already developed areas With about 1,150,000 acres within wilderness, more that 72 percent of the Bitterroot would not receive any ground-disturbing activities for the management of surface resources. In the developed portion of the Forest, objectives for water quality, fish, visual quality, and wildlife would assure full protection of these resources However, these resources would be impacted since timber harvest and road construction would occur in this alternative

Overall, Alternative J would provide the most wilderness, ensure the highest level of elk security, affect fisheries habitat the least, have the highest visual quality objectives, have a relatively small livestock grazing program, have the smallest suitable timber base and the lowest long-term production of timber, and require the fewest additional miles of road construction.

A comparison of management emphases and activity levels of the two alternatives is shown below

		Alternative	
Management Emphasis	Unit	E2	J
Wilderness	M Acres	820	1,144
Semiprimitive Recreation	M Acres	214	0
High Visual Quality	M Acres	117	194
Catchable Fish	M Fish	161	161
Allowable Sale Quantity	MMBF/Year	33	18
Road Construction	Miles/Year	25	12
Suitable Timberland	M Acres	390	316

Wilderness/Roadless. Alternative J would recommend an additional 401,000 acres for wilderness classification, which when added to the existing wilderness acreage on the Forest, would result in about 72 percent of the Forest being within the wilderness system. This contrasts with Alternative E2 which recommends an additional 77,000 acres for classification, resulting in 52 percent of the Forest classified as wilderness Alternative E2 would have an additional 214,000 acres in semiprimitive designation which along with the wilderness would make 66 percent of the Forest roadless The wilderness management of Alternative J would have the least environmental impact; therefore, Alternative J is environmentally superior to Alternative E2

Visual Quality Since more of the Bitterroot Forest would be in wilderness condition, the amount of timber harvest and roads less, and the visual quality objectives increased, more of the Forest would have a natural appearance in Alternative J than Alternative E2.

Wildlife. Alternative J would provide a higher degree of habitat effectiveness for species requiring late successional sere, high security, and solitude. Also, more of the Forest would be roadless big-game security and old growth than in Alternative E2

Water Quality and Fisheries. Fewer ground-disturbing activities would be required in implementing Alternative J, resulting in more watershed and fisheries protection, and less potential for erosion, sedimentation, and loss of soil productivity than in Alternative E2.

Timber Alternative J would harvest 18 MMBF/year over the Plan period compared to 33 MMBF/year in Alternative E2. The reduction in volume equates to fewer harvest acres under Alternative J which would reduce the potential for negative impacts on other resources.

Economic Efficiency. Alternative J has a PNV of $62 million. Alternative E2 has a PNV of $99 million and therefore provides greater dollar benefits.

Economic Impact Alternative J results in 880 jobs over the Plan Period and Alternative E2 provides 1,040 jobs, a significant increase that is necessary to help insure a viable timber industry.

X. IMPLEMENTATION, MITIGATION AND MONITORING

A. Implementation

Implementation of the Forest Plan will begin 30 days after the Notice of Availability of the Environmental Impact Statement and Record of Decision appear in the *Federal Register* (36 CFR 219.10 (c) (1))

Implementation requires moving from an existing land-use management program with a budget and schedule of activities, to the level of management outlined in the Forest Plan In areas where management activities have already been imposed, some period of adjustment may be required to attain Forest Plan goals and objectives However, as soon as practicable the Forest Supervisor will ensure that, subject to valid existing rights, all projects and contractual obligations are consistent with the Forest Plan

The schedule listing individual timber sales is not a decision in the Forest Plan on these sales. It provides public information as required by Forest Service Manual 1922.5. This schedule is subject to updates based upon budget, market or other considerations. The public will be notified, at least annually, of changes to this schedule during Forest Plan implementation

The Forest Supervisor has authority to change the implementation schedule to reflect differences between proposed annual budgets and actual appropriated funds. Such scheduled changes are considered an amendment to the Forest Plan, but are not normally considered a significant amendment or require the preparation of an environmental impact statement, unless the changes significantly alter the long-term relationships between levels of multiple-use goods and services projected under planned budget proposals as compared to those projected under actual appropriations (36 CFR 219.10 (e))

If, during Forest Plan implementation, it is determined that the best way to achieve the prescription for a management area does not totally conform to a management prescription standard, the Forest Supervisor may amend that standard for a specific project. Such site-specific amendments (36 CFR 219 10(f)) and the rationale for the changes must conform to the National Environmental Policy Act and the Threatened and Endangered Species Act and other statutory requirements

B. Mitigation

Mitigation measures are an integral part of standards for each management area and therefore an essential part of the Forest Plan. Implementation is guided by the Forest-wide management standards located in Chapter II of the Forest Plan, and by the specific management area prescriptions and requirements addressed in Chapter III of the Forest Plan The management standards were developed through an interdisciplinary effort and contain measures necessary to mitigate or eliminate any long-term adverse environmental effects Additional mitigation measures and management standards are discussed in the various appendices to the Forest Plan. The disclosure of effects described in Chapter IV of the EIS is premised on the assumption that implementing any alternative will include the mitigation of effects by employing selected mitigation measures To the best of my knowledge, all practical mitigation measures have been adopted and are included in the Forest Plan.

C. Monitoring and Evaluation

The management control system for the Forest Plan includes monitoring and evaluation. It will

provide you and me with information on the progress and results of implementation. This information and evaluation will provide feedback into the Forest planning process for possible future change.

To allay fears that monitoring will not keep pace with management activities, I have added the following to the monitoring plan: "Outputs and activities will be reduced, when necessary, to assure that programmed monitoring will properly evaluate the effects of activities" (Forest Plan, Chapter IV).

Table IV-1 in the Forest Plan displays the basic outline of the monitoring process. An annual monitoring program, developed in accordance with its outline, will be prepared as part of the Bitterroot National Forest annual work program Detailed programs will be prepared for all resources and activities requiring monitoring. These programs will be based on funds available. If funds are inadequate to properly monitor the Forest Plan goals and objectives, an analysis will be made to develop a further course of action. This may include Forest Plan amendment or revision, or dropping of projects.

The results and trends of monitoring will be described in the evaluation report and summarized periodically A report will be available for public review.

Data acquired by monitoring will be used to update inventories, to improve further mitigation measures, and to assess the need for amending or revising the Forest Plan

XI. PLANNING RECORDS

Planning records contain the detailed information and decisions used in developing the Forest Plan and Environmental Impact Statement (required in 36 CFR 219.12) These records are incorporated by reference into the Environmental Impact Statement and the Forest Plan.

All of the documentation chronicling the Forest planning process are available for inspection during regular business hours at:

Forest Supervisor's Office
Bitterroot National Forest
316 North Third Street
Hamilton, Montana 59840
(406) 363-3131

XII. RIGHT TO APPEAL

This decision is subject to appeal pursuant to 36 CFR 211.18. Notice of appeal must be in writing and submitted to

James C Overbay, Regional Forester
Northern Region
USDA, Forest Service
P.O. Box 7669
Missoula, MT 59807

Notice of appeal must be submitted within 45 days from the date of this decision or within 30 days after publication of the Notice of Availability of the Environmental Impact Statement and Forest Plan in the Federal Register, whichever date is later. A statement of reasons supporting the appeal and any request for oral presentation must also be filed within the same period for filing a notice of appeal

James C Overbay

JAMES C. OVERBAY
Regional Forester

SEP 30 1987
Date