RECORD OF DECISION
FOR
USDA FOREST SERVICE

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

Madison, Gallatin, Park, Meagher, and Sweet Grass Counties in Montana

September 1987

GALLATIN NATIONAL FOREST
RECORD OF DECISION
FOREST PLAN
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I. INTRODUCTION

A. 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 Gallatin National Forest. That Alternative, known as Alternative 7 is the best strategy for management of the Forest over the next 10 to 15 years.

Alternative 7, the selected alternative, is contained in the document titled *"Forest Plan"*, Gallatin National Forest (August, 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 August 1987.

B. 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 7 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.

C. What will happen to existing plans on the Gallatin 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All previous resource management plans will be superseded by the Forest Plan, once it is adopted.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.

D. 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)).

E. What is not being decided?

The Forest Plan contains general 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 Forest. Recommendations for those areas have already been made, or soon will be made, in the Forest Plan Record 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 210 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 Forest is located in the Rocky Mountains of southern Montana, extending about 100 miles from east to west and about 125 miles north to south. It shares a long, common border with Yellowstone National Park on the south. The Forest occupies portions of Gallatin, Madison, Meagher, Park, and Sweet Grass counties.

There are 1,735,412 acres of National Forest lands within the Forest boundary. National Forest System land is generally in large blocks with 415,826 acres of other ownership inside the boundary. The Gallatin is adjacent to Yellowstone National Park which, along with Grand Teton National Park and 6 National Forests, makes up the majority of the Greater Yellowstone Area.

The Gallatin consists of six mountain ranges and a high-altitude plateau. The rugged peaks and highlands of the Absaroka-Beartooth Mountains make up the easternmost part of the Forest. The Gallatin and Madison Ranges that face each other across the Gallatin River Canyon form the western half of the Forest. To the north, the Gallatin Forest includes the Bridger and Crazy Mountains.

The Forest contains the headwaters of the Gallatin, Madison, Yellowstone and Boulder Rivers and provides approximately two million acre feet of water to the Missouri River system.

The Gallatin National Forest supports a diverse pattern of plant communities. Typically, the mountain ranges of the Forest graduate from grasslands at the lowest elevations into limber pine and/or Douglas-fir forests, then into lodgepole pine, and finally into spruce or subalpine fir forests. Higher yet, whitebark pine continues to timberline and then there is alpine tundra or alpine turf.

The Forest provides habitat for approximately 330 wildlife species. Species richness and diversity now exists on the Forest because of a broad variety of habitats available. Well distributed elk herds, including two large migratory elk herds, a large native population of mule deer and stable populations of moose, bighorn sheep, mountain goats, black bear and white-tailed deer inhabit the Forest. The Forest also provides habitat for two endangered species (bald eagle and peregrine falcon) and one threatened species (grizzly bear). The Gallatin was once part of the gray wolf's range, although no wolf packs now exist on the Forest.

III. THE RELATIONSHIP OF PEOPLE TO THE FOREST

Human occupation and use of lands that now include the Gallatin National Forest began at least 10,000 years ago. Prehistoric Native Americans made use of the large variety of forest and grassland resources available throughout the prehistoric period. Aboriginal peoples developed a series of cultural adaptations centered around big game hunting, and the gathering of plants for subsistence, medicinal use, and religious ceremonialism.

These nomadic tribal organizations endured through several thousand years of slow but persistent cultural evolution until disrupted by the advent of Euro-American emigration into southwestern Montana.

Euro-American exploration began with the Lewis and Clark expedition of 1804-06. The report prepared by Lewis and Clark, and eye-witness accounts by expedition members, did much to encourage the first commercial exploitation of the Gallatin's resources. Fur trapping, to supply domestic and European markets, began in 1807 with the establishment of a temporary trading post at Three Forks. Over the next 40 years fur trading remained the dominant activity in this portion of Montana.

The discovery of gold and silver in southwestern Montana ushered in the next major era of resource extraction. The principal areas of mining for precious metals occurring in and near the Gallatin were at Yellowstone City and Emigrant (1860's), Independence and Cooke City (late 1870's and 1880's). Coal mining in the Trail and Meadow Creek drainages began in the late 1860's, and by the mid-1870's was an important economic enterprise.

The livestock industry began growing in the Bozeman and Livingston areas when Nelson Story drove the first herd of Texas cattle into Montana in 1866. Cattle, and by 1900, sheep made important use of the Gallatin's summer ranges to carry them through each grazing year.

Utilization of the Gallatin's timber resources followed quickly after initial settlement. Domestic use included logs for houses, posts for fences, and firewood. By 1870, numerous sawmills were turning our lumber to supply the local market. Later, commercial lumbering included the production of ties for the Northern Pacific Railroad (1883) and the Milwaukee Railroad (1893).

Recreation has been an important part of the Gallatin and Yellowstone Valley history from the beginning. Native Americans and whites have long praised the abundant hunting and fishing available. The outstanding scenery has attracted visitors for over 100 years. The Nation's first National Park, Yellowstone, was established in 1872 to preserve the area's natural wonders. Tourist-based industries, such as dude ranching, got their start in the upper Yellowstone Valley with the establishment of Montana's first dude ranch (the OTO) in the 1890's.

Today the primary social and economic impact area for the Forest is Gallatin, Madison, Park and Sweet Grass Counties in Montana. In 1980, almost 63,000 people lived in these counties.

People visit and live in the area because of the picturesque rural mountain environment, rich in its historic and cultural heritage. Native residents appreciate those values, and those characteristics have attracted a steady stream of new immigrants to the area. Many people see the Forest as being very important in their lives. At public workshops people have said that activities such as hiking, camping, picnicking, hunting and fishing, snowmobiling and skiing, and firewood gathering are significant. Watersheds, big game, wilderness, livestock, minerals, oil and gas, and timber are resources which people have identified as important to them.

As one can readily see, the Forest description can only be complete when written in the context of people: those who reside close and those who have a tie -- be it financial or through the heart. The natural environment and people are not separate entities. They are an integral part of life.

IV. A VISION OF THE FUTURE

The Forest Service's vision of the Gallatin 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 Forest resources in meeting the present and future needs of society, as well as those of future generations. 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 and effected by the Forest Programs.

Through implementation of the Forest Plan, the Gallatin National Forest will provide a variety of resources, uses, recreational experiences, and services to the public while assuring protection of soil, water, scenery and cultural resources. Achievement of this mission is dependent upon an interdisciplinary approach to management of National Forest programs and projects.

During the 10 to 15 year period of time covered by this Forest Plan, the Gallatin will progress to be a more diverse Forest. The distribution and variety of vegetative cover will remain about the same but progress will be made toward balancing and evenly distributing the age of trees on the suitable timber lands. Timber will be harvested where needed to accomplish multiple-use objectives and to provide an opportunity for local employment.

Within 10 years the Forest will have approximately 43 percent wilderness, 34 percent roadless and 23 percent developed or having road access. Most of the existing roadless lands outside of classified wilderness will not undergo significant change in the next dec-

ade, and thus remain in an unroaded condition to provide opportunities for dispersed recreation. Oil and gas development may occur but the complex geology of the area tends to make development slow.

The condition of recreation facilities will improve as the funding for replacement and maintenance of facilities increases. Both developed and dispersed recreation use will continue to increase. Through continued public contact the Forest will monitor the public's desires and make adjustments as necessary.

Special emphasis will continue to be focused on threatened and endangered species. Recovery of the grizzly bear, bald eagle, peregrine falcon and gray wolf will continue to be of major concern in the Gallatin National Forest.

Some changes will be evident in livestock grazing as more intensive management is implemented to distribute forage between livestock and big game animals and to protect riparian areas.

New roads and timber harvest will be visible in some previously unroaded areas.

The vision for the Gallatin National Forest assures a commitment to listen to the public and respond to its needs promptly with courtesy and fairness. It envisions a dedication to being good neighbors, working cooperatively, inviting the involvement of others, and extending recognition for accomplishments.

V. PUBLIC PARTICIPATION

Public involvement was essential to the development of Forest Plan issues and alternatives. A Notice of Intent to prepare the Forest Plan and Environmental Impact Statement was published in the Federal Register on October 29, 1980. Early in the planning process, public issues were identified. These issues were the driving force behind much of the planning process since they helped to determine what benefits people wanted in terms of goods, services, uses, and environmental conditions. To aid in this effort, public workshops were held during December 1980 in Bozeman, Livingston, Big Timber, West Yellowstone and Gardiner, Montana. These were followed by a mailing of 1,800 brochures listing tentative issues and inviting public response. These brochures were sent to adjacent landowners, livestock permittees, trade groups, sportsman's groups, and others who had expressed an interest in Forest planning. Two hundred and sixty-three persons attended the public workshops and 335 other persons submitted response forms after receiving the brochures. Responses from the meetings and mailing were used to develop a listing of issues for the Draft Environmental Impact Statement.

Additional public involvement was initiated in September 1983 to aid in resolution of the roadless area question. Prior to this, Forest planning efforts had examined a broad range of uses for roadless areas but had not included an evaluation for wilderness designation, except for the Hyalite-Porcupine-Buffalo Horn area of the Montana Wilderness Study Act. The Forest had relied on earlier evaluations and recommendations made in the RARE II (Roadless Area Review and Evaluation) Final Environmental Impact Statement. Responding to revised National Forest Management Act regulation 36 CFR 219.17, the Forest included an evaluation of roadless areas for wilderness in the Forest Planning process.

A cross section of people representing a broad range of interests was organized during the early part of this planning process to provide advice and to act as a sounding board

throughout the process. These people met with the Forest Supervisor and members of the planning organization several times to provide assistance in the major planning steps.

The 598 public responses received during the initial public involvement process, plus the public response to the roadless question and recommendations from the special cross section of interests, were studied to develop a list of 14 major issues to be addressed in the Draft Environmental Impact Statement. Management concerns identified by Forest Service personnel also contributed to the list. Criteria used to determine major issues included: ranking of issues at workshops, history of each issue, intensity of interest on the issue, and expected duration of each issue.

The public issues and management concerns were used to develop management alternatives which were analyzed in the planning process. A more detailed description as to how these issues were utilized in the development of the planning process is found in Appendix A of the Environmental Impact Statement.

Copies of the Draft Environmental Impact Statement, the Proposed Forest Plan, the Hyalite-Porcupine-Buffalo Horn Wilderness Study Report, or a summary overview document were provided to over 1,000 people.

Following the publication of the Draft Environmental Impact Statement in March 1985, the Forest solicited public comment. As a result of these efforts, the Forest received over 2,000 letters addressing a variety of subjects covered in the Draft Environmental Impact Statement and Proposed Forest Plan. Three additional issues were raised after public review of the Draft Environmental Impact Statement.

A general analysis of this public comment can be found in Chapter VI of the EIS. All public comment and Forest Service response is located in unbound Appendix D of the Environmental Impact Statement available for public review at the Gallatin National Forest Supervisor's Office in Bozeman, MT, and the Northern Region Office in Missoula, MT.

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

VI. DECISION

My decision is to implement Alternative 7 to guide the management of the Gallatin National Forest for the next 10-15 years. This alternative establishes a basis to resolve the issues and concerns identified for the Gallatin 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 7. I conclude the magnitude of change from the DEIS Alternative to Alternative 7, 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 on this Forest Plan speaks to the land and its many resources. Underlying these decisions are some basic philosophies. Succinctly, 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 Gallatin National Forest cannot provide everything each individual or group would like.

Some of the major aspects of the decision are:

Recreation, Roadless and Wilderness

I have decided to continue to provide for a wide variety of recreation opportunities including primitive, semiprimitive, roaded and developed experiences. The Forest Plan includes management standards and guides to implement the following actions related to this decision.

Existing campground facilities will be maintained at the current capacity while some modifications will be made to accommodate physically disabled people.

About 160 miles of trail will be reconstructed or constructed in the Plan period.

Additional public access will be provided with new roads and trails to the Forest boundary. End-of-road facilities will be provided for vehicle parking and unloading of horses, or trail and over-snow vehicles.

Wilderness recommendations are made that would increase the size of the North Absaroka Wilderness area by 480 acres and would create a new wilderness area of 21,461 acres in the Lionhead area. The Hyalite-Porcupine-Buffalo Horn area is recommended for non-wilderness uses. See Table 3, Section VII, for a description of the allocation for inventoried roadless areas.

My management recommendations for the Hyalite-Porcupine-Buffalo Horn Wilderness Study Area, which is an area included under the Montana Wilderness Study Act, PL 95-150, and recommendations for wilderness for other roadless areas are preliminary administrative recommendations. They will receive further review and possible modification by the Chief of the Forest Service, the Secretary of Agriculture, and the President prior to final recommendations to Congress, which has reserved to itself the final designation of Wilderness. Since these are recommendations and not decisions, they are not subject to appeal under 36 CFR 211.18.

Semi-primitive motorized and non-motorized recreation is established as the management direction for 512,000 acres of roadless lands which are not planned for road development. Since they are not withdrawn from oil and gas leasing and mineral exploration, some roads may be constructed for these activities to take place.

Cabin Creek

The Lee Metcalf Wilderness and Management Act of 1983 required the Forest Service to set the management direction in the Forest Planning process for the Cabin Creek Recreation and Wildlife Area established by this Act. My decision is to allow motorized trail vehicles, less that 40 inches wide, on designated routes from July 15 through October 30. This use, along with the other recreation uses taking place in the area, will be monitored to assure that the effects of the total activities are compatible with the protection and propagation of wildlife. The direction for Cabin Creek is established in Management Area 20 of the Gallatin Forest Plan.

Ski Yellowstone

My decision is to establish a management area - MA2 - in which the development of Ski Yellowstone could proceed. As stated in the goals of Management Area 2 of the Forest Plan, any eventual ski development will be guided by an approved master plan. The process which started a series of decisions on Ski Yellowstone since the Mount Hebgen EIS was completed and approved in 1977 will continue.

Wildlife and Fish

My decision increases the emphasis on improving and maintaining wildlife and fish habitat on the Forest. Implementing this direction will increase the capacity for elk winter range on the Forest from 5,600 to 6,100 animals.

Elk

Elk habitat on the key winter range in the upper Yellowstone River area will be managed to increase its capacity to support herds through the winter. (Management area 14 North Yellowstone Migratory Elk Area). This area is particularly important for elk that migrate out of Yellowstone Park to find winter feed.

To improve forage production, projects such as prescribed burning, planting, and fertilization are scheduled at the rate of approximately 600 acres per year during the Plan period.

Plan implementation will increase the amount of vegetative diversity which should improve the quality of wildlife habitat.

Fish

I have decided to implement management practices that will provide for increased habitat capacity for wild trout. Projections made in Chapter II of the FEIS indicate a potential population increase of 509,000 to 514,000 trout in the Plan period. This is accomplished by improving livestock management within riparian zones, scheduling and designing timber sales within these areas only if it will benefit resources that are dependent on riparian zones, and through scheduled habitat improvement projects.

Threatened and Endangered Species

Special management practices have been designed to provide for the recovery of the grizzly bear (Forest Plan Chapter III and Appendix G). Efforts to establish a peregrine falcon population on the Forest will be continued in cooperation with the Montana Department of Fish, Wildlife and Parks, and the Peregrine Fund. Bald eagle habitat will be managed in accordance with the Interagency Bald Eagle Management Plan for the Greater Yellowstone Area.

The Forest Plan contributes to the recovery of all listed threatened and endangered species. Direction is established in the Plan to cooperate in the re-establishment of threatened and endangered species on the Forest and in the Greater Yellowstone Area.

Domestic Livestock

Livestock grazing opportunities will increase from 43,400 animal unit months to 44,900 animal unit months in the next 10 year period. This increase will be a result of implementing more intensive management to distribute use and control the use of available forage. The Forest Plan gives wildlife the priority in grazing areas involving key big game winter range.

To protect the resident bighorn sheep population, I have decided not to permit livestock use in the Windy Pass area.

I have decided to treat noxious weeds at the rate of 400 acres per year to confine present infestations and prevent newly infested areas. Treatment will include chemical, biological and mechanical methods.

Timber

The allowable sale quantity (ASQ), or volume which can be sold, will average 21 million board feet annually during the first decade. This includes a non-interchangeable component of 5 million board feet per year of merchantable dead sawlogs and post and poles. This is equal to the annual average amount of timber sold in the last ten years. The annual timber harvest program will vary from an average of 21 million board feet because of factors such as economics, volume of timber under contract, and salvage of timber products resulting from fires and insect or disease problems. The projected second decade harvest level for the Gallatin remains at 21 million board feet.

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

I have decided to include 305,000 acres of the 440,000 acres of tentatively suitable lands in the suitable timber base. For a detailed breakdown of the suitable timber base see Table 4 "Timber Resource Land Suitability," in Section VII. Rationale for the Decision.

It will be necessary throughout the life of the Forest Plan to incur below-cost timber sales (sales in which cost exceeds what is received) to achieve the objectives of multiple-use management as well as to provide jobs.

Even-aged Management

Even-aged management, which includes shelterwood, seed tree, and clearcut silvicultural systems, will predominate. Uneven-aged management will be used where it is biologically feasible and consistent with management objectives. Ultimately, the selection of the silvicultural system will be based on site-specific evaluation of biological and management factors at the project level. Clearcutting will be used where it is determined to be the best method to meet the objectives and requirements of the Forest Plan. Refer to section VII of this document and Appendix A in the Forest Plan.

Water Quality

The Forest Plan establishes standards for use throughout the Forest and direction for each management area to meet or exceed current State and Federal water quality standards. These and other standards are found in Chapter II of the Plan, throughout Chapter III, and in Appendix C.

This direction will be accomplished through objectives for water quality for each major drainage, careful riparian area management, application of best management practices, and improvement projects for soil, water, and fisheries.

Minerals, Oil and Gas

Leasable Minerals - All lands on the Gallatin 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, lands available for leasing with No Surface Occupancy (NSO) stipulations and lands where conditions may lead to recommendations not to lease.

a. Areas that are available for leasing using the stipulations in the Forest Plan are Management Areas 2, 3, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 19, 23, 24 and 25 totaling 930,591 acres.

b. Areas available for leasing with No Surface Occupancy (NSO) stipulations are Management Areas 1, 3a, 18, 21, and 26 totaling 30,454 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 4 and 20 totaling 774,367 acres. These areas include existing wilderness, recommended wilderness, and the Cabin Creek Recreation and Wildlife Management Area.

Locatable minerals - All lands on the Gallatin National Forest are available for entry unless formally withdrawn. About 955,931 acres on the Forest are open to mineral entry. 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 779,481 acres of wilderness areas, campgrounds and administrative sites are withdrawn from mineral entry.

Common Variety Minerals - Lands on the Gallatin 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 849,501 acres are withdrawn or development is not permitted by direction in the Forest Plan.

The classified wilderness areas and the Cabin Creek Recreation and Wildlife area have been withdrawn from mineral entry by Congress.

As directed in The Montana Wilderness Study Act, PL 95-150, the National Forest System lands within the Hyalite-Porcupine-Buffalo Horn Wilderness Study Area will not be available for mineral entry until Congress decides upon the classification of this area for wilderness.

I have decided to defer any leases for geothermal development in the Corwin Springs area until the U.S. Geological Survey can establish that geothermal explorations and development will not significantly affect the geothermal system of Yellowstone National Park.

Roads, Access and Road Management

Approximately 25 miles of road will be reconstructed or constructed each year during the next ten years to support the Forest's resource programs. Approximately 5 miles per year will be for public access.

Additional road and trail rights-of-way must be acquired to provide adequate public access and to provide for the protection and administration of National Forest System lands. Forest-wide standards in the Plan establish that about 70 percent of local roads will be closed and rehabilitated upon completion of the timber harvest activities.

We have identified 47 points at which we need access into the Forest. I have decided to attempt to acquire about 16 of these in the next decade. Decisions on the exact location and type of access to be acquired will be determined through analysis of the specific area. My emphasis will be on cooperation with landowners in acquiring these rights.

Wild and Scenic Rivers

Segments of four streams meet the eligibility criteria for potential inclusion in the National Wild and Scenic River System as Recreational Rivers under the Wild and Scenic Rivers Act. These are listed in Table 1. These streams will be studied prior to undertaking any action that would change their current status.

The Forest Plan provides protection for the "outstandingly remarkable" values of these river segments until suitability studies and future decisions on possible Wild and Scenic designations are made. The studies will require coordination with private landowners and the State of Montana due to the presence of intermingled private lands along portions of the rivers.

TABLE 1.--Potential Classification for Rivers and Streams

Stream or River	Eligible Sections	Potential Classification
Boulder River	from the National Forest boundary to Box Canyon	Recreational River
Yellowstone River	from National Forest boundary to Yellowstone Park	Recreational River
Gallatin River	from the National Forest boundary to Yellowstone Park	Recreational River
Madison River	from the National Forest boundary near the Madison Slide to Hebgen Dam. This segment includes Earthquake Lake	Recreational River

Research Natural Areas

The Gallatin recommends for study eleven areas for possible establishment as Research Natural Areas. They are listed in Table 2. These areas will provide for research, observation, and study of undisturbed ecosystems that typify important forest, shrubland, grassland, alpine, and aquatic communities, and geologic types on the Gallatin National Forest. These areas will meet the Forest's objectives for representative habitat types as listed in the Northern Region Guide. Four of the areas recommended as additions are in established wilderness.

TABLE 2.--Research Natural Areas

Habitat Type Code	Vegetative Habitat Type	Occurrence**	Candidate RNA
FOREST	TARGETS		
430	PICEA/PHMA	m	Sliding Mtn., E. Fork Mill Cr. Passage Cr.
440	PICEA/GATR	M	Sliding Mtn.
470	PICEA/LIBO	M	Passage Cr., Pioneer Lakes
480	PICEA/SMST	m	
630	ABLA/GATR	m	Mt. Ellis, Sliding Mtn., Palace Butte
650	ALBA/CACA	M	Pioneer Lakes, Wheeler Ridge
660	ABLA/LIBO	M	Black Butte, Sliding Mtn., E. Fork Mill Cr., Passage Cr., Pioneer Lakes
720	ABLA/VAGL	M	Mt. Ellis, Sliding Mtn., Passage Cr
740	ABLA/ALSI	m	Sliding Mtn., Palace Butte
820	ABLA-PIAL/VASC	M	Black Butte, Sliding Mtn., Passage Cr., Palace Butte, Wheeler Ridge
910	PICO/PUTR	m	Obsidian Sands
	COTTONWOOD	M	
NONFOREST	AGSP/BOGR	M	Black Butte
	FIED/STRI	m	
	ARAR/AGSP	m	
AQUATIC	TYPE 1 STREAM		Pioneer Lakes, Mt. Ellis, Wheeler Ridge
	TYPE 3 STREAM		Pioneer Lakes, Palace Butte
	WATERFALL		Palace Butte
	SPECIAL FAUNAL POP.		Pioneer Lakes
	RIVER		
	LOW PRODUCTION LAKE		Palace Butte
	AVERAGE PRODUCTION LAKE		Pioneer Lakes
	HIGH PRODUCTION LAKE		
	LAKE WITH FISH		Pioneer Lakes
	LAKE WITHOUT FISH		Palace Butte
	LAKE W/SPECIAL FAUNAL POP.		Pioneer Lakes
	WET MEADOW		Wheeler Ridge

** M = major occurrence satisfied by representation of 50 acres.
** m = minor occurrence satisfied by representation of 10 acres.

Visual Quality

Visual quality objectives have been established for the entire Forest and are incorporated into the objectives set for each management area. In order to protect natural-appearing landscapes, resource management activities will be guided by these objectives in areas adjacent to or readily visible from major highways (such as highways 191 and 89), roads, trails, and campgrounds and other recreational developments.

Cultural Resources

Cultural resources will be inventoried, evaluated, and protected in accordance with the National Historic Preservation Act.

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 other agency and Indian Tribe goals.

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 7 is because it responds positively and thoroughly to public issues and management concerns on the Gallatin 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. Recreation, Roadless and Wilderness Management

I believe the Gallatin Forest will continue to provide excellent opportunities to meet the demands for a wide variety of recreation activities through implementation of the Forest Plan. A large number of public comments were received that either favored more primitive recreation or more motorized recreation. I analyzed several alternatives that recommend different levels of developed, motorized, nonmotorized and wilderness recreation. I believe Alternative 7 will allow us to meet future demand for recreation and represents a balance among the resources of the Forest that provides the highest net public benefit. Classified and recommended wilderness on the Forest provides opportunities for people to seek out and enjoy primitive recreation experiences. The non-wilderness areas on the Forest will provide for those who prefer motorized recreation activity. By the end of the first decade, approximately 583,000 acres of roadless lands outside of classified and recommended

wilderness areas will provide for nonroaded dispersed recreation experiences such as camping, hunting and hiking. Additional access, facilities at the end of the road, trail management, and the Forest Travel Map provide tools to help manage recreation use so as to reduce overcrowding, disperse use and create new opportunities. Construction of new campgrounds is not planned as an adequate supply exists in the private sector.

Ski Yellowstone

During the public comment period, numerous concerns were expressed about the Ski Yellowstone Ski Resort proposed for construction on Mount Hebgen. Ski Yellowstone Inc., submitted an application and a preliminary conceptual plan for the development in October, 1973. The Mount Hebgen Environmental Impact Statement was completed for the proposal in May 1977 and a decision was made to grant a special use authorization for the project. That decision was appealed through the Secretary of Agriculture, who decided not to review the decision. This essentially concluded the appeal process.

A special use authorization was issued for a public winter sports area on National Forest System lands, contingent on the permit holder meeting requirements of Federal, state, county and municipal laws, including provisions of the Endangered Species Act of 1973. The authorization was also contingent on submittal of an updated financial plan, schedule for Phase I development, and a master plan that resolves environmental and social impacts identified in the environmental statement.

In February 1984, the Forest Service initiated a biological assessment study of Threatened and Endangered species. The permit holder was informed no action would be taken on the development plan until the biological assessment was completed and necessary mitigation measures identified.

The biological assessment was completed in June 1987. It concluded that development of Ski Yellowstone as proposed could jeopardize the grizzly bear and bald eagles. Since the resort facility would be located on private and public lands, approval to develop falls under the jurisdiction of Gallatin County, State of Montana and the Forest Service. Ski Yellowstone has been advised to take the results and findings of the biological assessment into consideration in preparing any further proposals. When an updated development proposal is submitted, I will cooperatively review the plan with Gallatin County, State of Montana and the U.S. Fish and Wildlife Service to assess concerns and to determine necessary mitigation measures. I will continue to meet National Environmental Policy Act requirements and provisions of the Endangered Species Act related to this project.

Cabin Creek

The Cabin Creek Recreation and Wildlife Area was established by the Lee Metcalf Wilderness and Management Act of 1983. The Forest Plan provides a specific management area for the land - Management Area 20. The legislation placed emphasis on the recreation and wildlife values of the area. At the same time, the bill recognized the historical uses of the area. Specific management direction for areas was decided through the Forest planning process. It was decided that the travel direction for the area was key, especially the use of motorized vehicles. The Final Environmental Impact Statement analyzed six options for travel ranging from no motorized use to no restrictions on motorized use. The six options were evaluated in terms of their effects on recreation users, grizzly bear, and elk. All options had value, but my decision to allow motorized use of specific trails from July 15 to October 30 each year was based on several factors. It allows a broad use of the Cabin Creek area by

several different types of recreation users. It allows the uses that people have been used to such as retrieving animals killed during hunting season on motor bikes or snowmobiles. The effects of the use of motorized travel, under these guidelines, have little effect on grizzly bear and elk. The U.S. Fish and Wildlife Service in final consultation said the decision has "no effect" on the grizzly recovery.

Roadless Areas

The management of roadless areas was crucial in determining the recreation opportunities. Public comments received on the Proposed Forest Plan and Draft Environmental Impact Statement made it clear that wilderness classification continues to be a major issue. Individuals and groups have provided strong arguments for and against additional wilderness on the Gallatin National Forest and the increased exposure of the issue has caused increased polarization. These arguments centered on how much total wilderness should be recommended for classification and the effect of wilderness designation on other uses. The challenge was to propose for wilderness those areas with the highest wilderness values, and to maintain opportunities for non-wilderness recreation and the use of revenue-producing resources on other lands. With the exception of the roadless lands in the Madison Range (149,250 acres), all the roadless areas were analyzed and considered for wilderness classification. The roadless lands in the Madison Range were released from further consideration by the Lee Metcalf Wilderness and Management Act of 1983 (PL 98-140). I carefully considered priced and nonpriced benefits from both a national and local perspective, along with public comments, previous legislative proposals, and the analysis contained in the Environmental Impact Statement. My recommendations pertain only to those roadless areas on the Gallatin National Forest. Decisions on roadless areas shared by other National Forests are contained in the Records of Decision of the respective National Forests. The Gallatin National Forest roadless areas and their allocations are shown in Table 3.

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

TABLE 3.--Allocation of Roadless Areas
Probable acres at end of 10 years

Roadless Area Name	1983 acres	Recommend wilderness	Managed without new roads	Managed with Roads
Lionhead	32,780	21,461	9,619	1,700
Republic Mountain	700	480	220	0
Hyalite-Porcupine-Buffalo Horn	105,700	0	91,140	14,560
Crazy Mountains	70,498	0	63,398	7,100
North Absaroka	159,259	0	151,559	7,700
Bridger Mountains	45,402	0	44,802	600
Chico Peak	10,855	0	10,155	700
Gallatin	44,482	0	42,782	1,700
Reef	2,200	0	2,200	0
Dry Canyon	2,160	0	1,560	600
Box Canyon	1,747	0	0	1,747
Beartooth	4,720	0	3,720	1,000
TOTALS	480,503	21,941	421,155	37,407

My recommendations for the roadless areas are:

Lionhead (1-963, 32,780 gross acres, 32,780 net acres)

The rugged topography provides adequate screening to create a sense of solitude. Vegetative screening also contributes to the opportunity for solitude in much of the area. The area offers some risk to winter travelers from avalanches and winter storms. Cliffs in the area offer challenging rock climbing.

Because of its high wilderness value, I am recommending 21,461 acres of the Montana portion of the Lionhead roadless area as wilderness. This area lies adjacent to 14,400 acres of roadless lands across the Continental Divide in Idaho that have been recommended for wilderness on the Targhee National Forest. If these recommendations are finalized by Congress, the total wilderness for the area would be about 36,000 acres.

I have modified the proposed boundary of the area as was identified in the Proposed Forest Plan as a result of public review and recommendations made by Governor Ted Schwinden to the Montana congressional delegation in May 1984. A 1,350 acre portion of the original proposal was dropped to provide for continued use of a popular snowmobile trail in Watkins Creek. This exclusion will be managed primarily for dispersed recreation activities in an unroaded setting.

Approximately 11,000 acres were not recommended for wilderness because the wilderness values were low and because of conflicting resource uses. This land contains oil and gas leases, scheduled winter range habitat improvement, and scheduled timber harvest.

Much of the Lionhead area has high value for wilderness. Few evidences of man's hand are apparent in the area. Natural ecological processes proceed undisturbed. The drainages are steep and forested, adding to the sense of remoteness.

Republic Mountain (1-545, 700 gross acres, 700 net acres)

The North Absaroka Wilderness lies immediately south of this roadless area in Wyoming. The north boundary of the existing wilderness is the state line between Montana and Wyoming. I am recommending that 480 acres on the Montana side be added to the North Absaroka Wilderness in order to provide a more logical topographic boundary to the existing wilderness.

In my recommendation I am excluding the private lands known as the Irma Mine along with the more gentle terrain along the northern portion of the roadless area to provide for the continued snowmobile activity between the communities of Cooke City and Silver Gate.

There is no tentatively suitable forest land or livestock grazing in the area recommended for wilderness.

The entire area is within occupied grizzly habitat. It is used by elk, bighorn sheep, mule deer and moose during snow free periods. There are no lakes or fishery streams within the area recommended as wilderness.

The area has high scenic values. It is a very massive mountain in appearance with upper reaches of rugged, sheer rock faces.

Hyalite-Porcupine-Buffalo Horn Study Area (G1-548 and H1-548, 155,000 gross acres, 105,700 net acres)

This 155,000 acre area, which contains 42,700 acres of privately owned lands and 6,600 acres of State and City of Bozeman lands, is one of nine areas included in the Montana Wilderness Study Act (PL 95-150), which Congress passed in 1977. The act requires the Secretary of Agriculture to study and make recommendations to the President on the wilderness suitability of the area. The President, in turn, is required to make his recommendation to Congress.

I am not recommending this area for wilderness classification because I believe the following management which has been analyzed in the Hyalite-Porcupine-Buffalo Horn Study best serves the public. The rugged Hyalite Peaks portion of the area will be managed as an unroaded 23,100 acre scenic and recreation area because I wanted to provide a primitive and semi-primitive recreation setting close to Bozeman and retain the option of building "hardened" camping sites to withstand heavy use. A National Recreation Trail will be established from the Hyalite Reservoir area, through the scenic area, and down the Gallatin Divide to Windy Pass. Use of the Big Sky snowmobile trail will be continued. Trail bike use will be allowed on some of the trails in the area. Approximately 33,260 acres in Porcupine and Buffalo Horn Creek areas will be managed to enhance elk and grizzly bear habitats.

Most of the area will remain unroaded to maintain its dispersed recreation and wildlife qualities. Until Congress determines otherwise, this Montana Wilderness Study Act area will be managed, subject to existing rights and uses, to maintain its existing wilderness character and potential for inclusion in the National Wilderness Preservation System. Therefore, no timber harvest, road construction, or other development will occur until Congress acts.

Crazy Mountains (1-541, 107,647 gross acres, 70,498 net acres)

I am not recommending this area for wilderness classification. Although the area has high wilderness values, about 37,100 acres of private land are located within its boundaries. These private lands occur in a checkerboard pattern that traces back to the 19th century railroad land grants. This land is owned by many different individuals, and the complexity of ownership would render efforts to consolidate the National Forest ownership into a solid block through land exchanges very difficult.

The core of the area will continue to be managed in its existing unroaded and pristine condition for a variety of dispersed recreation opportunities.

Some timber harvest will be conducted around the periphery of the area. Mitigation measures are sufficient to maintain or improve big game habitat and water quality. Additional access to the area will be sought to provide the public with improved opportunities to enjoy the National Forest.

North Absaroka (1-371, 170,684 gross acres, 159,259 net acres)

The North Absaroka roadless area is composed of twelve separate land areas contiguous to the Absaroka-Beartooth Wilderness. Ten of the units are located on the Gallatin National Forest and two on the Custer National Forest. This Record of Decision makes a recommendation for only those units on the Gallatin National Forest, although the other units were considered in arriving at this recommendation.

I am not recommending any of the ten separate areas on the Gallatin for wilderness. I believe the other resources such as timber, locatable and leasable minerals, and opportunities for motorized and non-motorized recreation available on the units will provide a greater net public benefit than adding them to the existing wilderness area.

Other Roadless Areas

The remaining roadless areas on the Gallatin have also been analyzed for their wilderness qualities. The wilderness attributes of these areas are generally low when compared to the other roadless areas on the Forest. The analysis of these areas is found in Appendix C of the EIS. Public support for wilderness classification of these areas has not been high. Six percent of the combined acreage of these roadless areas is projected to be developed in the next ten years. The remaining 94 percent will provide recreation opportunities in a semiprimitive setting without roads. I believe these areas will contribute more to the net public benefit if managed for their non-wilderness values. Refer to Table 3 for the allocation of these areas.

2. Wildlife, Fisheries and Threatened and Endangered Species Management

The wildlife and fish are among the most important resources within the Forest. Loss of big game habitat and winter range on some private lands and the high economic value of hunting have increased the importance of the Gallatin National Forest in supporting wildlife populations. The Forest also contains significant acreages of riparian and aquatic habitat which are highly productive and have diverse life forms, including several blue ribbon trout streams. My decision to select Alternative 7 is based partially on its emphasis of wildlife and fisheries values.

My assessment of the importance wildlife and fisheries values of the Forest is reinforced by the comments received on the Draft Environmental Impact Statement. A high degree of concern was expressed about fish and wildlife and their habitat. Some people discussed the impact of timber harvest, increased access, and livestock grazing on elk and grizzly bear habitat, while others voiced the idea that our attention to wildlife was having an adverse effect on the production of other resources such as timber and forage. Much of the recreational use of the Forest is oriented toward the wildlife or fishery resources--hunting, fishing, camping, hiking, and observing wildlife. The Montana Department of Fish, Wildlife, and Parks has indicated that there is a demand for big game hunting that exceeds supply. The local economy has a tourism and travel component that caters to the use of the wildlife and fisheries resources.

The direction in the Forest Plan provides considerable flexibility to manage wildlife habitats for their maintenance and enhancement. In some instances, my emphasis on wildlife and fisheries habitat is compatible with the use of other National Forest resources such as range, timber or recreation opportunities. In other instances, however, compatibility cannot be achieved, or it can be achieved only through coordinating habitat needs with activities to use or develop resources. That is why the Gallatin Forest Plan has designed some of its management prescriptions to maintain, improve or feature wildlife habitat in critical areas.

I believe the recovery of species listed as threatened or endangered is very significant because of the importance of these species to the Gallatin National Forest and to the Nation. They are protected by the Threatened and Endangered Species Act of 1967. The grizzly bear, bald eagle, peregrine falcon, and gray wolf are all species of national significance. Some people, upon review of our Proposed Forest Plan, suggested certain

changes to improve the protection and recovery of threatened and endangered species while others suggested that we gave too much emphasis to these species.

On December 3, 1985, I requested a formal consultation on the proposed Alternative 7 and Draft Environmental Impact Statement from the U.S. Fish and Wildlife Service. Their response of February 14, 1986 (Appendix H of the Forest Plan) was that, in their biological opinion, the implementation of Alternative 7, along with inclusion of changes developed through consultation with the agency and from knowledge of bear habitat, is not likely to jeopardize the continued existence of these species. These changes include additional standards in Management Area 13 - Grizzly Bear and Timber - and the addition of approximately 63,000 acres to occupied grizzly bear habitat. In addition, they felt that implementation of the Plan will have a beneficial effect on the bald eagle and the peregrine falcon. The U.S. Fish and Wildlife Service reviewed the changes and reconfirmed the biological opinion in a letter of October 8, 1986 (Forest Plan Appendix H).

The Forest will continue to cooperate with the Montana Department of Fish, Wildlife and Parks, the Peregrine Fund, and the U.S Fish and Wildlife Service in their effort to establish a peregrine falcon population.

3. Livestock Management

Public comments concerning livestock grazing were also mixed. Some people wanted the Forest to reduce the amount of grazing because of conflicts with wildlife and riparian values. Others requested that livestock grazing be increased to support local ranch operations.

My decision to implement Alternative 7 establishes direction that results in additional livestock grazing on the Forest in recognition of the critical role of National Forest rangeland in local ranching operations. The Forest Plan schedules an increase in animal unit months of grazing from 43,400 to 44,900. Without the National Forest, many of our permittees would have difficulty sustaining a viable operation because of their dependence on National Forest allotments. It is possible that the loss of these ranch operations could result in the loss of elk winter range if they are sold for non-agricultural uses or are subdivided.

In looking at opportunities to use the range resource, I have also evaluated the impacts of that use on other resources. Some of the alternatives presented in the Draft Environmental Impact Statement provided similar opportunities to increase the use of forage by livestock as does Alternative 7. These alternatives required higher investment in range improvements to protect other resource values or had the potential of adversely affecting other resources such as fisheries and wildlife. The additional forage opportunities in Alternative 7 can be provided with increased investments in intensive grazing systems without causing adverse impacts to other resources.

Implementation of Alternative 7 will require investments in structural and nonstructural improvements to enhance forage production and to distribute livestock. The cooperation of permittees in riding herd, distributing salt, maintenance and moving animals on schedule will be necessary to increase the grazing capacity while protecting riparian areas and providing forage for big game on winter ranges. If the standards protecting other resource values cannot be met while maintaining or improving range condition and trend, increases in permitted animal unit months will not occur.

Several grazing allotments used in the past are currently vacant. I am closing these allotments because of the absence of suitable range in them, changes in livestock use (from

sheep to cattle, for example), and resource conflicts. Those portions within these closed allotments that are suitable for livestock grazing will be incorporated into adjoining allotments when compatible with other resource values.

4. Timber Management

This issue is the most controversial because of its relationship to all other forest resources and uses. People have highly opposing views on timber harvest. Some view use of the timber resources as being compatible with other forest resources and see timber harvesting in the public interest. Others believe timber harvesting is generally detrimental to other forest resources and that timber harvest levels should be less than they have been in the past.

I recognize that, because of its age, much of the standing timber on the Gallatin National Forest is heavily infested with mountain pine beetle, spruce budworm, and Douglas-fir root rot. I also recognize that the local timber industry in Montana and Idaho is dependent upon National Forest timber to supply much of the raw material for mills, and that much of this timber should be harvested soon before it has deteriorated beyond its usefulness to industry.

I evaluated the alternatives that offered sale quantities in excess of the average offered annually during the past 10 years. These alternatives appear to lead to unacceptable impacts that do not provide for the highest net public benefit. On the other hand, alternatives that offered less timber did not provide an adequate amount of timber to support this segment of the local economy. Lower harvest levels also did not provide for some of the additional benefits we expect from a viable timber harvest program, such as providing roads to the National Forest and establishing diversity in species, age and size.

In evaluating the above alternatives, I also considered the supply and demand information from "Montana's Timber Supply: An Inquiry into Possible Futures," USDA Forest Service Resource Bulletin, INT-40, which projects a range of demand for central and eastern Montana National Forest timber through the year 2030. Although there is no mathematical model at present that can be used to disaggregate the range of potential demand for central and eastern Montana to a specific National Forest, in making my decision, I assumed that future demand for the Gallatin National Forest will be proportional to its market share. Using this scenario, the range of potential demand for Gallatin National Forest timber over the next 30 years would be from 16 to 24 million board feet.

Given the available timber supply and environmental considerations in Alternative 7, I feel confident that the objectives for the timber resource as well as those for timber supply will be met. Alternative 7 approximates the average volume of timber offered annually for the past 5 years. During that time, I feel we maintained and strengthened environmental quality on the Gallatin National Forest. I also believe that an annual sales quantity of 21 million board feet over the next 10 years will provide for an adequate distribution of age classes over the Forest, reduce the threat of fire, and provide an opportunity to treat insect and disease-infested timber on some of our better growing sites. I am not willing to accept the potential effects on water, fisheries, and wildlife, or major changes in the appearance of the Forest if timber volumes are increased beyond Alternative 7. The amount of timber actually offered for sale each year may vary depending on demand and our ability to prepare sales, as long as the total volume, for the 10 years is not exceeded. I am convinced that within Alternative 7 flexibility exists and is necessary to accommodate fluctuations in market conditions during the next 10 years.

Because the Plan has identified the most economically sound sites, and because of the emphasis I am placing on preparing cost effective sales, I expect to sell a higher percentage of the volume we offer. This, coupled with the volume currently under contract, should provide an adequate amount of timber to meet local demand.

While some timber sales will be below cost, I believe they are necessary at this time in order to achieve long-term objectives to resource management.

Analysis done on the suitable timber lands is discussed in Appendix B of the Final Environmental Impact Statement. Table 4 shows the breakdown of suitable lands into three different categories: lands where the direct economic benefits of timber harvesting exceed direct costs, lands where timber harvest is needed to provide multiple-use objectives for resources other than timber, and lands where timber harvest is needed to provide for local jobs, income, and community stability.

TABLE 4

TIMBER RESOURCE LAND SUITABILITY

GALLATIN NATIONAL FOREST

		ACRES	EFFECTS 1st Decade Acres	EFFECTS 1st Decade MMBF	EFFECTS LTSY MMBF
FORESTED and NON FORESTED	NOT SUITED				
	Not Capable & Non Forest	1,143,341			
	Irreversible Soil and Watershed Damage	0			
	No Assurance of Adequate Restocking	0			
	Withdrawn from Timber Production	152,071			
	Subtotal of Above	1,295,412			
TENTATIVELY SUITABLE	SUITABLE				
	* LANDS COST EFFICIENT				
	Direct Benefits Exceed Direct Costs	95,000	700	5.9	-
	Direct Costs Exceed Direct Benefits				
	Meet Non Timber M.U. Objective	134,000	967	7.7	-
	Local Jobs/Income	76,000	333	7.4	
	Subtotal of Above	305,000	2,000	21.0	27.0
TENTATIVELY NOT SUITED			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	83,000	-	no volume	6.0
	Multiple-Use Objectives Preclude Timber Production				
	Other Uses	51,100	-	-	-
	Proposed Wilderness	900	-	-	-
	Subtotal of Above	135,000	-	-	6.0
	TOTAL NATIONAL FOREST LANDS	1,735,412			

Definitions:

Note: * Volume figures include:

~ Chargeable Volume only

~ Non-Interchangeable components to meet management objectives

Effective Period: from 1987 thru 1996

About one quarter of the tentatively suitable acres is not suited at this time for reasons of economics and other resource values. These lands will be reevaluated for their suitability when the Plan is revised.

Even-aged management - There are two basic ways to manage timber stands on the Gallatin National Forest, even-aged and uneven-aged. This was the subject of considerable public comment. In determining the appropriate silvicultural systems, I considered three groups of factors.

The first group considered was the major vegetative types found on the Forest and common individual stand conditions. The Three major vegetative types found on the Forest are Douglas-fir, Engelmann spruce-subalpine fir, and lodgepole pine. State of the art silvicultural information indicates that either even-aged or uneven aged management can be used on any of these vegetative types; however, individual stand conditions are critical to the decision. (Silvicultural Systems for Major Forest Types of the United States, Agricultural Handbook 455, USDA Forest Service.) Stands with decadent overstory vegetation and sparse regeneration, and stands at high risk to insect disease epidemics are common on the Forest. Stands with a high percentage of overmature, suppressed, or diseased trees can be rapidly regenerated into young, vigorous stands. There is also more opportunity to control species and stocking to minimize future pest problems using even-age management systems.

The second group of factors I considered were the non-timber 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 impacting timber harvest. Even-aged management, even though it has a more immediate impact on wildlife than uneven-aged management, usually requires only one to three entries during a 90 to 140 year rotation.

I did consider uneven-aged management for those areas where resource objectives can be met by stand conditions and harvest operations associated with selection harvest. Uneven-aged management generally provides continuous tree cover resulting in hiding thermal cover for some wildlife species and maintaining less apparent visual change. However, uneven-aged management also requires frequent entries 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 both big game winter range areas and riparian areas depending on the site-specific silvicultural prescriptions.

The third group of factors I considered were 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 Gallatin Forest. However, since a wide variety of site-specific conditions exist 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. The prescription will detail the actual silvicultural system or vegetative manipulation method to be implemented on a case-by-case basis.

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 (wildlife habitat, visual objectives, etc.). (See Chapter IV of Environmental Impact Statement for further discussion on shelterwood and clearcutting methods.) I estimate that clearcutting will be the optimum harvest system on approximately 90 percent of the acres harvested during the Plan period.

The final decision on which harvest method will be used will be based on a site-specific silvicultural prescription and interdisciplinary review. Additional discussion on the impacts of even-aged and uneven-aged silvicultural systems and an evaluation of each can be found in Chapter II of the Environmental Impact Statement and in Appendix A of the Forest Plan.

In conclusion, in selecting an average annual harvest level of 21 million board feet per year for the next 10 year period, I have considered many social, environmental, and economic factors. I believe this level provides the greatest net public benefit.

5. Water Management

In arriving at the decision to select Alternative 7, I have paid a great deal of attention to the water resource. Water on the Gallatin National Forest deserves careful consideration for several reasons. The Gallatin National Forest provides the headwaters for four major rivers - the Yellowstone, the Gallatin, the Madison, and the Boulder. Three of these rivers are "blue ribbon trout streams." The Forest also is the source of water for the City of Bozeman. Forest waters are critical to irrigators downstream and to recreationists on and off the Forest. Many of the people who commented suggested that water quality should be the Forest's top priority. Their comments, in combination with the critical role water plays in other resource management options both on and off the Forest, convince me that water quality will be a priority for the Forest and I have included standards in the Forest Plan that will continue proper management of this valuable resource.

6. Minerals Management

Public comments were mixed on this issue. Some felt that we did not give enough emphasis to minerals while others thought we should not allow mineral development to adversely affect other resources such as wildlife and recreation.

The Forest Plan does not approve mineral or oil and gas exploration and development. The Plan provides a system to analyze applications on a case-by-case basis and provides stipulations to guide mineral exploration and development activities. 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 or oil, gas and geothermal exploration and development in a manner that will safeguard the environment. The effects on other resources will be evaluated on a case-by-case basis utilizing the National Environmental Policy Act analysis process.

The Corwin Springs geothermal area is close to Yellowstone National Park's North Entrance and Mammoth Hot Springs. The reason for my decision not to issue leases for the area now is because of the proximity to the Park's thermal areas and the unknown relationship to the Corwin Springs area. The U.S. Geological Survey will provide additional analysis for this area.

7. Access and Road Management

In many places the Gallatin National Forest is buffered by private lands that separate the Forest from existing public roads. Public access to the National Forest has long been an issue. People have expressed the need for additional access to the National Forest for a variety of activities. My rationale for obtaining additional access, estimated in the Forest Plan to be about 16 places in the Plan period, is to open up more of the Forest to public use.

Roads do have the potential to affect some resources but are needed for management of other resources. I believe proper road location, design standards, revegetation, construction practices, and maintenance will help mitigate impacts of roads on water quality and fish. Seasonal or year-round restrictions help minimize the negative effects on wildlife and other resources. I have decided to close about 70 percent of the new timber roads constructed inside the Forest in order to maintain security for elk and grizzly bear and reduce maintenance costs.

8. Wild and Scenic Rivers

The four river segments identified earlier in the Decision section of this document were found to be eligible for further consideration as Recreational Rivers. These river segments meet eligibility criteria specified in the Wild and Scenic Rivers Act of October 1, 1968.

The "outstandingly remarkable" values for the river segments are:

Boulder River - geologic, recreational and scenic

Yellowstone River - scenic and recreational

Gallatin River - scenic, recreational and fisheries

Madison River - geologic, scenic and fisheries

These four river segments did not meet the criteria for Wild or Scenic classifications because of the presence of paralleling highways or county roads, and shoreline campgrounds, summer homes and other developments.

In my opinion, the remainder of the streams and rivers on the Forest do not possess "outstandingly remarkable" values as described in the act.

9. Research Natural Areas

These eleven areas recommended for study will provide for research, observation, and study of undisturbed ecosystems which typify important forest, shrubland, grassland, alpine, aquatic communities, and geologic types on the Gallatin National Forest. These areas will meet the Forest's objectives for representative habitat types as listed in the Northern Region Guide. Four of the areas recommended as additions are in established Wilderness.

B. Economic Efficiency

In determining economic efficiency, the Forest Service uses an estimate of present net value, which is the difference between discounted benefits and discounted costs. In calculating present net value, a dollar value is assigned to the outputs. Some of these output values, such as timber and grazing, are determined by the marketplace and they produce a revenue (market). Other resource outputs, such as recreation, are assigned values derived from research and generally do not produce revenue (non-market). Values for the quality of wildlife habitat and visual quality were not assigned. Therefore, present net value cannot be the only criterion used in selecting the preferred alternative. The criterion used was the maximization of net public benefit, which includes both the net value of resources that produced revenue, other priced resources, and consideration of those that do not produce revenue.

Related to the issue of economic efficiency is the controversy over below-cost sales which has become a national concern. In the past three 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.

In making my decision, I felt it was necessary to evaluate how opportunities will change by analyzing alternatives with varying combinations of priced and nonpriced resources. This helped me understand the interactions occurring among resources in determining net public benefit. Table 5 displays each alternative arranged in order of decreasing present net value. It also shows estimated outputs for selected priced and non-priced resources that relate to the key issues used in selecting the Forest Plan. Details of how present net value and other outputs are calculated for the alternatives are described in Appendix B of the Environmental Impact Statement.

TABLE 5.--Comparisons of Alternatives for the first 10 year period

Alternative / Bench-mark	PNV (MM$)	Timber (MMBF)	Elk (No.)	Stream Fish (M)	Wilderness (M acres)	Roadless Mgt (M acres)
Max PNV	309	6	6100	519	716	563
3	292	12	6400	523	780	573
4	289	16	6400	518	763	557
6	278	17	6500	517	716	631
7 (Selected)	276	21	6100	514	738	583
5	272	11	5600	499	968	370
10	272	21	6100	513	739	501
8	270	12	6600	521	1096	257
9	259	12	6600	524	1204	149
2	249	31	4500	499	716	596
1	208	25	5600	510	741	572

M = Thousand
MM = Million
PNV = Present Net Value

The following discussion summarizes the tradeoffs for those alternatives with a present net value greater than Alternative 7.

In general, the present net value of alternatives increases commensurate with several factors including: low development costs in the first few decades, great amounts and diversity of recreational opportunities, and low levels of timber harvest in the first three decades. The potential to increase economic efficiency toward the Maximum Present Net Value benchmark is traded off to some degree in all alternatives for higher levels of road construction and maintenance, fire protection, general administration, and timber sale preparation. These costs reflect objectives to manage the Forest to resolve issues and concerns and to reduce the risk of resource damage and loss of investment.

Alternative 3

The goal of this alternative is to reduce costs by 20 percent. Investments in the timber and range programs would be low. Few new roads would be constructed. There is low emphasis on fisheries and wildlife.

Maintenance of existing facilities would be at a low level and overcrowding of developed recreation facilities would occur after about 10 years. There would be no construction of new camp and picnic sites. In this alternative, 1,353,000 acres would be managed without roads, including wilderness.

Big game range would be managed to maintain forage production for elk and deer. Elk would increase due to less competition from livestock. A large portion of the area occupied by grizzly bear on the Gallatin would be managed for the bear.

The livestock grazing program is the lowest of all alternatives. Permittees would either be forced to reduce their stock or find substitute grazing on private land.

This alternative has the smallest suitable timber base, 84,800 acres. The local timber industry and local employment would be adversely affected. Little opportunity would exist

for reducing losses of timber from insects and disease. The forest would be predominately climax species stands growing at a rate much lower than potential. Wildfire occurrence would increase as of dead trees accumulate.

Hydrologic conditions of watersheds would be maintained.

National Forest administration and public access to the forest boundary is the lowest for all alternatives.

Alternative 7 has a lower present net value than Alternative 3 because Alternative 7 has increased costs associated with meeting public demand for developed recreation, range, timber, and access.

Alternative 4

This alternative attempts to produce a combination of goods and services that could best meet the 1980 RPA Program outputs targeted for the Gallatin in the Northern Regional Guide.

Cooperation with private investors would be emphasized to meet demands for recreation facilities. Forest Service investments would maintain the current capacity of National Forest facilities. More camping, picnicking, and skiing would take place off the Forest. The opportunity for recreation in a semi-primitive recreation setting will decrease as roads are built. In this alternative 1,320,000 acres would be managed without roads, including wilderness.

Conflicts for forage between elk and livestock would increase, and coordination of elk and livestock use would become more difficult. Some areas of winter range would receive heavy use, thus reducing the ability of the winter range to recover after severe winters. Fishery habitat would decrease due to road construction and livestock impacts.

Large investments for fences and water improvements would be necessary to insure a proper assignment of forage between elk and livestock. Sheep grazing would be re-introduced on summer range that is within some of the grizzly bear habitat which would increase the potential for conflict with the grizzly bear.

RPA timber targets would be achieved on 310,200 acres of suitable timberland. The threat of insect and disease epidemics would be reduced along with the risk of wildfire. There would be little opportunity to salvage much of the dead material that would be available on the west side of the forest.

Sedimentation in streams would increase.

This alternative would provide the fourth highest amount of National Forest administrative and public access.

I believe the lower present net value for Alternative 7 is a necessary tradeoff for meeting public demand for developed recreation, protecting the forage resource, protecting riparian areas by limiting livestock use, protecting the grizzly bear by not re-introducing domestic sheep into occupied habitat, and allowing for the salvage of dead trees and public firewood.

Alternative 6

The goal of this alternative is to intensify the management of the currently roaded portions of the Forest and have little additional road construction and timber harvest in areas without roads. Emphasis is placed on timber, range, and roaded recreation.

Recreation in developed areas would not be emphasized. Most of the existing roadless lands would remain available for semi-primitive and primitive recreation. Some Forest Service facilities would be closed and the experience that most people now enjoy in Forest campgrounds would change if private facilities were available. Sites would, over time, receive damage to vegetation and soil due to heavy use. In this alternative 1,347,000 acres would be managed without roads, including wilderness.

There would be no intensive wildlife management on nonroaded lands. Habitat improvement would take place on roaded lands mostly in winter range. Public access would remain at the current level. Larger elk populations would cause increased pressure on private winter range, and range condition would decline. Fishery habitat would be maintained.

Timber harvest would be 17 million board feet on 228,600 acres of suitable timberlands. The lack of flexibility in locating timber harvest areas in this alternative increases the probability of soil and watershed damage in specific areas. Future availability of firewood to local users would be limited. Landscape alteration would be quite evident in developed areas.

Concentrated timber harvest in some drainages could cause erosion.

This is one of the lowest alternatives in providing National Forest administration and public access. The amount of roads available for roaded recreation would not increase from present levels.

Alternative 7 was chosen over this alternative even though it had a lower present net value because it better provided for developed recreation, and protection of the forage resource, allowed for the salvage of dead trees and firewood, increased the ability to meet local timber industry needs, provided for increased public access, and improved the recovery of the grizzly bear and other threatened and endangered species. The larger suitable timber base in Alternative 7 allows timber sales to be placed over a larger area to prevent exceeding watershed constraints in individual drainages.

C. Social and Economic Stability

I considered the social and economic consequences of the various alternatives in arriving at my decision. The analysis is displayed in Chapter II of the Environmental Impact Statement. I believe Alternative 7 is the most desirable because it contributes to community stability by offering more timber for sale in the next decade than what was sold during the past decade. At the same time it maintains the amenities important to local residents as well as people from around the country. I believe the Forest Plan provides for the continuation of existing lifestyles that are dependent upon use and management of the Forest. No major shifts in populations, jobs or incomes are expected as a result of the Forest Plan.

D. Environmental Quality

Environmental quality was a significant consideration in my selecting Alternative 7. I considered environmental consequences of the various alternatives. Air quality will be maintained within legal limits and water quality will meet or exceed State standards. The productivity of the soil will be maintained. Fish and wildlife habitat will be maintained and timber harvest, road construction, and oil and gas activities will be designed to minimize adverse effects on wildlife. Activities which would jeopardize the continued existence of threatened and endangered species will not be undertaken. Forest management will improve the health, vigor, and diversity of the Forest and will reduce the risk of insect and disease epidemics and catastrophic wildfires.

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. The adverse effects that cannot be avoided are identified by resource activity in Chapter IV of the Environmental Impact Statement.

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

Potential increases in sediment resulting from soil disturbance and a minor increase in water yield associated with timber harvest activities.

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

E. Compatibility with the Plans of Others

This Plan has been developed with public participation, which included such agencies as the Montana Department of Fish Wildlife and Parks, the U.S. Fish and Wildlife Service, and various Indian tribes, as well as individuals, industrial groups and environmental organizations.

Extensive efforts were made to ensure that the Selected Alternative considered the goals of other public agencies and of Indian tribes. Plans of other agencies were reviewed and numerous meetings were conducted with officials from these agencies (see Chapter VI and Appendix A of the Final Environmental Impact Statement for details).

The Forest coordinated with the State Department of Health and Environmental Sciences concerning water quality and Best Management Practices, which have been included as standards in the Plan. In addition, we worked with the City of Bozeman and State Water Quality Bureau regarding proposed activities in the Hyalite and Bozeman Creek municipal watersheds. The Forest's planned activities in Bozeman Creek are compatible with the city's plan for its land in the watershed.

The Interagency Grizzly Bear Guidelines were used to develop standards to protect grizzly habitat and to aid in its recovery. We coordinated our proposed management areas with agencies having management responsibilities on adjacent lands, especially with National Forests and National Parks in the Greater Yellowstone Area.

In the Greater Yellowstone Area, the concerns with overall wildlife populations and heavy use by recreationists may create conflicts. Timber activities are less in areas surrounding the Park than on other parts of the Forest and are expected to remain near current levels. Minerals activities are sporadic and at this time activity is picking up with development of the Homestake Mine. Possible adverse impacts on the Greater Yellowstone Area will be mitigated by special stipulations to protect its integrity. If necessary, to protect the quality of the wilderness recreation experience, the number of visitors may be restricted in the future. The current emphasis on educating recreationists on the value of no-trace camping will be continued to help reduce adverse environmental impacts and provide for distribution of users. The Forest coordinates with Yellowstone National Park and other Forests that adjoin the park on establishing campground fees. The Gallatin Canyon Highway is a scenic route to Yellowstone Park and is provided special management direction to protect the scenic value.

I believe Alternative 7 is compatible and complementary to the goals of other agencies and Indian Tribes. The Montana Department of Fish, Wildlife and Parks, and the U.S. Fish and Wildlife Service were major entities that expressed concerns with the Draft Environmental Impact Statement and Proposed Forest Plan. Some of the changes made to the Preferred Alternative are in response to their concerns.

High levels of wildlife habitat are provided along with increased emphasis on the enhancement of water quality and fisheries. This will contribute to achieving State fish and wildlife goals. I believe the Selected Alternative provides timber sales that will be adequate to meet the demand in the decade ahead.

A dialogue with public agencies and interested individuals will continue. The involvement of these interested parties is critical to the successful implementation, monitoring, and updating of the Forest Plan.

I believe the Selected Alternative will permit the Gallatin National Forest to contribute to the achievement of the various goals of the State of Montana. The Forest Plan has been developed in close cooperation with the State of Montana. Concerns expressed by Governor Schwinden on the Draft Environmental Impact Statement and Proposed Forest Plan have been responded to in the Final Forest Plan and Final Environmental Impact Statement.

F. Summary of Reasons for Selecting the 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 balancing the outputs; thus providing for a continued 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 values (such as timber and grazing) and amenity values (such as recreation and wildlife) considering the range and intensity of the concerns expressed by the public on the various resources.

I made the decision to adopt Alternative 7 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 Gallatin National Forest.

Analysis of public comment on the Draft Environmental Impact Statement produced additional information that prompted us to make adjustments in Alternative 7, the selected alternative. These adjustments, which are the result of public comment, have been incorporated into Alternative 7. 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 7 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 by the Forest to display land management options, to provide analytical data for comparisons, and to determine the relative effects of various ways of addressing the issues. The Forest Planning Team developed 10 alternatives, including the "No Action" alternative (Alternative 1). Eight of these alternatives responded to the requirement of 36 CFR 219.17 to evaluate roadless areas for wilderness in the Forest Plan process. 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, as discussed in Appendix B of the Environmental Impact Statement, are met. Each alternative represents a technically and legally feasible strategy for managing the Forest and each alternative addresses the planning questions differently; all consider anticipated changes in demand for Forest resources.

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 1 (Current Program)

This alternative continues existing management direction. This is the "no action" alternative required by the National Environmental Policy Act.

Alternative 2

This alternative emphasizes the production of timber, livestock forage and minerals. It produces the highest levels of timber and livestock outputs of any alternative and has the highest cost of any alternative.

Alternative 3

The goal of this alternative is to reduce Forest Service administrative costs by 20 percent. Investments in the timber and range programs would be low and there would be low emphasis on fisheries and wildlife.

Alternative 4

This alternative achieves levels of commodity resource production that are responsive to the 1980 RPA Program objectives. Recreation and timber targets can be met. Targets for elk and livestock can be met in the near future but competition for forage will increase.

Alternative 5

The goal of this alternative is to manage areas other than existing and recommended wilderness areas in the most cost efficient manner while meeting basic resource protection needs.

Alternative 6

The goal of this alternative is to intensify the management of those portions of the Forest that have roads and have little additional road construction and timber harvest in the roadless areas. On the roaded areas, emphasis is placed on timber, range and recreation.

Alternative 7 (Selected Alternative)

The goal of this alternative is to provide a mix of resource uses to achieve a high net public benefit. Commodity oriented activities occur at levels that continue to support community stability while amenity values, especially wildlife, are emphasized on portions of the Forest. It provides emphasis for coordinated management within the Greater Yellowstone Area. Following is the summary of changes between the Draft and Final Environmental Impact Statement.

1. Motorized trail vehicle use of selected trails in the Cabin Creek area has been changed from September 1 to December 1 in the Draft Environmental Impact Statement to July 15 to October 30 in the Final Environmental Impact Statement.

2. The wilderness recommendation for Lionhead has been reduced by 1,350 acres to accommodate continued snowmobile use on a trail in Watkins Creek.

3. The suitable timber land has been reduced by 9,000 roadless acres as a result of additional analysis and validation of the Draft Plan. The 9,000 acres are roadless lands scattered across the Forest.

4. The average annual allowable sale quantity of 21 million board feet includes a noninterchangeable component of 5 million board feet of salvageable dead saw-logs and post, and pole material.

5. The Montana elk/logging guidelines have been utilized in the Plan's development.

6. Updated mapping of grizzly bear habitat resulted in an increase of 63,000 acres to be managed for the bear.

7. Standards for livestock grazing in riparian areas have been changed to better protect the fishery.

8. Information from the Montana Timber Supply Report has been added to the Final Environmental Impact Statement.

Alternative 8

This alternative provides for a substantial increase in the amount of area recommended for wilderness and a high degree of economic efficiency for management on the remaining land.

Alternative 9

This alternative recommends all the existing roadless lands for wilderness and a high degree of economic efficiency for the management of the remaining land.

Alternative 10

This alternative is similar to the preferred alternative except the harvest volume of timber is allowed to depart from a nondeclining flow to obtain improved economic returns to the treasury. A detailed description of the effects of this action is found in Chapter II of the Final Environmental Impact Statement.

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

Alternative 9 was determined to be the environmentally preferred alternative. Implementation of this alternative would cause less physical and biological disturbance than other alternatives because of the amount of wilderness and the schedule of timber harvesting in the Plan period (1988-1997). Approximately 149,000 acres of roadless area inventory would continue to be managed without additional roads or development. In the developed portion of the forest, objectives for water quality, fish, and wildlife would assure full protection of these resources. A reduced amount of timber harvesting and road construction would occur in this alternative.

Management for and protection of water quality, fish, and wildlife management would be emphasized in the developed areas of Alternative 9.

The environmentally preferred alternative differs from the selected alternative in several respects.

Wilderness/Roadless

Alternative 9 would provide 1,204,000 acres as wilderness, and 149,000 acres of roadless land. Alternative 7, the selected alternative, would provide 738,000 acres of wilderness and 584,000 acres of roadless land for the Plan period.

Timber

Alternative 9 would harvest 990 acres per year during the Plan period for an average annual allowable sale quantity of 12 million board feet. Alternative 7, the selected alternative for the Forest Plan, will harvest approximately 2,190 acres annually for a volume of 21 million board feet over the Plan period (1988-1997). The fewer harvest acres under Alternative 9 would reduce the potential for negative impacts on other resources.

Water Quality and Fisheries

Objectives for water quality and fisheries in Alternative 9 are similar to those in the Forest Plan. As a result, fish habitat potential is approximately the same for both alternatives. Because of the fewer miles of new road construction needed and the smaller amount of timber harvest acres in Alternative 9, the risks of adversely affecting water quality and fish would be greater in the Forest Plan. Alternative 9 would have a slight environmental advantage over the Forest Plan.

Wildlife

The removal of some livestock from big game winter ranges provides more forage in Alternative 9. The Forest Plan provides more acres for the grizzly bear emphasis. Alternative 9 provides more undisturbed, secure habitats for many wildlife species on the forest than will be available in the Forest Plan. The species that would benefit the most would be those dependent on old-growth timber.

Soils

Fewer activities that disturb the soil such as timber harvesting and road construction, would occur in Alternative 9 than in the Forest Plan. As a result, the potential for adverse impacts would be less in Alternative 9.

Economic Efficiency

Alternative 9 has a present net value of $259 million. Alternative 7 has a higher present net value of $276 million, and is, therefore, a more efficient alternative.

Economic Impact

Alternative 9 results in a decrease of 76 jobs over the Plan period. In contrast, the selected alternative (7) provides for an increase of 162 jobs during the Plan period, thus making a positive contribution to community stability.

Conclusion

Even though Alternative 9 is preferable from the standpoint of the physical and biological environment, I believe Alternative 7 provides for a better mix of management emphases and maximizes the net public benefit while protecting the environment. Some components of the environment will be managed at similar levels in Alternative 9 and 7, such as water quality and the fishery. Also, increased emphasis on programs such as improving habitat for grizzly bear in Alternative 7 will result in higher resource outputs than in Alternative 9.

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 implementation schedule.

The Forest Supervisor has authority to change the implementation schedule to reflect differences between proposed annual budgets and actual funds appropriated by Congress. Such scheduled changes are considered an amendment to the Forest Plan, but are not considered a significant amendment or to 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 (CFR 219.10(f)), and the rationale for the changes, must conform to the National Environmental Policy Act, 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 management standards established for the entire Forest and outlined in Chapter II of the Forest Plan, and by the specific 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. 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.

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 Gallatin 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 monitor the Forest Plan goals and objectives properly, 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 monitoring report, and will be 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 as required in 36 CFR 219.12.

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

Forest Supervisor's Office
Gallatin National Forest
10 E. Babcock
Bozeman, Montana 59807
(406) 587-4701

These records are incorporated by reference into the Environmental Impact Statement and Forest Plan.

XII. APPEAL RIGHTS

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
U.S.D.A. Forest Service
P. O. Box 7669
Missoula, Montana 59807

Notice of appeal must be submitted within 45 days from the date of this decision or within 30 days after publication by the Environmental Protection Agency 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 to support the appeal and any request for oral presentation must be filed within the 45-day period for filing a notice of appeal.

James C Overbay

JAMES C. OVERBAY
Regional Forester

SEP 23 1987
Date