United States
Department of
Agriculture

Forest Service

Rocky Mountain
Region

Summary of the Final Environmental Impact Statement

To accompany the Land and Resource Management Plan - 2002 Revision

WHITE RIVER
NATIONAL FOREST

FINAL ENVIRONMENTAL IMPACT STATEMENT SUMMARY
for the
WHITE RIVER NATIONAL FOREST
LAND AND RESOURCE MANAGEMENT PLAN 2002 REVISION

Eagle, Garfield, Gunnison, Mesa, Moffat, Pitkin, Rio Blanco,
Routt, and Summit counties, Colorado

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Abstract

This is the summary for the final environmental impact statement (FEIS) documents analysis of seven alternatives developed for programmatic management of the 2.3 million acres administered by the White River National Forest. The Forest Service has identified **Alternative K as the selected alternative**.

Note to readers

The Forest Service believes that readers should be given notice of several court rulings related to public participation in the environmental review process. First, reviewers of Draft EISs must structure their response to the proposal to make clear the reviewer's position and contentions [*Vermont Yankee Nuclear Power Corp. v. NRDC,* 435 US 519, 53 (1978)]. In addition, environmental objections that could be raised at the Draft EIS stage but are not raised until after completion of the FEIS may be waived or dismissed by the courts [*City of Angoon v. Hodel,* 803F.2d 1016, 1022 (9th Circuit 1986) and *Wisconsin Heritages, Inc. v. Harris,* 490. Supp. 1334, 1338 (E.D. Wis. 1980)].

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Introduction

This is a summary of the Final Environmental Impact Statement (FEIS) to accompany the White River National Forest Land and Resource Management Plan – 2002 Revision (Forest Plan). This summary presents the major findings of the analysis that went into building the FEIS and presents the different alternatives considered and their projected impacts.

In addition to the FEIS, the revised Forest Plan includes the following:

- Land and Resource Management Plan – 2002 Revision
- Record of Decision
- Three books of appendices that support the material presented in the FEIS.
- A packet of maps that illustrate much of the data and results found in the Revised Forest Plan and FEIS.

All of this information is available to you at your local Forest Service Office, public library or our web site, www.fs.fed.us/r2/whiteriver. We realize, however, that this amount of information can be overwhelming.

It is our hope that this summary will help you see what we did, why we did it and where we go from here.

This summary contains the following information:

- An overview of the planning process and history
- A look at the White River National Forest and its environs
- An explanation of what occurred between the Draft EIS and the Final version
- The public involvement process
- Themes of the forest management alternatives
- Land allocations for each forest management alternative
- Probable effects that each alternative will have on the Forest
- How you can find out more information about the Revised Forest Plan.

Overview

The planning, environmental, and decision processes

The **final environmental impact statement** (FEIS) analyzes seven alternatives for implementation of the **2002 Land and Resource Management Plan** (2002 Forest Plan) for the White River National Forest. A draft environmental impact statement (DEIS) that analyzed six alternatives was issued in **August 1999** and was available for public comment until **May 9, 2001**. Forest planners and interdisciplinary team members reviewed these comments and modified the direction in the forest plan, the alternatives, and the supporting analysis as needed. This FEIS incorporates those changes and identifies the selected alternative that will guide future management of the White River National Forest. The Regional Forester will document the basis of this decision in a **record of decision** (ROD).

A brief history of the forest planning process

Current forest planning regulations are an extension of historical Forest Service experience in land management planning. For many years the Forest Service has prepared plans to guide inventory development, identify special management areas, calculate sustainable use levels, and monitor resource conditions and trends.

In addition, Forest Service planning activities are guided by several key pieces of federal legislation. Under the **Multiple-Use Sustained-Yield Act of 1960** and the **National Forest Management Act of 1976** (NFMA), National Forest System lands are managed for a variety of uses on a sustained basis to ensure, into perpetuity, a continued supply of goods and services to the American people. NFMA amended the **Forest and Rangeland Renewable Resources Planning Act of 1974** (RPA) to specify that land and resource management plans (forest plans) be developed for units of the National Forest System.

Regulations to implement NFMA are set forth in 36 CFR 219. The White River National Forest's first forest plan was issued in 1984, and NFMA regulations state that forest plans should be revised on a 10-year cycle or at least every 15 years.

NFMA regulations establish extensive analytical and procedural requirements for the development, revision, and significant amendment of forest plans. They describe procedures for the formulation and evaluation of alternatives and require that alternatives consider a full range of resource outputs and expenditure levels. NFMA regulations also acknowledge the need to comply with other laws such as the Endangered Species Act, Clean Water Act, National Historic Preservation Act, and Archeological Resources Protection Act.

The landmark 1969 **National Environmental Policy Act** (NEPA) brought environmental analysis and public participation requirements into land management planning. NEPA ensures that environmental information is made available to public officials and citizens before decisions are made and before actions are taken. The aim is to help officials base their decisions on

an understanding of environmental consequences, and to take actions that protect, restore, and enhance the environment. Essential to the NEPA process are accurate scientific analyses, expert agency input, and public scrutiny. These all have been part of this forest plan revision.

Relationship of the forest plan to the alternatives

Under NFMA, a forest plan establishes the goals, objectives, standards, and guidelines for management activities on the White River National Forest. It sets both **forest-wide** guidance and the additional direction needed to define each **management area prescription**. Management area prescriptions correspond somewhat to county zoning ordinances because they define the specific uses and conditions emphasized, allowed, or restricted on parcels of land. For this forest plan revision process, the goals, objectives, standards, and guidelines do not vary across alternatives. What does vary across alternatives is where and how extensively each management area prescription is applied over the land area of a forest.

Steps leading to development of the draft forest plan and DEIS

Revision of a forest plan occurs in a number of steps. Preliminary work to revise the 1984 Forest Plan began in 1994. Improved scientific methods and data processing techniques that were not available when the 1984 Forest Plan was developed were used during formal inventories of the forest's natural and environmental resources.

In 1996, the Forest Supervisor published a *Monitoring & Evaluation Five-Year Report*, which reviewed the status of National Forest System lands administered by the White River National Forest. This report found that conditions and public demands had changed significantly since inception of the 1984 Forest Plan and that a need existed to revise it.

The Forest Supervisor then solicited comments from the public on what factors the plan revision process should consider. After a series of open houses and media coverage, the White River National Forest received hundreds of comments from across the nation, but mainly from people who live near the forest. Issues raised by the public and by other agencies were examined by an interdisciplinary (ID) team of planners and resource specialists organized by the forest to spearhead the planning process.

An *Identification of Purpose and Need* document, issued in August 1996, summarized how public comments and monitoring and evaluation efforts were used to determine what areas of the existing plan were most in need of revision. After extensive review, the interdisciplinary team identified six areas, called *revision topics*, on which to base the planning process: (1) biological diversity, (2) travel management, (3) recreation, (4) roadless areas, (5) special areas, and (6) timber suitability and allowable sale quantity. Many different issues fall within these broad categories. Other issues are addressed in Forest Service guidance. The 1984 Forest Plan was revised using guidance provided by the *1992 Rocky Mountain Regional Guide* (USDA Forest Service 1992), as well as staff, stakeholder, other agency, and public input.

In July 1997, the forest released a report called *Analysis of the Management Situation* (AMS), which assessed the ability of the forest to supply goods and services in response to the public's demand for them. The AMS also provided a foundation for developing a broad range of reasonable

alternatives to the existing plan. The report reviewed the current and expected level of goods and services provided by the forest, made projections of public demands for resources, and discussed the need to establish or change management direction in response. Complete reports and details of these findings are available at the Supervisor's Office, 900 Grand Avenue, Glenwood Springs, Colorado.

In the summer of 1997, the revision topics were presented to the public in a series of 10 open houses held in Aspen, Avon, Carbondale, Denver, Eagle, Frisco, Glenwood Springs, Grand Junction, Meeker, and Rifle. Forest managers solicited comments from the public at these open houses and through media disclosures.

After completing the AMS, forest planners turned their attention to formulating a preliminary array of forest management alternatives that responded to the six initial issues. These alternatives were based on the public comment received as well as on improved knowledge of the forest's resources recorded in its Geographic Information System (GIS) database.

By July 1998, six alternatives had been developed. They were described in depth in **Chapter 2** of the DEIS. By design, each alternative meets legal and administrative requirements and can be implemented if selected.

The next step in the revision process was to evaluate the environmental consequences of the alternatives presented in the DEIS. A summary of these effects was presented in **Chapter 3** of the DEIS. For each forest resource, resource specialists described its existing condition and discussed how the alternatives would affect it.

The DEIS was made available for public comment in August 1999. Based on public and congressional requests, the original 90-day comment period was extended to May 9, 2001. Over 14,000 individual responses were received from the public, city, county, state and federal officials, public interest organizations, and private businesses. A specialized Forest Service unit, the Content Analysis Team (CAT), reviewed all responses, organized them all into an electronic database by subject, and generated public concern reports. This helped the White River National Forest ID team and decision-makers to systematically consider the voluminous public input and respond to it (see Appendix A, Response to Comment.)

Steps between draft and final forest plan and FEIS

After considering public comments on the draft forest plan and DEIS, the interdisciplinary team made necessary changes and revisions. These are presented in the FEIS volumes and the 2002 Forest Plan. One change of note is the formulation of a **new alternative**, **K**, which is described later in this document and in **Chapter 2** of the FEIS. This was developed in response to public comment and new Forest Service policies since the DEIS was released. Analysis for all seven alternatives is presented in **Chapter 3** of the FEIS. This analysis has made use of improved mapping and updated analytical tools, processes, and information.

The FEIS also identifies the alternative selected for implementation. Reasons for this decision will be documented by the Regional Forester in a record of decision. A response to public comments is provided in Appendix A. Following approval of the forest plan and selected alternative, specific activities and projects will be planned and implemented as part of the forest's ongoing management activities.

Understanding the White River National Forest

The White River National Forest is one of the nation's largest and oldest national forests. Established in 1891 as the White River Plateau Timber Reserve, the forest later incorporated several other reserves to reach its current expanse of 2,270,000 acres. The White River National Forest is located in north-central Colorado west of the Continental Divide (**Figure 1**). The divide marks most of the forest's eastern boundary, which is about 60 miles from Denver. Ready access to the forest by residents of Denver and other Front Range communities is provided by Interstate 70, which enters the forest at the Eisenhower Memorial Tunnel.

The forest boundary encompasses National Forest System lands within nine different Colorado counties: Eagle, Garfield, Gunnison, Mesa, Moffat, Pitkin, Rio Blanco, Routt, and Summit. **Table 1** provides the official acreages of National Forest System lands within each of these counties.

Figure 1
Location of the White River National Forest in Colorado

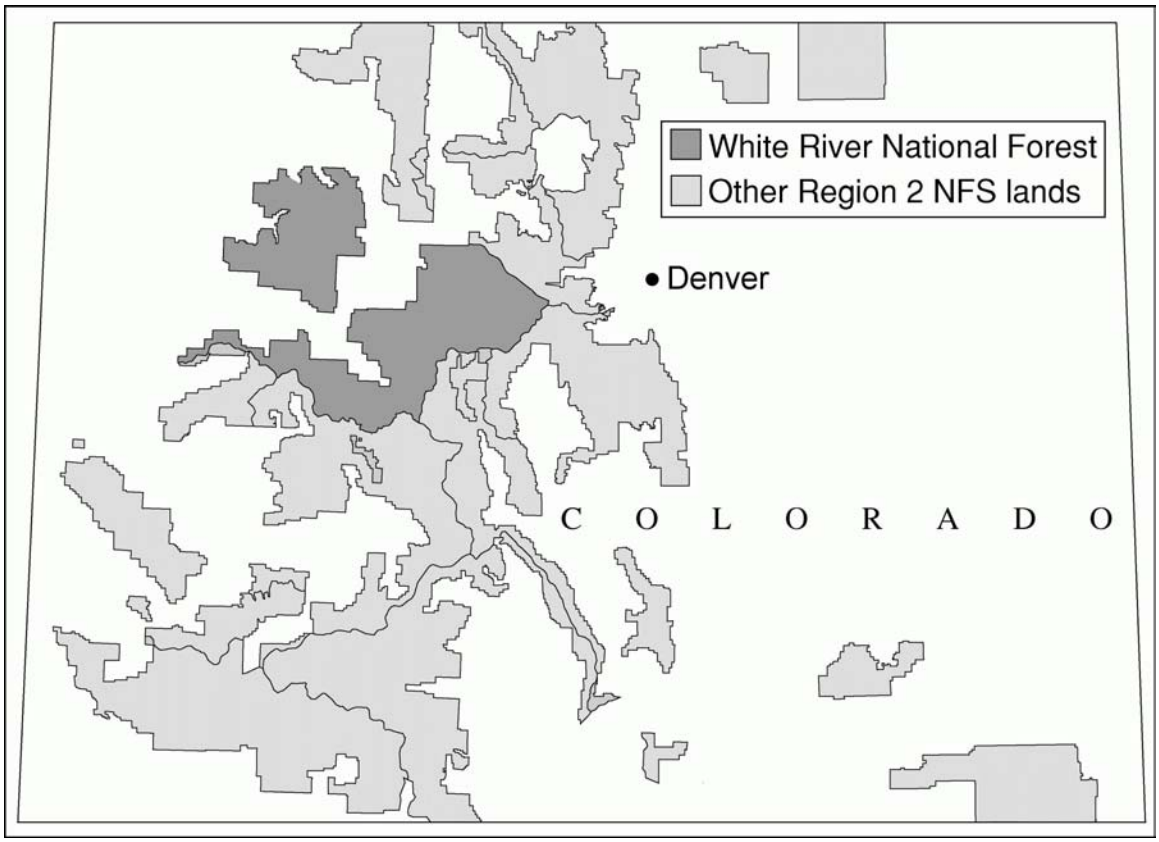


Table 1
Acres of National Forest System lands, by county, within the White River National Forest as of September 1997

	County								
	Eagle	Garfield	Gunnison	Mesa	Moffat	Pitkin	Rio Blanco	Routt	Summit
Acres	595,542	478,628	60,880	83,069	3,679	490,911	247,318	6,128	309,671

Source: *USDA FS-383*

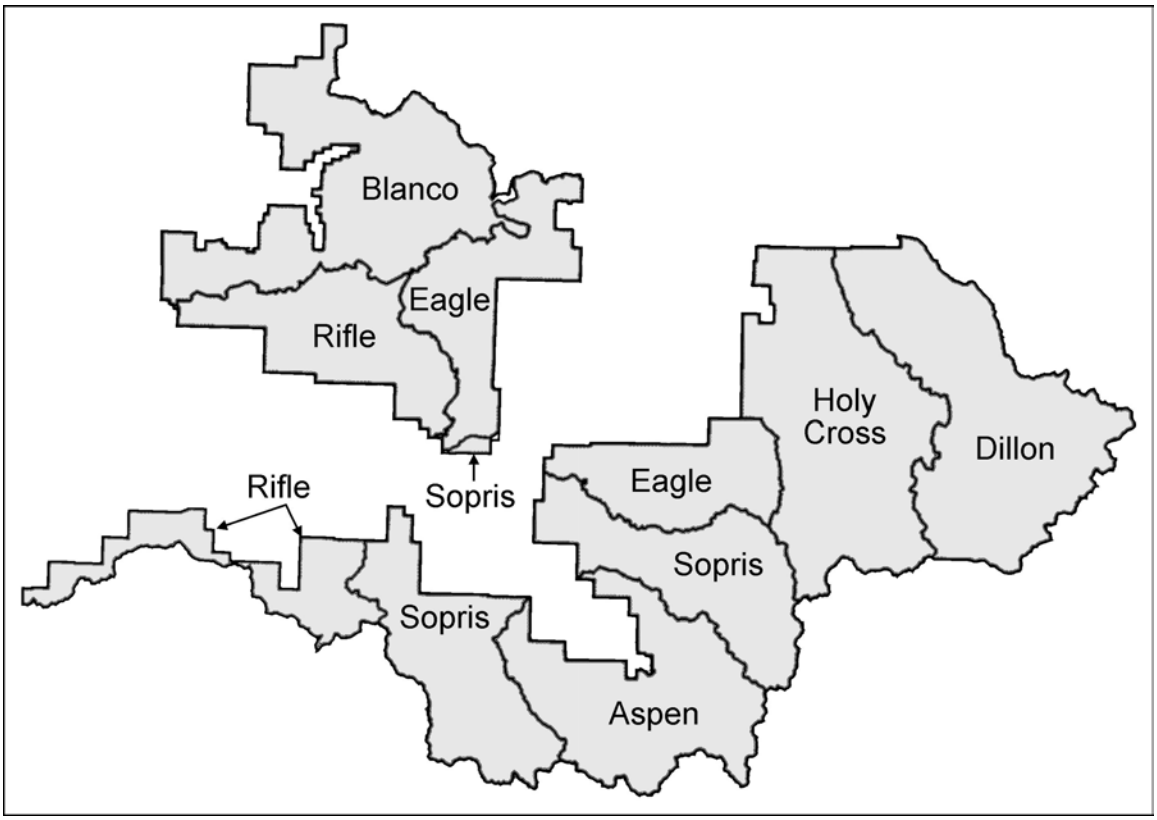
Figure 2 shows the location of these nine counties (and several others that border the forest) in relation to the forest boundary.

Figure 2
County boundaries in relation to the White River National Forest

In terms of recreational visitor days, the White River National Forest ranked fifth in the nation in 1995. Best known for its world-famous ski areas such as Aspen, Vail, and Breckenridge, the forest also features the beauty and solitude to be found in some 750,000 acres of wilderness; outstanding scenic vistas such as Hanging Lake and the Maroon Bells; and the nation's largest herd of elk. Another key forest attraction is the Colorado River, a boon to rafters, kayakers, and anglers.

The forest has seven ranger districts: Aspen, Blanco, Dillon, Eagle, Holy Cross, Rifle, and Sopris. Each of these districts has a district office located, respectively, in the towns of Aspen, Meeker, Silverthorne, Eagle, Minturn, Rifle, and Carbondale. Figure 3 shows the location of these ranger districts.

Figure 3
White River National Forest ranger districts



Physical environment

Few places in the United States feature as much topographic relief as the region of the White River National Forest. Its majestic mountain ranges attract visitors from throughout the world for sightseeing, skiing, and backcountry recreation. The forest rises from an elevation of about 5,800 feet in Glenwood Canyon to the summits of ten peaks higher than 14,000 feet. This wide range in elevation provides the White River National Forest with climate, soils, and plant and animal communities that are more

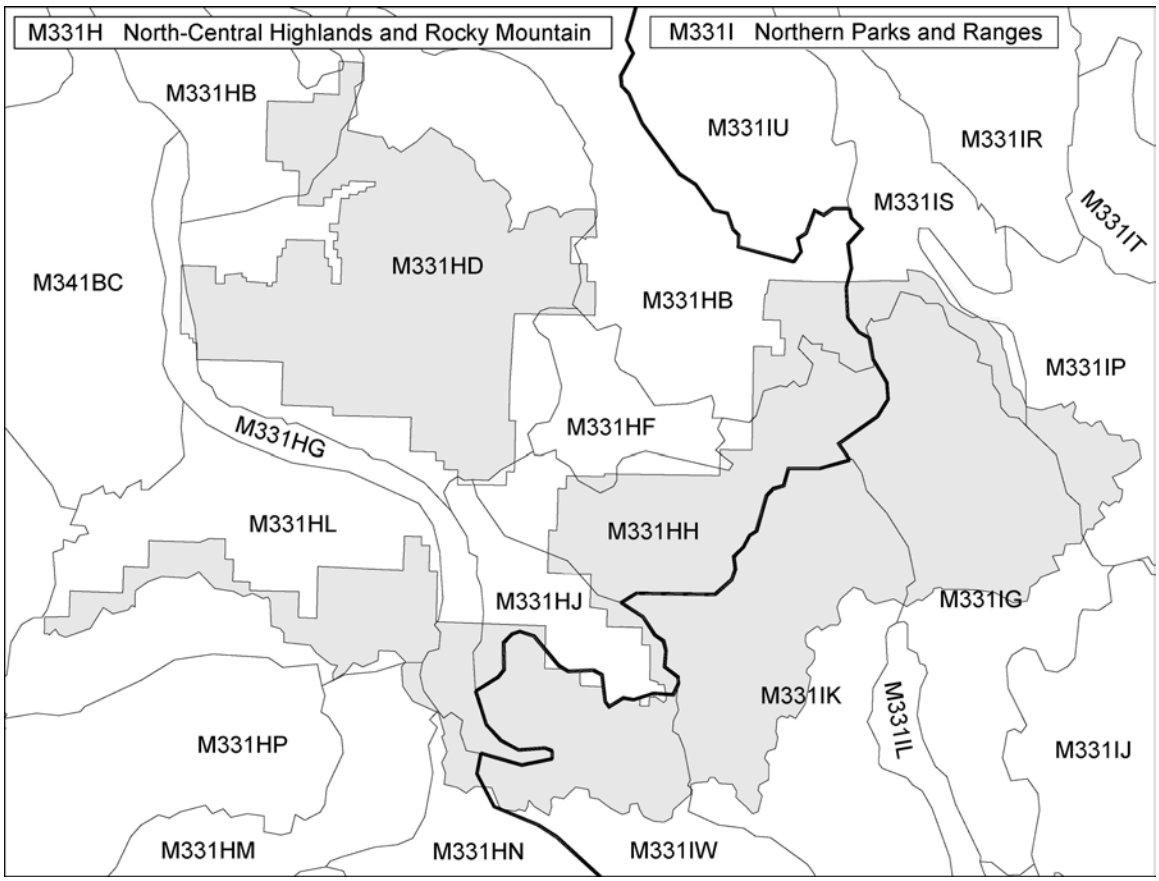
diverse than those found in many other parts of the country. Measured annual precipitation ranges from less than 12 inches on the forest's western margin to more than 40 inches at higher elevations.

Mountain ranges include the Gore Range in the northeastern portion of the forest, the Elk Mountains along its southern margin, and the towering Sawatch Range in the southeast. In the northwestern portion of the forest are the Flat Tops, which are a series of high-elevation plateaus. The headwaters of the Eagle, Roaring Fork, Fryingpan, Crystal, Blue, and White rivers originate entirely on the forest.

Biological environment

The White River National Forest lies within two ecological sections—North-Central Highlands and Rocky Mountains, and Northern Parks and Ranges—as defined by the National Hierarchy of Ecological Units (ECOMAP 1993). **Figure 4** shows the forest boundaries in relation to these two sections. For a more detailed description of the ecological hierarchy with respect to the forest, refer to Appendix E of Volume 4 of the FEIS.

Figure 4
Location of the White River National Forest in relation to the two ecological sections



About two-thirds of the area is forested. The main cover types on these forested lands are Engelmann spruce-subalpine fir, lodgepole pine, and aspen. Most of these stands are in older age classes. Nonforested land makes up about 30 percent of the forest. These lands include grassy meadows, shrublands, alpine tundra, and rocky areas.

The White River National Forest provides habitat for about 300 wildlife and fish species, including common species such as elk, mule deer, and rainbow trout, and less common species such as the peregrine falcon and the Colorado River cutthroat trout.

Historical human use and occupation

From about 12,000 years ago, the area of the White River National Forest was frequented by bands of hunters known as paleo-Indians, who left signs of their passage throughout the region. In more recent times, western Colorado was the domain of the Ute Indians who occupied the area for several centuries if not longer. The Ute people were skillful nomadic hunters who followed herds of elk and bison on their seasonal migrations and established an elaborate network of foot trails that criss-crossed the area.

Exploration of the area of the forest by people of European origin began in the 1700s by Spanish missionaries. During the 'mountain man' era of the 1820s and 1830s, fur traders traveled throughout western Colorado in search of beaver and other animals. The fur trade lasted only a few decades.

The nation's westward expansion came late to Colorado because its towering mountain ranges were a barrier to travel. But when gold fever struck in 1859, thousands of people came to Colorado to seek their fortunes. The 1870s brought the mining boom into lands of the White River National Forest, starting with the establishment of Breckenridge in 1869 and Aspen in 1879. During this period, numerous mining camps were built near timberline in the drainages of the Blue, Eagle, and Roaring Fork rivers. Miners and settlers made extensive use of nearby stands of trees as raw material for structures, mine props, and railroad ties.

The mining era was accompanied by a steady influx of farmers and ranchers, who, by 1881, had displaced the Utes from their homeland and from the forest. During the settlement period that followed, ranchers introduced thousands of head of cattle and sheep to the rangelands. In the same period, market hunting of deer and elk led to their near-extirpation from the forest by about 1910.

Unregulated exploitation of timber, range, and wildlife resources in the public lands of the West prompted the designation of national forest reserves. The White River Plateau Timber Reserve of 1891 was the second such reserve to be named. Authority over the reserve was granted to the newly established Forest Service in 1905.

Livestock grazing continued as the primary use of the forest for several decades. Severe overgrazing by 1930 led forest managers to greatly reduce

permitted livestock numbers. This period also saw the introduction of protection for deer and elk to restore their numbers.

In the 1920s, the forest acquired national significance as the site of Mount of the Holy Cross, known for a large cross formation that appears on its northeast face. This feature attracted thousands of visitors to viewpoints near the mountain.

The U.S. Army's construction of its Camp Hale base along the Eagle River, where 16,000 10th Mountain Division troops were trained during World War II, played a major role in the forest's future. After the war, some of these veterans returned to establish the downhill ski areas that today are the source of most of the forest's recreation use. The Aspen ski areas were first established in the 1940s and 1950s, with Vail and the Summit County ski areas following in the 1960s. As the ski resorts grew, so did nearby communities.

The 1964 passage of the Wilderness Act was later followed by designation of about one-third of the forest as wilderness, making it a popular destination for hikers and campers.

Present social and economic environment

Communities adjacent to the White River National Forest include Aspen, Avon, Basalt, Breckenridge, Carbondale, Dillon, Eagle, Edwards, Glenwood Springs, Gypsum, Meeker, Minturn, New Castle, Rifle, Silt, Silverthorne, and Vail. In recent years, some of Colorado's highest growth rates have been in parts of the forest's five-county planning area. Most of this growth has occurred near the forest's ski areas. In the 1990s, these ski areas evolved into four-season resorts that attract visitors throughout the year. This change has greatly boosted employment in the tourism and commercial sectors of local economies and has led to populationgrowth.

Because of high housing costs near the ski resorts, however, many of these new residents must commute long distances to their jobs. As a result, many towns that historically served only the local ranching and farming population are experiencing rapid residential growth. This growth is accompanied by an influx of retail and service businesses. In the same period, the area's scenic and cultural amenities have prompted the development of vacation homes, second homes, and golf courses. As private lands near the forest are converted to these residential and commercial uses, the traditional agricultural economic base is increasingly supplanted.

Urbanization has posed new problems for forest managers. Development of private lands and the increased number of visitors to the forest have combined to:

- Reduce traditional points of access;
- Reduce or restrict wildlife habitat, migration corridors, and winter range;
- Increase the risk to human safety (from wildfire); and
- Increase the impacts that visitors have on trails, recreation sites, and other national forest resources.

Distinctive roles and contributions

The White River National Forest is . . .

Global/intercontinental/national scope

- A leading destination for skiing, tourism, and backcountry recreation;
- The setting for about 750,000 acres of wilderness;
- The setting for several world-famous resort communities, which host 13 percent of the nation's downhill skiing;
- The location of the renowned Mount of the Holy Cross; and
- The domain of the nation's largest elk herd.

Multi-state/regional scope

- The site of the most recreation use of any national forest in the Rocky Mountain Region;
- The location of eight of Colorado's 54 'fourteeners'—mountain peaks taller than 14,000 feet;
- Host to 30 percent of Colorado's recreation on National Forest System lands; and
- Host to 64 percent of the downhill skiing in Colorado.

Forest scope

- The centerpiece of a growing central Colorado economy and population base;
- The scenic backdrop for local communities; and
- A source of support for local industries and businesses.

Factors that may affect the White River National Forest

Global/intercontinental/national scope

- Changes in skiing demand;
- Changes in off-road vehicle technology; and
- Changing demographics of recreationists.

Multi-state/regional scope

- Population growth throughout the Rocky Mountains;
- Shifts in employment; and
- Shifts in management emphasis to ecosystem management.

Forest scope

- Population growth along the Interstate 70 corridor in Western Colorado;
- Changes in ecological conditions; and
- Changes in local industries.

Resource commodities and services from the White River National Forest

Recreation. Outdoor recreation, including skiing and other winter activities, is the primary use of the White River National Forest. In 1997, more than 8.9 million people visited the forest, which provides 13 percent of the nation's downhill skiing.

Dispersed recreation. About 44 percent of recreation on the forest is dispersed, which occurs without constructed facilities. Demand is projected to increase for trails and scenic resources that provide opportunities for hiking, backpacking, horseback riding, mountain biking, all-terrain vehicle and snowmobile use, sightseeing, and pleasure driving.

Developed recreation. Developed recreation includes all activities that take place on developed recreation sites, which have constructed facilities. Use of developed facilities currently is at 81 percent of practical capacity and is expected to increase to well beyond this current capacity.

Leasable minerals. Leasable minerals are those deposits of oil, gas, coal, etc. that are available for development under various laws. These deposits are generally located on the western side of the forest and are apart of the Piceance Basin. Production in the Divide Creek Unit has been ongoing since the mid 1950's. The Wolf Creek Storage Unit supplies natural gas to the Roaring Fork and Eagle Valleys. Demand for fossil fuels will increase over the life of the plan and development of resources on National Forest will increase. There are also significant geothermal resources yet to be developed. Demand for this resource will increase along with demand for fossil fuels.

Locatable minerals. Locatable minerals are those deposits subject to exploration and development under the Mining Law of 1872 and its amendments. About 42 percent of the forest outside of wilderness can be classified as having a moderate-to-high potential for locatable minerals.

Timber production. From 1940 to 1999, timber volume harvested averaged 15.2 million board feet (MMBF) per year, with an annual average of 22.4 MMBF between 1984 and 1999. About 37 percent of the forest's land base is 'tentatively suitable' for timber management. Only about 4 percent of the forest's total land area has been affected by harvest activities since 1900.

Livestock grazing. Permits are required for domestic livestock grazing on the forest. During the past 10 years, numbers have fluctuated annually depending on economics and weather. In 1998, 22,700 head of cattle and 51,500 head of sheep grazed on the forest. About 830,800 acres of land are considered suitable for grazing on the White River National Forest.

THE PLANNING PROCESS AND PUBLIC INVOLVEMENT

Public comments were critically important in shaping a responsible plan for the Forest that best meets the Forest Service mission, the goals of the NFMA and the National Environmental Policy Act (NEPA), and the interests of the American public.

Preliminary work on the revision of the 1984 Forest Plan began in 1994. Formal inventories of the Forest's natural and environmental resources were begun using many improved scientific methods and data processing techniques that were unavailable during the development of the 1984 plan.

In 1996, the Forest Supervisor published a Monitoring & Evaluation Five-Year Report that reviewed the status of National Forest System (NFS) lands administered by the White River National Forest. This report concluded that conditions and public demands had changed significantly since inception of the 1984 Forest Plan and that the need for a revision existed.

The Forest Supervisor then solicited public comments on what the plan revision process should consider. After a series of open houses and extensive media coverage, the White River National Forest received hundreds of comments, not only from local residents but also from people nationwide. Issues brought up by the public and by other agencies were examined by an interdisciplinary team of planners and resource specialists brought together by the Forest to organize the planning process.

An Identification of Purpose and Need document, issued in August 1996, summarized how public comments and monitoring and evaluation efforts were used to determine what areas of the existing plan were most in need of revision. After extensive review, the interdisciplinary team identified six areas, called ***revision topics***, on which to focus the planning process: 1) biological diversity, 2) travel management, 3) recreation management, 4) roadless areas, 5) special areas, and 6) timber suitability and allowable sale quantity. These broad categories incorporate many different specific issues. Other topics germane to Forest management are addressed through the Forest Service directive system.

In July 1997, the Forest released the Analysis of the Management Situation (AMS), which assessed the ability of the Forest to supply goods and services in response to the public's demand for them and discussed the need to establish or change management direction in response. The AMS provided a foundation for developing a broad range of reasonable alternatives to the existing plan. Also in the summer of 1997, the six revision topics were presented to the public in a series of 10 open houses held in Aspen, Avon, Carbondale, Denver, Eagle, Frisco, Glenwood Springs, Grand Junction, Meeker and Rifle. At the open houses, and through media disclosures, forest managers solicited comments from the public.

After completing the AMS, and incorporating public comment and improved resource information, forest planners formulated a preliminary array of forest management subfactors that expanded upon the six revision topics.

By July 1998, six alternative management schemes had been developed. By design, each alternative represented a potential forest plan that met all legal and administrative requirements and that, if selected, could be implemented. The next step in the forest plan revision process was to evaluate the environmental consequences of the implementation of the alternatives. For each forest resource, specialists described the existing condition and discussed how implementation of the various alternatives would affect the resource.

The DEIS and the Proposed Revised Forest Plan were made available for public comment on August 6, 1999. Based on public and Congressional requests, the original 90-day comment period was extended by 180 days to May 9, 2000. Over 14,000 individual responses were received from the public; city, county, state and federal officials; public interest organizations and private businesses[1].

Between the issuance of the DEIS and the completion of the FEIS, the Forest held several meetings to consult with the three Confederated Ute tribes and ensure American Indian rights and interests were adequately accounted for in the planning process. Additionally, stakeholder meetings were held with six different groups of people representing different interests, including local government. These meetings were held to help validate and corroborate the public comment drawn from the DEIS and to aid in identifying factors and attributes of the forest plan decision that might be most important to the public.

After considering public comments[2] on the Proposed Revised Forest Plan and DEIS, the interdisciplinary team made necessary changes as they developed the FEIS. Alternative K was crafted for consideration during the preparation of the FEIS in response to public comments received on the Proposed Revised Forest Plan and DEIS and to incorporate new Forest Service policies, for example, Canada lynx management direction. The seven alternatives (initial six plus K) are analyzed in detail in the FEIS.

[1] A summary of the public comments on the DEIS is available on the website: www.fs.fed.us/r2/whiteriver/planning.html.
[2] A detailed review of public comment and agency responses is presented in Appendix A of the Revised Forest Plan FEIS.

The Alternatives

Introduction

This summary of the environmental impact statement explores the differences among a number of management alternatives for the White River National Forest. These were developed to provide a range of options for the direction that forest management will take for the next 10 to 15 years. Each of these alternatives is a potential forest plan that can be implemented if selected.

Included in this summary is a discussion of:

- How alternatives were developed;
- Overview of changes to alternatives between draft and final;
- The features of each alternative, including the no-action alternative;
- Alternatives that were considered but eliminated from detailed study;
- How the alternatives compare to one another;
- The **selected alternative**;
- Budget levels assumed for each alternative; and
- How management areas compare among alternatives.

Development of alternatives

As explained at the beginning of this document, this plan revision process started with the determination that there is a need to change the forest plan approved in 1984 due to changes in circumstances, legal mandates, and societal uses and values. The core of this process is the formulation of a revised **land and resource management plan**, or **forest plan,** and a set of forest management **alternatives** for implementing the plan. The alternatives provide different scenarios for applying forest plan **management area direction** across the land area of the White River National Forest. The alternatives do not vary in forest-wide direction as established in the forest plan, but do vary in acreage allocated to each management area (see the map packet and **Table 14** for more information).

The forest plan first defines a set of goals, objectives, strategies, standards, and guidelines that provide the forest-wide direction for managing the White River National Forest and its resources. The forest-wide direction combines regional goals established in the *Desk Guide* (which apply to all national forests in the Rocky Mountain Region of the Forest Service) with goals, objectives, standards, and guidelines that are specific to the White River National Forest.

Forest **goals** are broad statements that describe overall conditions managers will strive to achieve. They are not directly measurable and there are no time frames for achieving them. In other words, goals describe the ends to be achieved rather than the means to these ends; they serve as vision statements. In contrast, **objectives** provide these means in the form of measurable steps,

referred to as **strategies**, taken to accomplish goals. Objectives generally are achieved by implementing projects or activities. However, objectives are not targets, which are a measure of annual outputs dependent upon budgets. Budget allocations may or may not correspond to areas that have been emphasized by the forest plan. A **standard** is defined as a course of action that must be followed, or a level of attainment that must be reached, to achieve forest goals. Adherence to standards is mandatory. Standards are used to assure that individual projects are in compliance with the forest plan and other legal mandates that govern the Forest Service. They should limit project-related activities, not compel or require them. Deviations from standards must be analyzed and documented in a forest plan amendment. A **guideline** is a preferred or advisable course of action or level of attainment. Guidelines are designed to achieve desired conditions (goals).

A forest plan also establishes additional direction for individual management areas, such as Deer and Elk Winter Range, or Ski Areas, as needed. Management area direction includes a desired condition statement and then defines which different management activities may be carried out, with additional standards and guidelines as needed to manage or protect specific resources. **Table 2** presents a list of all final revised Land and Resource Management Plan (2002 Forest Plan) management areas, and a comparison to those in the 1984 Forest Plan.

As required by National Environmental Policy Act (NEPA) regulations, alternatives have been developed using an interdisciplinary process. Public comments received during the scoping phase were combined with the **revision topics**, which are based on monitoring of the 1984 plan. Six alternatives were then developed, each with a specific **theme** and set of management area allocations designed to match the theme. These alternatives were analyzed in the draft environmental impact statement (DEIS), released for public review and comment in 1999.

Comments received on the draft environmental impact statement were used to make modifications to the draft forest plan and alternatives presented in the DEIS (see FEIS Volume 3, Appendix A—*Response to Public Comment* for a detailed explanation of the comment analysis process and responses to specific public concerns identified in the comments). Based on public comment, revisions in national policy, and Canada lynx management needs, the interdisciplinary team developed an additional alternative within the range of those presented in the DEIS. This additional alternative is presented and analyzed along with the original six alternatives in this FEIS. The interdisciplinary team also made changes to the draft forest plan, resulting in the 2002 Forest Plan.

Each alternative has been designed to respond to comments and significant issues in a different way, providing a range of possible management approaches from which to choose. In each alternative, this different approach

is conveyed by the alternative's **theme**, which emphasizes a particular issue or a group of compatible issues.

Alternatives developed under this process do not follow a continuum and are not linked to each other in any way. Each stands alone as a potential forest plan. Alternatives do have many things in common, sharing the essential goals, concepts, and policies that all national forests are directed to follow. How they differ from one another is in the relative emphasis given to particular issues and concerns.

For each alternative, specific land areas of the forest are allocated to the **management areas** that are defined in the 2002 Forest Plan. In Chapter 3 of the 2002 Forest Plan, these management areas are defined in detail. Management area allocations also are shown on the maps of each alternative in the map packet. These maps were created by selecting management areas consistent with each alternative's theme and assigning them to different locations on the forest. Each alternative reflects a different combination of management area locations and acreages. A listing of these acreages is provided at the end of this summary in **Table 14**.

Alternatives that were considered in detail are presented in this summary. One of these has been designated as the **selected alternative**. A few were dropped from detailed consideration because they did not meet current requirements or were duplicated by other alternatives. The Regional Forester will make a final decision on the **selected alternative** for implementation and explain the rationale for this choice in the **record of decision** document.

Important points shared by all alternatives

- All alternatives adhere to the concepts of multiple use and ecosystem management. They also all share a set of basic forest-wide goals and objectives and a set of standards and guidelines (see accompanying 2002 Forest Plan volume) that ensure protection of forest resources and comply with applicable laws. Existing activities under permit, which are not considered at the programmatic level, will continue. In all alternatives, ecological conditions will be managed to maintain minimum viable or higher populations of existing native and desirable non-native species, and watershed conditions will remain stable or improve. Standards and guidelines (forest-wide and management area) are designed so that management activities and forest uses maintain the sustained capabilities of forest ecosystems.
- All lands bordering the forest (regardless of whether they are assigned to Management Area 7.1) will be subject to forest-wide goals and objectives relating to intergovernmental cooperation and partnerships.
- Updated data and analytical procedures, as well as evolving scientific knowledge, have been incorporated into all alternatives.

In addition, a number of designations and activities will not change in the 2002 Forest Plan:

- Existing ski resort developed areas and infrastructure;
- Current designated wilderness;
- Current active grazing allotments;
- Existing developed recreation sites, utility corridors, and electronic sites;
- Current designated national scenic and recreational trails; and
- Current designated scenic byways.

Objectives shared by all alternatives

Management of the White River National Forest will meet objectives established in the *1992 Rocky Mountain Regional Guide* (USDA Forest Service 1992), although their relative emphasis varies by alternative.

These objectives are to:

- Protect the basic soil, air, and water resources;
- Provide for multiple uses and sustainability in an environmentally acceptable manner;
- Provide for a variety of life through management of ecosystems;
- Provide for scenic quality and a range of recreation opportunities that respond to customers and local communities;
- Emphasize cooperation with individuals, organizations, and other agencies in coordination of planning and project application;
- In cooperation with other landowners, strive for improved land ownership and access patterns to the mutual benefit of both public and private landowners;
- Improve the financial efficiency of all programs and projects.

Major changes in the alternatives between the DEIS and the FEIS

Shifts in regional and agency priorities, new direction, and public comment all contributed to the need for changes between the draft and final environmental impact statement (FEIS). These changes are summarized below.

PUBLIC INPUT

Nearly 14,000 individual pieces of public input (letters, emails, faxes, public hearing testimony, etc.) were received on the DEIS and draft forest plan. Many offered recommendations or requests for changes or improvements in the environmental analysis; identified changes, improvements, or suggested new alternatives; or suggested modifications to the goals, objectives, standards, and guidelines.

Public input received on the DEIS and accompanying proposed forest plan also identified the need for several minor improvements to analysis and presentation of materials in the FEIS and forest plan. As a result, editorial or

other inconsistencies in the presentation of information in the DEIS were corrected for the FEIS.

WATER

New regional and national policy direction resulted in revision of guidance with regard to water rights and protection of watersheds as presented in the proposed revised forest plan. Direction regarding jurisdiction and rights of the Forest Service with respect to water rights were clarified. Regional watershed conservation practices were incorporated into forest plan guidance.

WILDLIFE

Species Viability—as a result of the Black Hills appeal direction and in consideration of consequent review by the Secretary of Agriculture, the interdisciplinary team revised analysis in the DEIS. In order to incorporate the results of this analysis and appeal direction, additional forest-wide goals, objectives, standards, and guidelines were added to the forest plan for all alternatives to meet needs for continued viability of species.

Canada lynx—as a result of listing of the Canada lynx under the Endangered Species Act and corresponding regional efforts toward a strategy for managing lynx habitat, further analysis was completed for the final EIS. In response to analysis additional goals, objectives, standards, and guidelines were developed and applied forest-wide for all alternatives in the forest plan to ensure the forest's contribution to lynx recovery.

ROADLESS AREA MANAGEMENT DIRECTION

Direction in the National Roadless Area Conservation Rule was considered in the period following the issuance of the DEIS. However, we were enjoined from incorporating this direction in the plan decision, subject to current ongoing efforts to revise the rule. We have incorporated the Chief's interim direction (Chief Bosworth memorandum, June 7, 2001) roadless areas. Additionally, in response to public comment and consistent with direction provided in the DEIS, we have added guidelines on management of roadless areas emphasizing our intent to maintain the character of these areas.

TRAVEL MANAGEMENT

Draft site-specific travel management plans accompanied each alternative presented in the DEIS. In response to public comment, to improve-on-the-ground inventories, and to allow time to engage the public in a dialogue on the future of the transportation system on the forest, we have separated the site-specific travel plan from the forest plan revision process. This also resulted in changes to analyses in the DEIS on the future of the transportation system that relied on site-specific data. All comments offered by the public in response to the draft travel plans released with the DEIS will be carried forward into the travel management planning process.

SOCIAL AND ECONOMIC ANALYSIS

In response to public comment, the White River revisited the social and economic analysis presented in the DEIS. A series of stakeholder meetings were used to clarify and validate the significance of the social and economic attributes analyzed in the DEIS. Data provided from these meetings was used to capture the social and economic consequences of each alternative in a meaningful manner for the public. This resulted in further social analysis and a higher level of specificity with regard to community impacts, including a discussion in the FEIS about urbanization.

ALTERNATIVE K

Alternative K was developed in response to public comments received on the DEIS and the draft forest plan that accompanied it, and to incorporate new Forest Service policies. Many of the public's concerns focused on the need for an alternative that better emphasized various combinations of uses across the forest.

Description of the alternatives

How alternatives are described

Each alternative for the 2002 Forest Plan is presented in the same format, with the following components:

- **Background—**The major issues to which the alternative responds.
- **Theme—**The relative degree of emphasis applied to different resources and concerns.
- **Relationship to revision topics**—How specific elements of the revision topics (see Preface) are incorporated into management areas on the forest. In this discussion, the terms low, medium, moderate, and high are used to compare levels of outputs or the relative degree of environmental impacts. No absolute measures are intended by these terms. For example, if an alternative calls for the highest level of road closure, it means simply that more roads will be closed under this alternative than under any other, not that a maximum possible number of roads will be closed. The words more and less are used in a specific context. These terms generally are used to compare the amount of an activity or output in relation to the no-action alternative, which in this case is Alternative B.

The interdisciplinary team originally considered nine different alternatives during scoping, identifying them by the letters A through I. The alternatives were not given names to keep the comparison of alternatives more objective and impartial.

After review of the original group, six of the alternatives—B, C, D, E, F, and I—were deemed suitable for further analysis. The expected outcomes and effects of these six alternatives were analyzed and disclosed in the DEIS. This analysis was further refined for the FEIS. A seventh alternative, K, has been added for further analysis in response to public comment and changes

in Forest Service policy. The seven alternatives considered in detail for the FEIS are described in the following section. Three alternatives, A, G, and H, were determined to be inappropriate for further analysis and were not considered in detail. The reasons why they were not considered in detail are presented later in this summary. Both groups of alternatives contribute to the NEPA requirement that a reasonable range of alternatives be examined.

The management areas described in Chapter 3 of the 2002 Forest Plan represent an expanded and updated array of areas, compared to the set of management areas used in the 1984 Forest Plan. In addition, a different numbering system has been used to identify them. Some of the management areas used in the 1984 plan are unchanged (except in identifying number). However, a number of new management areas have been created to reflect current practices, knowledge, and direction. **Table 2**, on the following page, compares the existing set of management areas to the ones developed for the revised plan.

Table 2
Comparison of numbering systems used in the 1984 plan and the 2002 plan

Management area	1984 Plan #	2002 Plan #	Management area	1984 Plan #	2002 Plan #
Pristine wilderness	8A	1.11	*Scenic byways, scenic areas, vistas, or travel corridors*	N/A	4.23
Primitive wilderness	8B, 8C	1.12	*Dispersed recreation*	2A, 2B	4.3
Semi-primitive wilderness	8D	1.13	*Dispersed recreation, high use*	2B	4.32
Recommended wilderness	N/A	1.2	*Recreation rivers — designated and eligible*	N/A	4.4
Backcountry recreation, non-motorized	3A	1.31	*General forest and rangelands — range vegetation emphasis*	6A, 6B	5.12
Backcountry recreation, limited winter motorized	N/A	1.32	*Resource production — forest products*	7D, 7E	5.13
Core areas	N/A	1.41	*Forested flora and fauna habitats*	4B	5.4
Wild rivers — designated and eligible	N/A	1.5	*Deer and elk winter range*	5A, 5B	5.41
Special interest areas — minimal use and interpretation	N/A	2.1	*Bighorn sheep habitat*	4B or 5A	5.42
Research natural areas	N/A	2.2	*Elk habitat*	4B	5.43
Special interest areas — emphasis on use or interpretation	N/A	3.1	*Forested landscape linkages*	N/A	5.5
Limited-use areas	N/A	3.21	*Intermix*	N/A	7.1
Backcountry recreation — year-round motorized	2A, 3A, 3B	3.31	*Developed recreation complexes*	1A	8.21
Backcountry recreation — non-motorized with winter motorized	3A, 3B	3.32	*Ski resorts — existing and potential*	1B	8.25
Scenic rivers — designated and eligible	N/A	3.4	*Aerial transportation corridors*	new (1B)	8.31
Corridors connecting core areas	N/A	3.55	*Designated utility corridors — existing and potential*	1D	8.32
Scenery	N/A	4.2			

***Key**: N/A = not applicable; element is new to the 2002 Forest Plan.*

In the new numbering system, management areas are organized into categories, which are identified by the numbers 1, 2, 3, 4, 5, 7, and 8. Category 6 applies to grasslands specifically and was not applied to areas on the White River National Forest for this forest plan revision. Each of these categories represents a different primary emphasis for the management of National Forest System lands. Refer to Chapter 3 of the 2002 Forest Plan for complete descriptions of each category.

The primary emphasis of each category can be described as follows.

Note: Most Management Areas in Categories 3, 4, 5, 7, and 8 permit motorized use on designated routes. If applicable, seasonal or wildlife restrictions are described in the Chapter 3 of the 2002 Forest Plan.

- **Category 1—**Wilderness, recommended wilderness, wild rivers; non-motorized recreation; limited winter motorized
- **Category 2—**research natural areas (RNAs); minimal-use special interest areas
- **Category 3—**motorized recreation; interpretive special interest areas; scenic rivers
- **Category 4—**dispersed recreation; scenic areas; recreational rivers
- **Category 5—**wildlife habitats; rangelands; forest products
- **Category 7—**urban/wildland intermix
- **Category 8—**ski areas and developed recreation sites; special uses.

In the following section, each of the alternatives analyzed in detail is described, accompanied by a pie chart that shows the relative percentage of each management area category. The different percentages convey how the overall theme of each alternative is represented by the array of management areas allocated to it.

Alternatives considered in detail

ALTERNATIVE B

Alternative B, an updated form of the no-action alternative, reflects current forest-wide direction. It meets the NEPA requirement (36 CFR 219.12(f)(7)) that a no-action alternative be considered. For further discussion of the no-action alternative, see Alternative A later in this summary.

'No action' means that current management allocations, activities, and management direction found in the existing forest plan, as amended, would continue. All alternatives, including Alternative B, contain some modifications to direction provided by the 1984 Forest Plan. These include new definitions, new technologies and inventories, and updated standards and guidelines. Output levels have been recalculated for this alternative to comply with new information, in particular, new scientific and inventory data.

Theme Alternative B emphasizes production of goods and services such as developed recreation, downhill skiing, and range, all of which would be increased to meet expected levels of demand. Vegetation management would be applied to improve wildlife habitat, maintain and improve visual quality in travel corridors and recreation areas, treat of over-mature and diseased tree stands, and provide firewood and other wood products. (Source: *1984 Forest Plan, Final EIS, Summary,* Page 8)

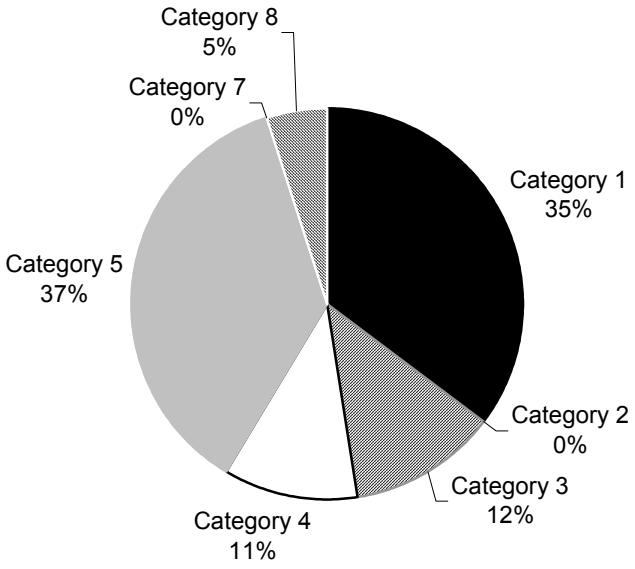
- **Biodiversity**—In Alternative B, habitat enhancement projects focus on big game species, fisheries, and threatened, endangered, and sensitive species and species of viability concern. Management does not specifically emphasize managing towards historical range of variability conditions; however, the general principles of ecosystem management are addressed to a limited degree. This alternative has the highest potential for localized perforations of forest stands resulting in changes to structural stages and patch sizes in areas in which management is concentrated. It also has the most potential for the spread of noxious weeds.
- **Travel Management—**The current travel management plan is retained but adjusted as necessary to comply with new standards and guidelines. Based on management area prescription standards and guidelines and on Recreation Opportunity Spectrum (ROS) classifications, this alternative is fourth in combined areas for snow-free motorized and snow-free motorized on-designated-route use, close in rank with Alternatives E and D. For over-snow motorized travel, this alternative allows for more areas of motorized travel than any other alternative, with the least amount limited to motorized-on-designated-routes, close in rank with Alternative F.
- **Recreation—**Winter ROS classes have been defined for the first time. Semi-primitive non-motorized recreation opportunities are emphasized during the summer, and semi-primitive motorized opportunities are emphasized in accessible areas during the winter. A forest-wide dispersed recreation capacity analysis has been completed for the first time. Ski resort land allocations do not increase, but opportunities for additional non-ski resorts and backcountry huts

may exist. The Scenery Management System will be implemented. Natural-appearing landscapes will be managed to a moderate scenic integrity level.

- **Roadless Areas—**No inventory of roadless areas was done during preparation of the 1984 Forest Plan. Under this alternative, no new recommendations are made for designation of areas as wilderness.
- **Special Areas—**No new RNAs are proposed, but three rivers are eligible for designation as wild, scenic, or recreational rivers.
- **Timber Harvest—**The allowable sale quantity (ASQ) for the forest has been recalculated based on more accurate analysis of suitable timber lands and yield projections. It is lower than what is stated in the 1984 Forest Plan and is at a medium level in relationship to other alternatives.

Figure 5 summarizes the percentages of management area allocations, by category, under Alternative B.

Figure 5 Alternative B management area allocations by category



Category 1—wilderness, recommended wilderness, wild rivers; non-motorized recreation; limited winter motorized

Category 2—RNAs; minimal-use special interest areas

Category 3—motorized recreation; interpretive special interest areas; scenic rivers

Category 4—dispersed recreation; scenic areas; recreational rivers

Category 5—wildlife habitats; rangelands; forest products

Category 7—urban/wildland intermix

Category 8—ski areas and developed recreation sites; special uses.

ALTERNATIVE C

Alternative C was developed to respond to a diverse range of public comments on recreation issues. It acknowledges the need to provide a range of recreational opportunities to serve forest customers and local communities while maintaining forest ecosystems. It represents a balance of recreational uses with ecological conditions.

Theme

The emphasis is to provide a range of recreation opportunities in balance with biological diversity considerations. The range of recreation that is provided will be determined by projected demand and analysis of trends. The quantity of recreation that is available will be determined by measures of recreation capacity. Ecological constraints may limit recreation activities in some locations of the forest. Vegetation management activities will focus on producing healthier and more diverse vegetation conditions.

Alternative C authorizes resource production only in areas that have been previously managed. No new roads will be built in areas that have not been previously developed. As a result, limited resource production will occur.

Relationship to the revision topics

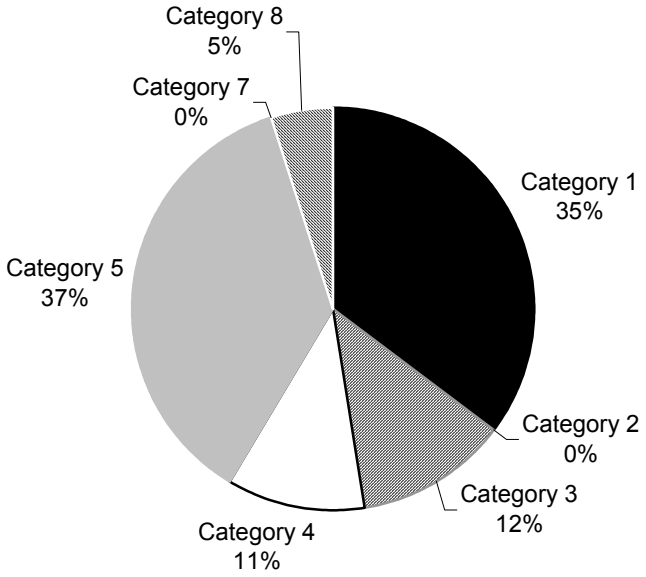
- **Biological Diversity—**In Alternative C, habitat improvement projects focus on threatened, endangered, and sensitive species (TES), species of viability concern, sport fish species, small game and big game species. Watershed conditions are improved, and most ecological changes result from natural processes. Together, these actions reduce the risk to species of viability concern on the White River National Forest.
- **Travel Management—**Alternative C calls for more separation of uses and more non-motorized recreational experiences than currently available. Based on the management area prescription standards and guidelines, and on ROS classifications, this alternative ranks fifth in combined areas for snow-free motorized and snow-free-motorized-on-designated-route use. A conversion of some motorized road and trail use to non-motorized trail use would be expected under this alternative, along with improvements to arterial and collector system roads. For over-snow motorized travel it ranks fourth compared to other alternatives for areas of allowable motorized travel. It also ranks fourth, along with Alternative I, for areas of over-snow motorized travel on designated routes only.
- **Recreation—**The distribution of summer and winter recreation opportunities is more responsive to current visitor demands and trends. Additional motorized opportunities are provided during the summer, and more non-motorized opportunities are provided during the winter. Ski resort land allocations increase as well as opportunities for additional backcountry huts. Aerial transportation corridors are considered. Heritage tourism opportunities may increase. Natural-appearing landscapes will be managed to a moderate scenic integrity level.
- **Roadless Areas—**Some areas are recommended for designation as wilderness.
- **Special Areas—**Some new RNAs are designated. Some special interest areas

are established, with an emphasis on heritage resources, education, interpretation, or ecology.

- **Timber Harvest—**The allowable sale quality is at a low level, and timber harvesting that does not contribute to ASQ is also at a low level.

Figure 6 summarizes the percentages of management area allocations, by category, under Alternative C.

Figure 6
Alternative C management area allocations by category



Category 1—wilderness, recommended wilderness, wild rivers; non-motorized recreation; limited winter motorized

Category 2—RNAs; minimal-use special interest areas

Category 3—motorized recreation; interpretive special interest areas; scenic rivers

Category 4—dispersed recreation; scenic areas; recreational rivers

Category 5—wildlife habitats; rangelands; forest products

Category 7—urban/wildland intermix

Category 8—ski areas and developed recreation sites; special uses.

ALTERNATIVE D

Alternative D was developed to respond to concerns that wildlife habitat for a wide variety of species, as well as biological diversity, be given special emphasis. It would give a higher priority to physical and biological resources than to human uses of the forest. It was identified as the preferred alternative in the DEIS.

Theme

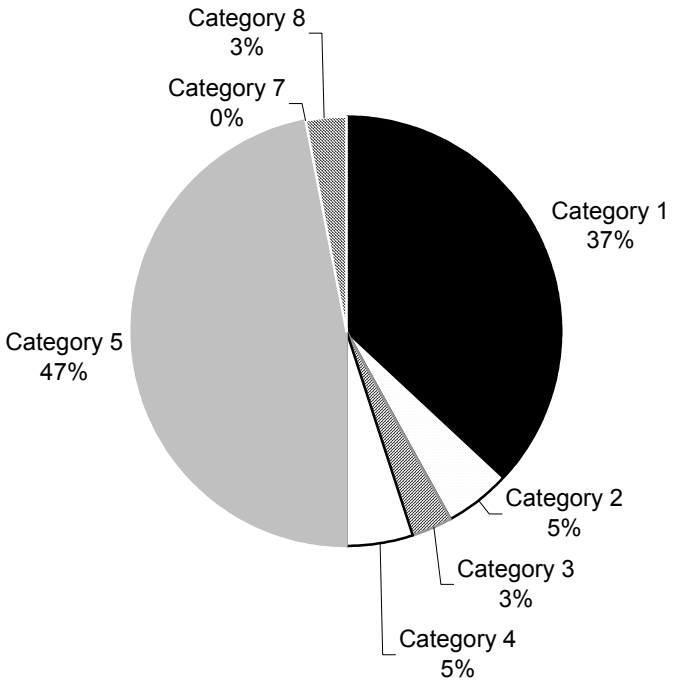
Alternative D emphasizes active management of all habitat types, including the use of such tools as timber harvesting, prescribed fire, and structural improvements. It represents an aggressive approach to habitat management and places a low emphasis on letting natural processes run their course. It will use active management to make the most rapid progress, compared to other alternatives, toward a diverse, healthy ecosystem condition. Of all the alternatives, Alternative D places the lowest emphasis on developments for human uses or recreation.

Relationship to the revision topics

- **Biological Diversity—**In Alternative D, species of viability concern for the White River National Forest are maintained at the highest level of all alternatives through active habitat enhancement projects. Active management of vegetation composition and structure is emphasized over allowing natural processes to dominate. Overall watershed conditions are improved. Among the alternatives, this alternative will see the most changes in vegetation composition and structure.
- **Travel Management—**The theme of Alternative D suggests that this alternative would have more seasonal restriction on areas of critical wildlife habitat. Based on the management area prescription standards and guidelines and on ROS classifications, this alternative ranks third in areas of snow-free motorized travel, with all travel limited to designated routes. For over-snow motorized travel, this alternative ranks sixth, close to Alternative K. Again, for over-snow there may be areas of seasonal and prohibited travel for the protection of critical habitat and wildlife. Under the theme of this alternative the existing road system would likely be maintained, and roads that are no longer needed would be closed to reduce road density in critical wildlife areas.
- **Recreation—**Recreation opportunities toward the semi-primitive and primitive end of the ROS are emphasized. Recreation travel is restricted by seasonal and area closures. Ski resort land allocations are reduced to current permit boundaries and opportunities for aerial transportation corridors do not exist. Opportunities for additional backcountry huts are few if any. Existing developed recreation sites such as campgrounds may be expanded or improved, or new sites may be constructed to concentrate visitor use. Natural-appearing landscapes will be managed to a low scenic integrity level.
- **Roadless Areas—**Some areas are recommended for wilderness designation.
- **Special Areas—**A moderate number of new RNAs are designated. Special interest areas focus on areas of wildlife or botanical interest.
- **Timber Harvest—**The ASQ is at a moderate level. Timber harvest is oriented to forest health and wildlife habitat purposes; the portion that does not contribute to ASQ is at a moderate level.

Figure 7 summarizes the percentages of management area allocations, by category, under Alternative D.

Figure 7
Alternative D management area allocations by category



Category 1—wilderness, recommended wilderness, wild rivers; non-motorized recreation; limited winter motorized

Category 2—RNAs; minimal-use special interest areas

Category 3—motorized recreation; interpretive special interest areas; scenic rivers

Category 4—dispersed recreation; scenic areas; recreational rivers

Category 5—wildlife habitats; rangelands; forest products

Category 7—urban/wildland intermix

Category 8—ski areas and developed recreation sites; special uses.

ALTERNATIVE E

Alternative E was developed to respond to the growing demand for a broad spectrum of recreation opportunities, particularly those that are of economic importance to local communities. Additional support is given in this alternative to tourism, ski resorts, hunting and fishing, and recreation services. These activities will vary in emphasis by local community based on local support and investment.

Theme

Alternative E emphasizes recreation activities and amenities that provide economic benefits to local communities. Land allocations help provide opportunities to recreation-based businesses, support the improvement of developed recreation infrastructure, and provide for consumptive recreation activities. The following commercial uses are favored:

- Ski resorts
- Outfitting and guide services
- Tour operators
- Non-ski resorts
- Developed recreation infrastructure

Non-commercial recreation that provides significant economic benefits also is emphasized in this alternative. Examples include consumptive wildlife activities such as hunting and fishing as well as other activities such as hiking and bicycling.

Economically important recreation will be supported while maintaining or improving the health of forest ecosystems.

Relationship to the revision topics

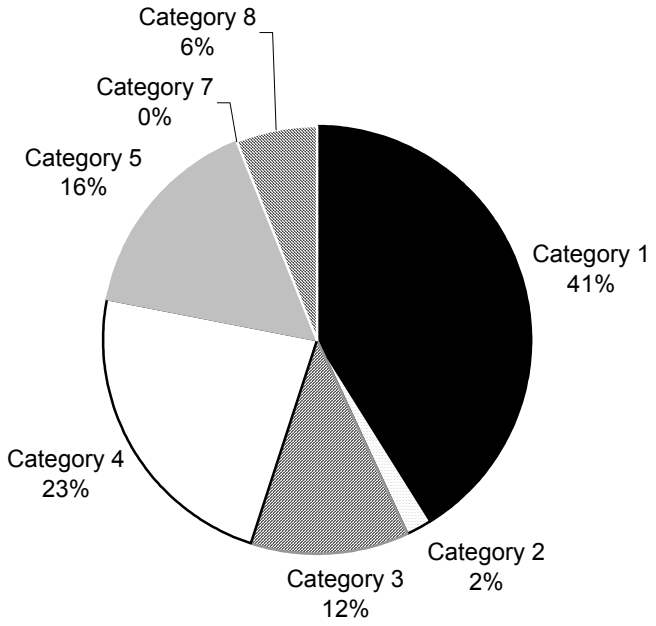
- **Biological Diversity—** In Alternative E, habitat improvement projects focus on big game and sport fish species, threatened, endangered, and sensitive species, and species of viability concern. Natural processes are expected to occur in most management areas and conditions may or may not remain within the historic range of variability. Active management of habitats and protection afforded by forest plan direction is expected to reduce the risk to species of viability concern on the forest.
- **Travel Management—**Consistent with its theme, Alternative E stresses a variety of recreation opportunities and a high degree of separation of recreation uses. Based on the management area prescription standards and guidelines and on ROS classifications, this alternative offers the second to most combined areas of snow-free motorized travel and snow-free motorized travel on designated routes. For over-snow motorized travel, this alternative ranks third behind Alternatives F and B. Alternative E would be expected to create more trail opportunities along with improvements to roads.
- **Recreation—**Recreation opportunities toward the semi-primitive motorized and developed end of the ROS are emphasized. Ski resort and aerial transportation corridor land allocations are maximized. Opportunities for additional backcountry huts and non-ski resorts exist as well as opportunities for newly constructed developed sites such as campgrounds and trailheads.

Natural-appearing landscapes will be managed to a high scenic integrity level.

- **Roadless Areas—**Few areas are recommended for wilderness designation.
- **Special Areas—**Few new RNAs will be designated. Special interest areas will focus on areas of heritage, education, and interpretation interest.
- **Timber Harvest—**The ASQ is at the lowest level of all alternatives, and timber harvesting that does not contribute to ASQ is at a low level.

Figure 8 summarizes the percentages of management area allocations, by category, for Alternative E.

Figure 8
Alternative E management area allocations by category



Category 1—wilderness, recommended wilderness, wild rivers; non-motorized recreation; limited winter motorized

Category 2—RNAs; minimal-use special interest areas

Category 3—motorized recreation; interpretive special interest areas; scenic rivers

Category 4—dispersed recreation; scenic areas; recreational rivers

Category 5—wildlife habitats; rangelands; forest products

Category 7—urban/wildland intermix

Category 8—ski areas and developed recreation sites; special uses.

ALTERNATIVE F

Alternative F was developed to respond to the idea that the White River National Forest should be managed for the maximum use of natural resources on a sustained-yield basis. Alternative F would produce the highest output levels of commodity resources among the alternatives and considers management activities in all areas that are legally and technologically available for resource production.

Theme

The emphasis in Alternative F is on resource production activities such as timber harvesting and domestic livestock grazing, while continuing to provide a range of recreational activities. In areas that are intensively managed for resource production, minimum population viability for all species will be an ecological constraint. In other areas, natural processes will be allowed to dominate the landscape.

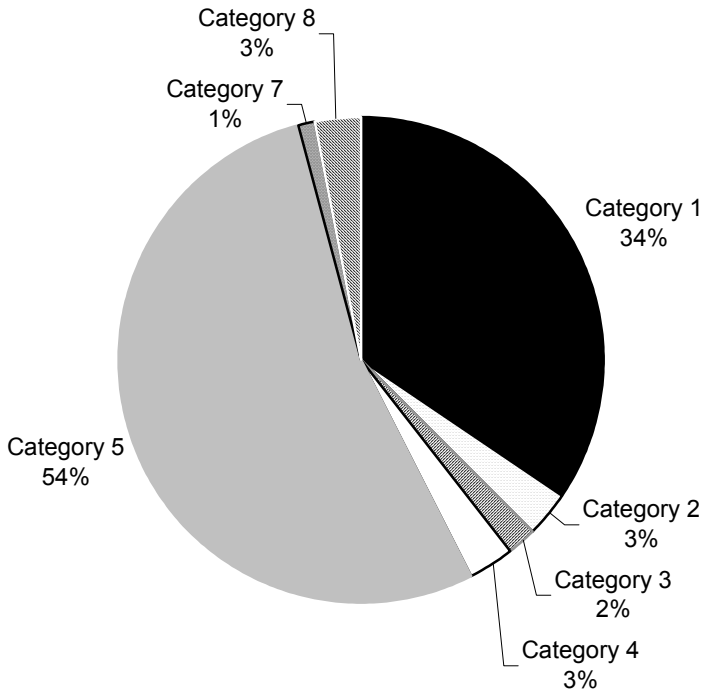
Dispersed and developed recreation opportunities will be at current levels or higher. Roaded recreation opportunities will expand. Semi-primitive recreation opportunities may decrease.

Relationship to the revision topics

- **Biological Diversity—**Compared to other alternatives, Alternative F places a lower emphasis of managing forest ecosystems within the HRV. Active management is emphasized over natural processes in managed areas, while natural processes dominate in other areas. Habitat improvements focus only on TES species and species of viability concern.
- **Travel Management—**Based on its theme, Alternative F is likely to see the highest level of new road construction, as well as road reconstruction and maintenance. Based on the management area prescription standards and guidelines and on ROS classifications, this alternative offers the most snow-free and over-snow motorized opportunities. It would, therefore, be the alternative most limited in non-motorized recreational areas.
- **Recreation—**Semi-primitive non-motorized recreation opportunities may decrease. Summer and winter semi-primitive motorized, roaded natural, and rural opportunities are emphasized. Ski resort and aerial transportation corridor land allocations may increase when there are no conflicts with other resource productions such as timber harvesting or livestock grazing. Opportunities for additional backcountry huts and non-ski resorts exist as well, providing that conflicts with resource production activities can be avoided. Natural-appearing landscapes will be managed at a low scenic integrity level.
- **Roadless Areas—**No areas are recommended for wilderness designation.
- **Special Areas—**Few, if any, RNAs are designated. A low emphasis is placed on special interest areas.
- **Timber Harvest—**The allowable sale quantity is the highest among the alternatives and timber harvest that does not contribute to ASQ is at the highest level of all alternatives.

Figure 9 summarizes the percentages of management area allocations, by category, for Alternative F.

Figure 9
Alternative F management area allocations by category



Category 1—wilderness, recommended wilderness, wild rivers; non-motorized recreation; limited winter motorized

Category 2—RNAs; minimal-use special interest areas

Category 3—motorized recreation; interpretive special interest areas; scenic rivers

Category 4—dispersed recreation; scenic areas; recreational rivers

Category 5—wildlife habitats; rangelands; forest products

Category 7—urban/wildland intermix

Category 8—ski areas and developed recreation sites; special uses.

ALTERNATIVE I

Alternative I responds to views expressed by a coalition of environmental groups that a specific set of principles of conservation biology be used to guide management of the White River National Forest. These principles are somewhat different than the set of ecological principles incorporated in other alternatives. In all other alternatives, active management is used to improve ecosystem conditions. Alternative I relies more on natural disturbance processes for the maintenance of ecosystems. In the analysis of this alternative, the effects of managing the forest according to these conservation biology principles has been compared to the effects of managing the forest according to the principles used in the other alternatives.

Theme

Alternative I emphasizes the idea that the best way to perpetuate ecosystems, forest health, and biological diversity is to allow natural disturbance regimes and other ecological and evolutionary processes to occur without human intervention. Commodity production, including recreation, is accommodated only to the extent that it does not fundamentally impair these natural processes, the restoration of ecological functions, or the health of native plant and animal communities. To the highest degree possible, the essential wildness of the land is maintained.

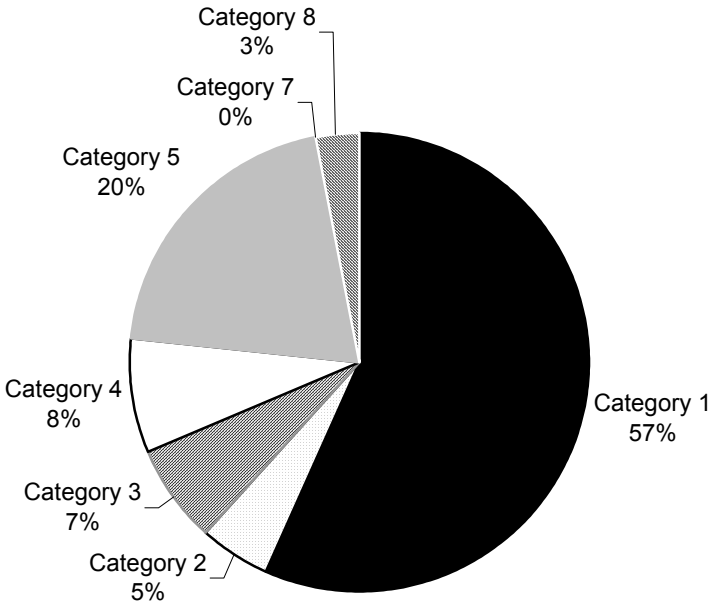
Relationship to the revision topics

- **Biological Diversity**—In Alternative I, natural processes are emphasized as the primary ecological change agent more than in any other alternative. Habitat improvements focus on threatened, endangered, and sensitive species and species of viability concern. Management activities are focused on restoration of ecological conditions.
- **Travel Management**—Because of the high level of non-motorized opportunities under Alternative I, it would be expected that this alternative would have a higher amount of roads converted to non-motorized trails, along with road closures to provide for the non-motorized experience. Based on the management area prescription standards and guidelines and on ROS classifications, this alternative offers the most snow-free and over-snow non-motorized areas. All snow-free motorized travel is limited to designated routes.
- **Recreation**—Recreation opportunities toward the semi-primitive non-motorized and primitive end of the spectrum are emphasized. Recreation uses are concentrated to protect wildlife habitat. Ski resort land allocations are reduced to current permit boundaries, and opportunities for aerial transportation corridors do not exist. Opportunities for additional backcountry huts, non-ski resorts, and developed sites such as campgrounds are few if any. Natural-appearing landscapes will be managed at the highest scenic integrity level compared to the existing condition.
- **Roadless Areas**—Many areas deemed eligible are recommended for wilderness designation, more so than in any other alternative.
- **Special Areas**—More RNAs are designated than in any other alternative and there will be many special interest areas, with an emphasis on ecological values.

- **Timber Harvest**—The ASQ is at a low level compared to other alternatives and timber harvest that does not contribute to ASQ is at a low level.

Figure 10 summarizes the percentages of management area allocations, by category, under Alternative I.

Figure 10
Alternative I management area allocations by category



Category 1—wilderness, recommended wilderness, wild rivers; non-motorized recreation; limited winter motorized

Category 2—RNAs; minimal-use special interest areas

Category 3—motorized recreation; interpretive special interest areas; scenic rivers

Category 4—dispersed recreation; scenic areas; recreational rivers

Category 5—wildlife habitats; rangelands; forest products

Category 7—urban/wildland intermix

Category 8—ski areas and developed recreation sites; special uses.

ALTERNATIVE K

Alternative K was developed in response to public comments received on the proposed 2002 Forest Plan and DEIS, and to incorporate new Forest Service policies. Public comments that did not pertain to alternative development (comments on standards and guidelines, analysis processes, public involvement, etc.) are not addressed in Alternative K. Many of the public's concerns focused on the need for an alternative that emphasizes various combinations of uses across the forest. These public concerns, as well as Forest Service priorities, helped identify what uses will be emphasized and where they will be focused.

Alternative K includes new policies that have surfaced since the proposed 2002 Forest Plan and DEIS were issued—specifically, Canada lynx management direction. Although direction for Canada lynx has been added to all alternatives presented in the DEIS, it was used in the initial design of Alternative K.

Theme

Alternative K borrows ideas and management allocations from several alternatives presented in the DEIS, particularly Alternatives C, D, and I. These alternatives were most often cited in public comments as containing desirable forest plan elements.

Alternative K sustains the capabilities of forest ecosystems while addressing social values and expectations, as well as managing for multiple resource outputs. Ecosystem components are actively managed to improve wildlife habitat, water quality, and soil productivity. Management activities will maintain or restore ecosystem structure, function and composition.

Recreation activities across the forest will continue to be diverse. Emphasis will be placed on quality recreation experiences in a predominately natural setting. Recreation growth will become more managed, while still allowing modest increases in use.

Relationship to the revision topics

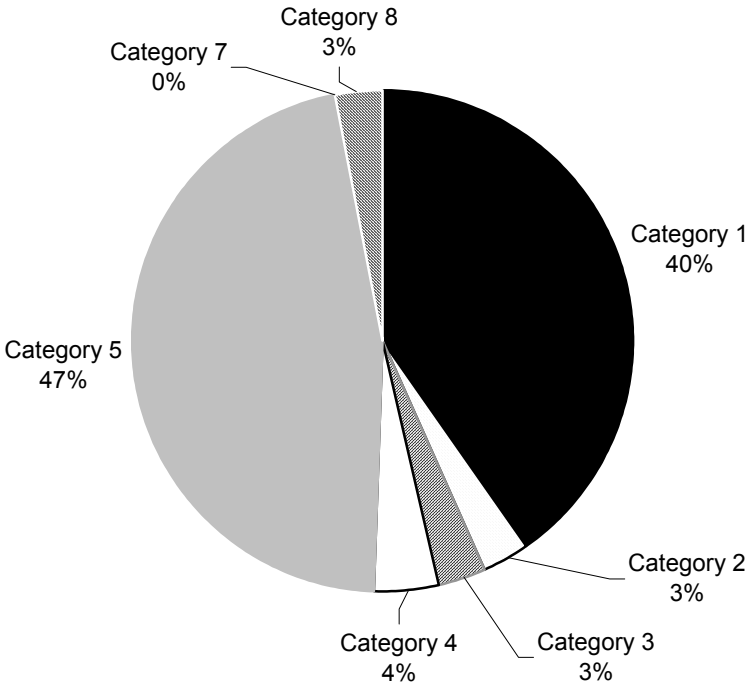
- **Biological Diversity—**Natural processes will be the primary factors shaping ecosystems in wilderness and roadless areas; however, active management may occur in some areas to meet stewardship or restoration goals. Alternative K has the second highest level of habitat enhancement for native and desired non-native species. Management activities will focus on maintaining and restoring habitats for populations of terrestrial and aquatic species for which there is a viability concern on the forest, as well as enhancing habitat for other species, such as game species. Overall trends in watershed conditions will improve due to restoration work. Vegetation composition will be managed mainly through silvicultural treatments, prescribed grazing, and prescribed fire for resource benefits and to move the forest toward desired conditions.
- **Travel Management—**Due to the composite nature of the theme under this alternative road reconstruction and road maintenance would be stressed. Management will be encouraged to convert roads to trails or fully decommission roads no longer needed to serve the forest or public. Construction of new roads may occur; however, the utilization of temporary

roads will be stressed. All snow-free motorized and mechanized travel would be limited to designated routes. Based on the management area prescription standards and guides and ROS classifications, this alternative is second in the amount of snow-free non-motorized opportunities in comparison to the other alternatives. It ranks fourth in over-snow motorized travel. For all recreation, loop systems would be utilized and developed to enhance recreational experiences.

- **Recreation—**Recreation opportunities toward the semi-primitive non-motorized and primitive end of the spectrum are emphasized. Summer motorized and winter non-motorized trail opportunities will be increased. Land allocation for existing ski resorts will be more than in Alternative D and address individual resort demands and skier expectations. No new ski areas are allocated and opportunities for aerial transportation corridors do not exist. Opportunities for additional backcountry huts are few if any. Emphasis will be placed on improving quality of existing sites and eliminating sites that are not efficient to manage. New developed recreation sites will be limited. Natural-appearing landscapes will be managed at a high scenic integrity level compared to the existing condition.
- **Roadless Areas—**Many areas deemed eligible are recommended for wilderness designation with an emphasis on lower elevation acreage.
- **Special Areas—**Designated RNAs are fewer than in Alternative D. More areas are allocated to MA 3.1 than in Alternative D to manage for current and future recreation use. A greater emphasis is placed on primitive opportunities in wilderness.
- **Timber Harvest—**Emphasis is on active management on the third of the forest outside wilderness and roadless areas. This will result in an ASQ slightly higher than in Alternative D. Active management of vegetation will be concentrated in areas that have been previously roaded or developed, and will focus on maintaining ecosystems and improving forest health.

Figure 11 summarizes the percentages of management area allocations, by category, for Alternative K.

Figure 11
Alternative K management area allocations by category



Category 1—wilderness, recommended wilderness, wild rivers; non-motorized recreation; limited winter motorized

Category 2—RNAs; minimal-use special interest areas

Category 3—motorized recreation; interpretive special interest areas; scenic rivers

Category 4—dispersed recreation; scenic areas; recreational rivers

Category 5—wildlife habitats; rangelands; forest products

Category 7—urban/wildland intermix

Category 8—ski areas and developed recreation sites; special uses.

Alternatives Submitted by the Public

On May 8, 2000, Congressman Scott McInnis provided the Forest Supervisor with a comment letter on the draft forest plan. This comment has two main components, a set of written documents on specific issues and a management area map. The comment is described in these documents as the "Blended Alternative." The full text of this comment can be found in the *Government Comment Letters* section of Appendix A, FEIS Volume 3. The map is located in the map packet, which is available on the web site, on CD-ROM, at Forest Service offices, and at local libraries.

The comment provided specific suggestions on many issues. The cover letter for the comment identified six primary issues: water, wildlife management, intermix, allowable ski area expansion, travel management, and wilderness. Statements of management intent, and in some cases, rewording of direction, were proposed in the comment letter.

The following is a summary of how the six areas were addressed in the 2002 Forest Plan direction (Chapters 1, 2, and 3) or in Alternative K. Full discussion of these issues can be located in the Response to Comment Appendix A, the FEIS, or the 2002 Forest Plan.

Water—The Blended Alternative proposes specific rewording of standards and guidelines for the management of water resources. This wording was not incorporated directly into the forest plan. Because of the degree of concern and controversy, however, all water direction has been carefully examined and re-written. Updated water aquatic and riparian direction can be found in Chapter 1 of the 2002 Forest Plan (Goal 1, Ecosystem Health), and Chapter 2 (Water and Riparian Resources).

Wildlife—Alternative K reflects an increase in winter range from the draft forest plan, a concern raised in the Blended Alternative.

Intermix—The Blended Alternative applied the intermix prescription—an allocation that identifies areas where there are opportunities to address issues that cross many ownership boundaries. Alternative K also applies this prescription.

Ski Area Expansion—The Blended Alternative allows for expansion of ski areas in certain locations, notably Summit County. Alternative K reflects this request, allocating the most additional 8.25 areas to the ski resorts in Summit County with limited additions elsewhere.

Travel Management—The Blended Alternative included site-specific travel management recommendations, as the DEIS did include site-specific travel plans. However, at the request of many public groups and individuals, the travel plan has been separated and a new round of planning will start after the forest plan revision is finished. The comments on individual roads and trails provided in the Blended Alternative, as well as in all other public comment letters, will be taken into account in the upcoming travel planning effort. The

general travel concepts contained in the Blended Alternative were considered in the 2002 Forest Plan. Areas of consistency with Alternative K include opportunities for looped trails and scenic byways.

Wilderness—Of the 8 areas proposed for wilderness designation in the Blended Alternative, 5 of them are included in Alternative K. These areas are: Treasure Mountain, Ute Pass, Acorn Creek, North Independence, and Hunter. See Chapter 3, Topic 4 of the FEIS Volume 2, *Recommended Wilderness and Roadless Area Management*, for location and description of these areas.

In addition to the six areas listed above, general themes in the Blended Alternative include: community and local support, multiple use opportunities, and general resource protection. These ideas were also explored in many other public comment letters. In response to the issue of community and local support, the 2002 Forest Plan now includes an expanded focus on public collaboration (2002 Forest Plan Chapter 1, Goal 5). Alternative K provides for a range of resource outputs, both recreational and commodity. And we have retained resource protection measures that were proposed in the draft forest plan, as well as adding some further direction resulting from new information that has recently become available.

All comments on the draft forest plan and DEIS, including the Blended Alternative from Representative McInnis, were examined in the content analysis process described in FEIS Volume 3, Appendix A, *Response to Comment*. In this process, individual issues were taken from the Blended Alternative comment and combined with similar issues submitted by other individuals to form public concerns. The Blended Alternative content generated many of the public concern statements found in Appendix A. We have considered and responded to these public concern statements in Appendix A.

In addition to Congressman McInnis's comment being a part of the content analysis process, our interdisciplinary team examined and discussed components of the map and comment letter as a whole. Some ideas and positions stated in the Blended Alternative were incorporated into the formulation of Alternative K. Some issues discussed in the Blended Alternative are not forest plan issues, or are better addressed elsewhere. In some instances, the Blended Alternative proposals were considered and incorporated in part or in a modified way in order to be responsive to other public concerns on similar issues.

Alternatives considered but eliminated from detailed study

Several alternatives were considered during the development of the DEIS and eliminated from further study during the planning process. For example, alternatives that differed only slightly from other alternatives were eliminated from further detailed consideration. When this occurred, all alternatives that were dropped from detailed analysis were reviewed and compared with the alternatives analyzed in detail to make sure that all important issues and concepts were included in the alternatives analyzed in detail.

ALTERNATIVE A

National Forest Management Act (NFMA) regulations at 36 CFR 219.12(f)(7) state that "at least one alternative shall reflect the current levels of goods and services provided by the unit and the most likely goods and services expected to be provided in the future if the current management direction continues. Pursuant to NEPA procedures this alternative shall be deemed the *No Action Alternative*."

As the 1984 Forest Plan was analyzed, it became clear that significant changes had occurred, primarily in the timber management area, but also in several other resource areas. The following summarizes that analysis, provides a rationale as to why the 1984 plan is not considered a viable alternative, and explains why it was updated and transformed into Alternative B for full analysis.

ALTERNATIVE G

Alternative G was developed to respond to preliminary, short-term internal direction regarding road building and maintenance. This alternative was not analyzed in detail because it does not address existing long-term policy direction. Forest plan alternatives are not designed to speculate on internal or external future policy; rather, they are designed to work within current knowledge and direction.

ALTERNATIVE H

Alternative H was developed to respond to concerns about urbanization. Opinions vary widely regarding the role the White River National Forest should, or can, play in the urbanization of areas adjacent to National Forest System lands. After extensive discussion, this alternative was not submitted to detailed analysis because urbanization is not directly controlled by Forest Service management activities. Instead of serving as the theme of a forest plan alternative, social impacts and effects (including urbanization) are considered to be environmental consequences of all of the alternatives considered in detail. This discussion can be found in Chapter 3 of the FEIS.

The selected alternative

Based on the analysis presented in this EIS and on public comments on the DEIS, the Regional Forester has identified **Alternative K** as the selected alternative. The reasons for this choice are explained in a record of decision that accompanies the release of this FEIS.

Accordingly, each alternative is described in terms of how it would be implemented with either 'experienced' funding or full funding. The experienced funding level assumes that actual funding is at the same level as the 1998-2001 annual average. The full funding level assumes that all goals and objectives will be met and is considered to be 50 percent higher than the 1998–2001 annual average. Specific information about the two budget levels is displayed in **Table 16** (supplemental table 3) at the end of this summary.

Conformance with RPA

NFMA regulations at 36 CFR 219.12 (f)(6) require at least one alternative to be developed that responds to and incorporates the Forest and Rangeland Resources Planning Act (RPA) Program's tentative resource objectives for each national forest displayed in the *Regional Guide*. However, the 1990 RPA Program establishes national guidance for units of the National Forest System through 1995 by providing program emphasis and trends rather than specific, quantified output targets for individual Forest Service programs. As a result, no resource objectives were quantified for each region to display in regional guide documents, which would then be passed on to individual forests.

The RPA program is updated every five years and has three components: (1) roles in natural resource management for Forest Service management, (2) Forest Service program responses to contemporary issues, and (3) long-term strategies to guide the program development and budgetary process.

RPA emphasizes four high-priority themes: (1) recreation, wildlife and fisheries resource enhancement; (2) environmentally acceptable commodity production; (3) improved scientific knowledge about natural resources; and (4) response to global resource issues. This guidance was used in the *1992 Rocky Mountain Regional Guide* (USDA Forest Service 1992) to shape National Forest System, research, and state and private forestry programs. This process also is considered in the revision of the existing forest plan. All of the alternatives incorporate the four high-priority themes.

Comparison of alternatives

This section is designed to help the reader understand and compare the land allocations, the activities and outputs, and the environmental effects of the seven alternatives considered in detail. Each description tells how the alternatives respond to the revision topics. This discussion focuses on factors that display measurable differences among alternatives, summarizing more detailed information that is found in Chapter 3 of the FEIS.

Comparison of effects by alternative	The following summary of the environmental and economic effects, which are presented in detail in Chapter 3 of the FEIS, reviews the differences among alternatives and should aid in the comparison of the effects each alternative is expected to have on the environment. The summary is presented by revision topic, with the addition of economic impacts. For a complete disclosure of environmental effects, consult Chapter 3 of the FEIS.

BIODIVERSITY

Analysis of ecological conditions revealed that most components of biodiversity on the forest are within their HRV, but some are not:

- Rangelands have been affected by the spread of noxious weeds and reseeding with non-native species. These impacts are expected to continue in all alternatives.
- Some forest stands are outside HRV conditions because of management activities, such as fire suppression and development of ski areas. Alternatives F, E, and B allocate the most acres to ski resorts; therefore, they will have the most impact on HRV conditions within permit boundaries. Other management activities are not expected to change HRV conditions significantly in any alternative. Fire suppression is expected to remain at a comparable level in all alternatives.
- Alternatives D, C, and K all stress the need to manage within HRV parameters, while Alternatives B and F do not provide management within the HRV. Impacts on HRV conditions will be the most significant under Alternatives B and F.

Two key aspects of wildlife habitats are **fragmentation** and **perforation**:

- Fragmentation of wildlife habitat is defined as the breaking up of contiguous blocks of habitat into progressively smaller patches that are increasingly isolated from one another. It also may be viewed as the process of interspersing blocks of suitable habitat with areas that are hostile to plant or animal life, such as highways or urban development. Fragmentation is expected to remain relatively constant in all alternatives and be most pronounced as the result of management activities on private lands adjacent to National Forest System lands.
- Perforation refers to holes within otherwise contiguous blocks of habitat. An example would be a clearcut (or group of clearcuts) surrounded by forest. Perforation is likely to result from road construction, timber management, and ski resorts. Alternatives B and F have the most potential to increase perforation of forest stands. Alternatives I, E, and C, in that order, have the least amount of land

allocated to management areas that would result in increased perforation.

Also under the biodiversity topic are the forest's various physical and biological resources:

Soils Standards and guidelines will maintain or improve the existing soil resource conditions in all alternatives.

Watersheds Standards and guidelines will maintain or improve the existing condition of watershed resources in all alternatives.

Air resources Management activities will not significantly affect the quality of air resources in any alternative.

Mineral and energy resources Adequate opportunities for the private development of mineral and energy resources will be maintained in all alternatives.

Forested vegetation Management activities are not expected to significantly change the percentage or distribution of different tree species in any alternative. Changes to structural stages (the developmental stages of tree stands in terms of tree size, age, and canopy closure) will be the most significant in Alternatives F and B, which allocate the most acres to timber sales, expansion of ski resorts, and road building. Alternatives I, E, and C have the least amount of lands allocated to these uses and are expected to undergo the least change.

- The average size and shape of forest patches are expected to change the most in alternatives that do not stress managing within HRV conditions. Alternatives D, C, and K both stress the HRV, while Alternatives F and B do not emphasize HRV conditions.
- Inventoried old growth is protected in all alternatives and is not expected to be affected. More existing stands will age and acquire old-growth characteristics under Alternatives I, E, and C, which contain less timber management, road construction, and ski resort allocations than do Alternatives B and F. The acreage and distribution of late-successional forest (mature and old-growth forest) are expected to follow trends similar to old growth. Late-successional forest acreage and distribution, including old growth, are expected to increase substantially across the forest in all alternatives.

Rangeland vegetation About 95 percent of the non-forested vegetation on the forest is considered to be within or moving toward desired conditions. This is expected to remain fairly constant in all alternatives. No significant changes to the distribution or composition of rangeland vegetation are expected.

Noxious weeds currently infest at least 90,000 acres of the forest. Alternatives B and E have the most potential for the spread of weeds; Alternatives D, I, and K have the least.

Domestic livestock grazing

The level of grazing by domestic livestock is not expected to change dramatically from the current situation in any alternative.

Fire management

Prescribed fire projects in forested areas are expected to make up a majority of the fuels management portion of the annual planned program. More acres are burned using prescribed fire in Alternatives B, C, D, and K than in other alternatives. The least amount of fuels treatment will occur in Alternatives F and I, with Alternative F having the fewest acres of annual treatment.

Alternatives that limit the amount of resource production, such as C, E, and I, will possibly lead to a trend in larger and longer-duration fires.

Stands large enough that are not affected by the ecological changes that occur at the boundaries of patches, increasing the amount of young seral forest habitats more than any other alternative. Alpine habitats above timberline will change the most under Alternatives E and F, which allocate the most acres to ski resorts and aerial transportation corridors. Sagebrush, cottonwood riparian, and pinyon-juniper habitats are not expected to change significantly in any alternative. Special habitats such as cliffs, caves, and waterfalls may be affected the most by alternatives that promote dispersed recreation such as I, C, and E, or from increased trail access in Alternatives E, B, and C. These impacts are not expected to significantly change viability conditions for any management indicator species on the national forest.

Overall, the wildlife resources and associated habitats on the forest are in good condition. Forest management actions are not expected to significantly affect species viability in any alternative. Most of the activities with the potential to negatively affect wildlife resources are occurring on private lands adjacent to the forest.

Mule deer and bighorn sheep would benefit from management areas that favor the specific habitat needs of each species. Deer are likely to benefit from Alternatives D, I, K, and B, which have the most acres dedicated to mule deer habitat management; the most acres dedicated to bighorn sheep prescriptions are in Alternatives K, I and D.

Interior forest habitats are important for a wide range of wildlife species. Alternative F, followed by B, D, and K will have the most impact on interior forest patch sizes in lodgepole pine and spruce-fir stands as a result of timber management. Alternatives C and E will have the least impact on interior forests.

The connectivity of habitats across the landscape provides for the movement of species to suitable habitats or to escape predation. Alternatives C, D, I, and K maintain the best conditions for unimpeded animal movement on the forest; Alternatives B, E, and F all provide conditions that impede dispersal or movement of some species.

Elk habitat quality is maintained above the minimum level of concern in all alternatives except Alternative I. However, Alternative I provides the largest

amount of elk security habitat of all the alternatives. Alternative K provides the greatest amount of elk winter range. The largest number of recreational visitor days for big game hunting is expected in Alternative F, followed by Alternatives E, B, C, D, and K.

Aquatic resources

Aquatic resources will be adequately protected by standards and guidelines in all alternatives. All alternatives maintain habitat with potential for viable Colorado River cutthroat trout populations; Alternatives E and I provide the most followed by C, K, D, B, and F. Recreational fishing opportunities are highest in Alternative C because of its emphasis on amenities.

RECREATION MANAGEMENT

Recreation

The White River National Forest is capable of providing a variety of recreation settings for non-motorized and motorized opportunities in summer and winter. The quantity, quality, and distribution of recreation opportunities depends on the mix of recreation opportunity spectrum (ROS) classes available and the theme of each alternative. The ROS maps in the map packet illustrate the mix of ROS settings, by alternative, in summer and winter. The number of acres in each ROS class is presented in charts in the recreation section of Chapter 3 of the FEIS.

Budget levels will continue to affect the quality of services in developed facilities under all alternatives. Under the experienced budget level (the average forest budget from 1997 to 2001), the number of developed units that could be rehabilitated or reconstructed ranges from 94 units in Alternative E to 65 units in Alternative F.

On the White River National Forest, one family campground may have between 4 and 108 units. The forest's current backlog in facility maintenance makes reconstruction of existing facilities a higher priority than the building of new ones. Consequently, developed capacity would be exceeded within the planning period in all alternatives because of the increased developed recreation use that is expected to occur.

A large share of the recreation budget would be allocated to recreation special uses in all alternatives, especially in Alternatives C and E, because of commitments authorized by existing permits. Under the experienced budget level 13 permits could be administered annually to standard in Alternatives B, C, D, F, and I, as defined in Meaningful Measures (a Forest Service process that helps improve services to recreation visitors by setting quality standards, prioritizing work by visitor preference, and making better use of available funding). These 13 permits are for concessionaires and ski resort operators. Alternative E provides for the annual administration of 134 permits to standard, or 39 percent of the forest's existing recreation permits.

Dispersed recreation includes motorized and non-motorized activities outside of developed areas. Alternative F provides the most summer and winter motorized opportunities; Alternative I provides the most summer and winter non-motorized opportunities. Because dispersed capacity depends on the

ROS classes available and the transportation system, Alternative I has the lowest capacity outside of wilderness, followed by Alternatives D, K, C, E, F, and B.

Because dispersed use is projected to increase in all alternatives, summer capacity outside of wilderness may be reached within the planning period in all alternatives. Alternative C provides for more dispersed campsites to be rehabilitated or reconstructed annually, approximately three percent of known campsites, followed by Alternatives K, E, D, B, I, and F.

Wilderness capacity depends on the ROS classes and trail systems provided under each alternative. Alternative I provides the most capacity followed by Alternatives C, F, B, E, D, and K. Current use projections indicate that wilderness capacity would not be reached within the planning period in any alternative.

Trails provide the opportunity to experience backcountry settings, get away from traffic and crowding, find solitude, and test survival skills. Under the experienced budget level, the amount of annual trail maintenance conducted outside of wilderness ranges from 220 miles in Alternative F to 540 miles in Alternative E. Inside wilderness, Alternative C provides the most miles maintained annually at 860 trail miles and Alternative F provides the least trail maintenance at 200 miles. Alternative E provides the most trail miles reconstructed or constructed annually with 23 miles inside wilderness and 120 miles outside.

Ski resorts

Each of the seven forest management alternatives allows continued operation of the 11 ski resorts currently operating on National Forest System lands, according to the terms of special use permits authorized by the forest. Each alternative provides a different level of potential annual skier capacity based on a variety of potential expansion sites (Table 3). Alternatives B, E, and F attempt to meet skier demand and provide the highest levels of service. Alternatives D and I do not allocate any additional National Forest System lands for skiing beyond current levels. Opportunities for skiing in these alternatives would remain stagnant at approved capacity levels. Alternative K allows for expansion and boundary adjustments for some existing resorts in response to projected increases in population, need to improve public safety, and to reduce impacts to wildlife.

Table 3
Acres allocated to ski areas by alternative

	Alternative						
	B	***C***	***D***	***E***	***F***	***I***	***K***
Acres of MA 8.25	92,970	57,664	42,965	83,750	68,275	43,282	51,519

Aerial transportation corridors

Alternative transportation opportunities that have the potential to directly affect National Forest System lands include the use of gondolas, trams, or chairlifts to move pedestrians to, from, or between key locations at resort communities. Such aerial transportation systems may be used as 'people movers' to provide an alternative to ground-based transportation systems. Aerial transportation systems also can provide a source of recreation in the form of scenic rides and access to National Forest System lands.

Table 4
Acres allocated for aerial transportation corridors by county and alternative

	ALTERNATIVE						
County	**B**	**C**	**D**	**E**	**F**	**I**	**K**
Eagle	0	0	0	1,672	956	0	0
Garfield	0	0	0	0	0	0	0
Pitkin	0	75	0	0	75	0	0
Summit	0	346	0	1,076	366	0	0
Forest total	**0**	**421**	**0**	**2,748**	**1,397**	**0**	**0**

Alternatives C, E, and F allow aerial transportation systems on National Forest System lands. In particular, Alternatives E and F make the highest allocations to this management area, while Alternatives B, D, I, and K do not allocate any lands for this purpose.

Scenic resources

Scenery is an integral component of all forest settings, contributing to the quality of the user's experience. The most obvious and significant effects on scenic resources are from vegetation and landform alterations from road construction, vegetation management, power line clearing, recreation facility development, and mineral exploration and development.

The scenic integrity levels (SILs) of very high, high, and moderate will result in a relatively natural-appearing landscape, which research has shown to be preferred by the public. Thus it is important for the forest to manage scenery at this level. **Table 5** displays the amount of natural-appearing landscapes in each alternative.

Table 5
Acres of natural-appearing landscapes by alternative

	ALTERNATIVE						
	B	**C**	**D**	**E**	**F**	**I**	**K**
Acres	1,716,000	1,836,000	1,699,000	1,973,000	1,580,000	2,038,000	1,707,000

Infrastructure and travel management

New road construction levels are anticipated to be lower than 1984 Forest Plan projections for all alternatives. Most new construction is expected from timber management activities. Road reconstruction and road maintenance may vary by alternative but should actually increase above current levels to bring roads into compliance. Permanent road closures, obliteration, and recontouring of roads identified for decommissioning will occur in all alternatives. Decommissioning of roads would be based on need, resource protection, and compliance with management area prescriptions. The amount of road construction, reconstruction, maintenance, and decommissioning accomplished each year will be based on forest priorities, administrative and public needs, and budgetary allocations.

The primary issue for winter travel management and recreation use was the perceived lack of non-motorized recreation areas. Wilderness is considered by many to be inaccessible to non-motorized uses such as cross-country skiing, snowshoeing, and dog sledding because of the steepness of the terrain, avalanche hazards, southern aspects, or remoteness from trailheads. To address this issue, some alternatives allocate more land outside of wilderness to non-motorized travel only. Another issue influencing winter travel management is the effect of motorized travel on wildlife habitat. Some alternatives reduce motorized areas to avoid conflicts occurring in wildlife winter ranges. Snow compaction from all uses is a concern to be considered in the management of lynx.

The following summary of motorized, motorized-on-designated-routes, and non-motorized acres (**Tables 6** and **7**) was based solely on management area prescription standards and ROS classifications. Assignment was given to the more restrictive of the two when an area had differing travel classifications. This analysis was done for comparison between alternatives. This analysis should be used only for comparison among alternatives. A final travel area strategy will be completed as part of the travel management plan based on the selected alternative. Because of further analysis, site-specific information, and other considerations, it is very likely that within the travel management plan, categories and numbers represented will vary from what is represented in this document.

Table 6
Summary of Acreage for Motorized/Motorized on designated routes/Non-motorized—Summer

	Type of Strategy	Acres	%	Total Motorized	%
Alternative B					
	Non-Forest Service Lands	195,510	8		
	'Motorized'	885,826	36	1,031,512	42
	'Motorized designated routes'	145,686	6		
	'Non-motorized'	1,254,930	51		
Alternative C					
	Non-Forest Service Lands	195,510	8		
	'Motorized'	613,753	25	948,700	38
	'Motorized designated routes'	334,946	13		
	'Non-motorized'	1,337,744	54		
Alternative D					
	Non-Forest Service Lands	195,511	8		
	'Motorized designated routes'	1,059,972	43	1,059,972	43
	'Non-motorized'	1,226,469	49		
Alternative E					
	Non-Forest Service Lands	195,510	8		
	'Motorized'	847,924	34	1,091,111	44
	'Motorized designated routes'	243,187	10		
	'Non-motorized'	1,195,328	48		
Alternative F					
	Non-Forest Service Lands	195,510	8		
	'Motorized'	1,046,671	42	1,268,265	51
	'Motorized designated routes'	221,593	9		
	'Non-motorized'	1,018,175	41		
Alternative I					
	Non-Forest Service Lands	195,511	8		
	'Motorized designated routes'	672,036	27	672,036	27
	'Non-motorized'	1,614,403	65		
Alternative K					
	Non-Forest Service Lands	195,511	8		
	'Motorized designated routes'	795,812	32	795,812	32

Notes: *Based on Management Area Standard and Guide Strategies and ROS Classifications*
Total Lands with in the White River National Forest Boundary = 2,481,950 acres
Total White River National Forest Lands = 2,286,440

Table 7 Summary of Acreage for Motorized/Motorized on designated routes/Non-motorized—Winter

	Type of Strategy	Acres	%	Total Motorized	%
Alternative B					
	Non-Forest Service Lands	195,511	8		
	'Motorized'	1,253,234	50	1,266,262	51
	'Motorized designated routes'	13,028	1		
	'Non-motorized'	1,020,179	41		
Alternative C					
	Non-Forest Service Lands	195,510	8		
	'Motorized'	889,980	36	986,647	40
	'Motorized designated routes'	96,667	4		
	'Non-motorized'	1,299,797	52		
Alternative D					
	Non-Forest Service Lands	195,510	8		
	'Motorized'	829,075	33	889,742	36
	'Motorized designated routes'	60,667	2		
	'Non-motorized'	1,396,699	56		
Alternative E					
	Non-Forest Service Lands	195,510	8		
	'Motorized'	847,924	34	1,091,111	44
	'Motorized designated routes'	243,187	10		
	'Non-motorized'	1,195,328	48		
Alternative F					
	Non-Forest Service Lands	195,510	8		
	'Motorized'	1,265,997	51	1,266,031	51
	'Motorized designated routes'	30,048	1		
	'Non-motorized'	990,395	40		
Alternative I					
	Non-Forest Service Lands	195,511	8		
	'Motorized'	462,407	19	562,343	23
	'Motorized designated routes'	99,936	4		
	'Non-motorized'	1,724,096	69		
Alternative K					
	Non-Forest Service Lands	195,510	8		
	'Motorized'	825,044	33	938,246	38
	'Motorized designated routes'	113,202	5		
	'Non-motorized'	1,348,194	54		

Notes: *Based on Management Area Standard and Guide Strategies and ROS Classifications*
Total Lands with in the White River National Forest Boundary = 2,481,950 acres
Total White River National Forest Lands = 2,286,440

Roadless areas

Thirty-seven roadless areas were found to be capable of and available for wilderness recommendation on the forest. Collectively, these areas comprise about 298,000 acres.

Table 8 identifies the number of and the total acreage of capable and available roadless acres recommended for wilderness (Management Area 1.2) by alternative. It also shows whether they are adjacent to existing wilderness.

Alternative I recommends both the largest number of roadless areas for wilderness designation and the largest number of acres. Alternative E recommends the next highest acreage, but fewer areas. There are fewer, larger roadless areas recommended in Alternative E than there are in Alternative C. Alternative C recommends 10 areas, but with less acreage than Alternatives E or I and more acres than Alternative D. Of the alternatives that do recommend wilderness, Alternative D has the fewest areas and the fewest acres. Alternative K recommends more then D and less than alternative C. Alternatives B and F make no recommendations.

Table 8
Areas of management area 1.2 by alternative

	Alternative						
	B	*C*	*D*	*E*	*F*	*I*	*K*
Acres of management area 1.2	0	94,000	47,000	107,000	0	200,000	82,000
Percent of capable and available roadless areas recommended for wilderness	0	32	16	35	0	69	28
Number of adjacent areas	0	9	3	0	0	22	13
Number of non-adjacent areas	0	1	2	6	0	4	3

Capable and available roadless areas were assigned either management area 1.2 or another management area. If an area is not recommended for wilderness designation, it must be allocated to one of the other available management areas. **Table 9** summarizes how roadless areas have been assigned to different management areas (acreages have been rounded to the nearest 100). The seven management area categories have been aggregated into three groups to show what types of management will occur on these lands. Management area categories 1 and 2 were combined into Group 1; Categories 3 and 4 into Group 2; and Categories 5, 7, and 8 into Group 3.

Table 9
Summary of capable and available roadless acres in different management area categories by alternative

		ALTERNATIVE						
		B	C	D	E	F	I	K
Group 1								
	acres	21,900	199,500	124,300	137,000	33,500	258,100	153,800
	percentage	7	67	42	46	11	87	51
Group 2								
	acres	126,600	44,200	15,000	131,800	25,700	25,500	12,100
	percentage	42	15	5	44	9	8	4
Group 3								
	acres	149,400	54,400	158,900	29,200	238,800	14,200	135,700
	percentage	50	18	53	10	80	5	45

Roadless areas allocated to categories 1 and 2 (Group 1) are most likely to retain their undeveloped character. These categories are basically non-motorized with backcountry emphases. This includes roadless areas that will be managed as RNAs and some special interest areas. Alternative K manages the highest percentage of roadless areas in categories 1 and 2. Alternative C has the next highest percentage, followed by D, E, F, and B.

Categories 3 and 4 (Group 2) emphasize various types of recreation. With an emphasis on human uses, the roadless areas that are assigned to management areas in these categories are likely to retain some undeveloped characteristics but also to include some motorized opportunities. Development in these management areas, however, does not include intensive land management activities such as commercial timber harvest or ski resorts. Alternatives E and B allocate the largest percentage to categories 3 and 4, with 44 percent and 42 percent, respectively.

Categories 5, 7, and 8 (Group 3) will have the most intensive development and have the potential to have the most significant impact on the undeveloped character of roadless areas. Roadless areas in these management areas may have timber harvest, road construction, motorized uses, utility corridors, and wildlife habitat developments. Alternative F has 80 percent of the roadless areas managed with these management areas. Alternatives D and B manage about half of the roadless areas this way followed by Alternative K at 45 percent, while Alternatives C, E, and I contain a low percentage of roadless areas assigned to Group 3.

Special areas

Heritage resources

The White River National Forest contains a rich fabric of historical and prehistoric resources known as heritage resources. Only 5 to 10 percent of the forest has been intensively inventoried to locate these resources. However, each time a ground-disturbing activity is planned the law requires that an inventory be conducted to mitigate any impacts on heritage resources. In addition to these actions, at least 125 sites are monitored annually for any adverse effects or vandalism. Because of the protections afforded under various laws, adverse effects on heritage resources are expected to be minimal.

Research natural areas (RNAs)

RNAs are established to maintain areas of natural ecosystems and areas of special ecological significance. The White River National Forest currently shares an RNA (Hoosier Ridge) with the Pike National Forest. Fifteen potential RNAs have been identified for possible inclusion in the system. These range in size from 1,420 to 24,450 acres. The number and vegetation representation of proposed RNAs varies depending on the theme of each alternative. Alternative B proposes no additional RNAs; Alternative E proposes four additional RNAs, totaling 52,600 acres; Alternative F proposes seven additional RNAs, 67,200 acres; Alternative C proposes nine additional RNAs, 76,000 acres; Alternative D proposes 12 additional RNAs 93,900 acres; Alternative I proposes 15 additional RNAs, 116,300 acres; and Alternative K proposes 5 additional RNAs, 37,400 acres.

National trails

The White River National Forest manages a segment of the Continental Divide National Scenic Trail and three national recreation trails. Other trails of national or regional significance either cross or are proposed to cross the forest. All of these trails play a role in providing trail-related recreation in systems that reach beyond the forest boundaries. Effects on national trails are expected to be minimal and do not vary significantly among alternatives.

Special interest areas

The forest has some special and unique resources. Planning procedures and regulations allow for the recognition and protection of these resources, as has been implemented in several alternatives.

Six special interest areas emphasize recreation use and interpretation of the environment. Alternative D proposes the most areas allocated to this purpose, followed by Alternatives K, C, E, and I. Alternatives B, D, and F propose no allocations for this purpose.

Fourteen special interest areas minimize recreation and other uses in order to protect their special biological or zoological values. Alternative D would allocate the most land for this purpose, followed by Alternatives K, I, C, E, and F. Alternative B would allocate no lands for this purpose.

Wild and Scenic Rivers

National forests are directed to evaluate their rivers during plan revision for inclusion in the National Wild and Scenic River System (NWSRS). The White River National Forest evaluated all of its rivers, including 77 in detail, and found 5 rivers totaling 103 miles to be eligible for inclusion in the NWSRS: the South Fork of the White River, the Crystal River, Deep Creek, the Colorado River in Glenwood Canyon, and Cross

Creek. The South Fork of the White River, Deep Creek and the Crystal River are recognized in Alternative B, while all of the eligible rivers are recognized in Alternatives C through K. These rivers will be managed to maintain their eligibility until a detailed suitability study is completed. The second phase of river evaluation, a suitability study, will be considered when:

- Strong local interest or support is demonstrated for wild and scenic designation; and
- Congress expresses interest in a specific river for wild and scenic designation; or
- A proposed project would alter the free-flowing character of a stream, such as through impoundment, or would affect the resources that made the stream eligible.

Wilderness

The White River National Forest manages three areas as wilderness and shares management of five additional areas with adjacent national forests. Congress has designated about a third of the forest as wilderness. In addition to providing a resource for recreation, these areas also are important for maintaining species diversity, protecting threatened and endangered species, protecting watersheds, and providing for scientific research and various social values.

Alternatives analyzed in this forest plan revision vary wilderness management by allocating different acreages to be managed as pristine (management area 1.11), primitive (1.12), or semi-primitive (1.13). Pristine allocations range from Alternative E with 9 percent of the total area of wilderness on the forest to Alternative I with 15 percent of the total area. Primitive allocations range from Alternative B with 89 percent of the total area of wilderness on the forest to Alternative K with 65 percent of the total area. Semi-primitive allocations range from Alternative I with 0.3 percent of the total area of wilderness on the forest to Alternative E with 6 percent of the total area.

Timber suitability and allowable sale quantity

Figure 12 displays the lands that are suitable, including scheduled and unscheduled, for timber production for each alternative. Alternatives F, D, and K have the largest amounts of suitable timber lands.

Figure 13 displays the ASQ (unconstainted by budget) and volume offer (constrained to the experienced budget level) for sawtimber for the first decade of the plan's implementation for each alternative. The full implementation level represents the funding of all programs at a level one and one-half times as much as the experienced budget level (the amount of funding that the forest actually receives each year, shown here as the average annual budget between 1998 and 2001). Alternative F provides the highest ASQ and volume offered under the experienced budget level.

Figure 14 displays the net returns for the timber program for the first decade of the plan's implementation for each alternative. No alternative is below cost for timber management. Alternative F generates the highest net returns.

Figure 12
Acres of suitable timber lands by management area prescription

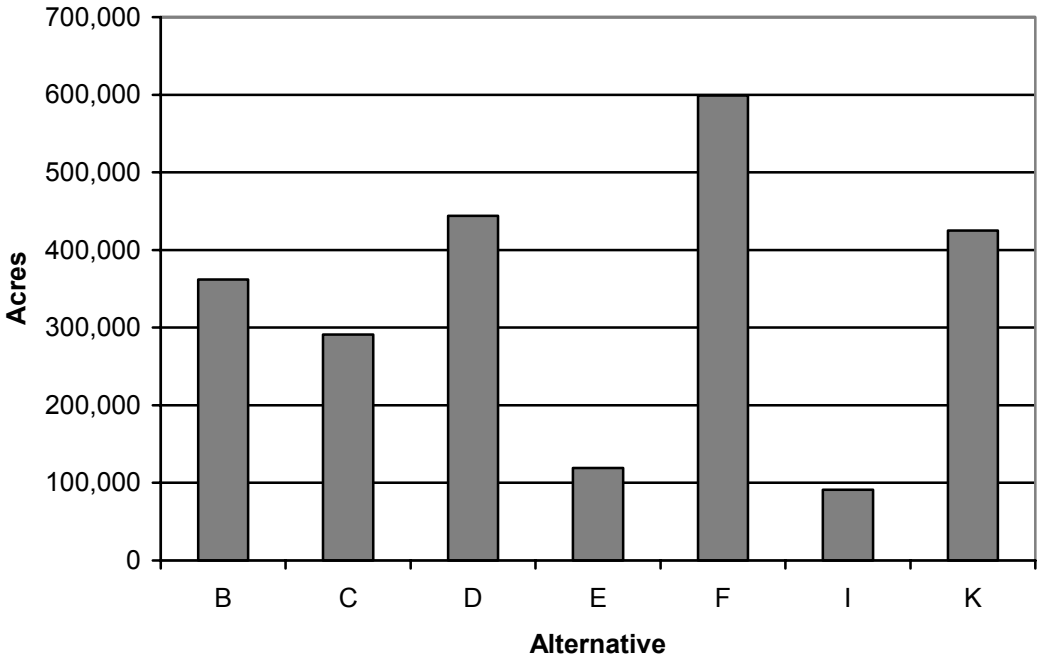


Figure 13
Sawtimber ASQ (unconstrained by budget) and Volume Offered (constrained by experienced budget)

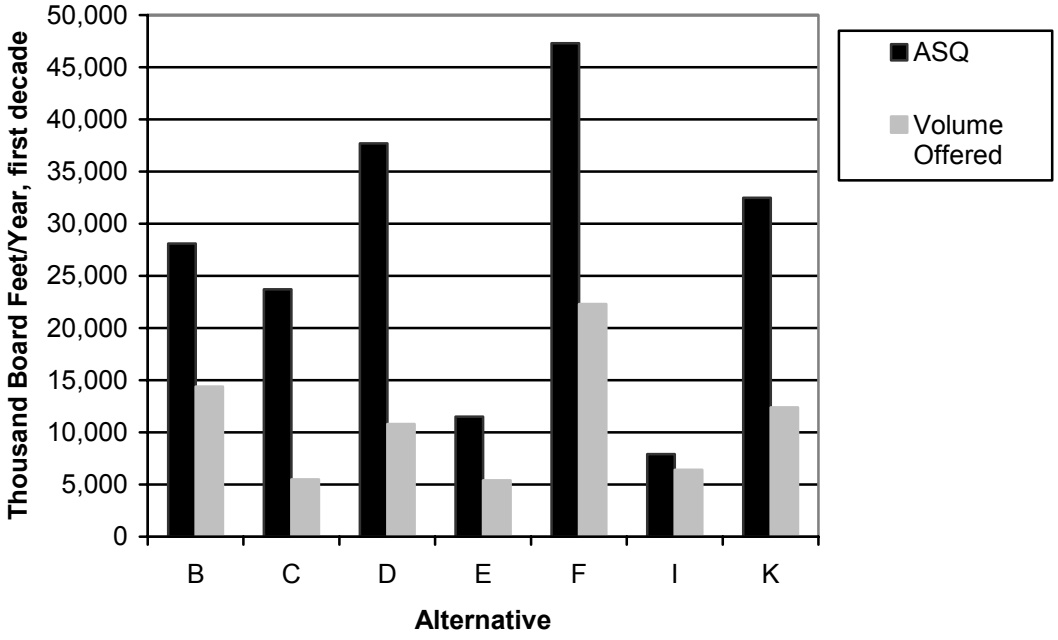
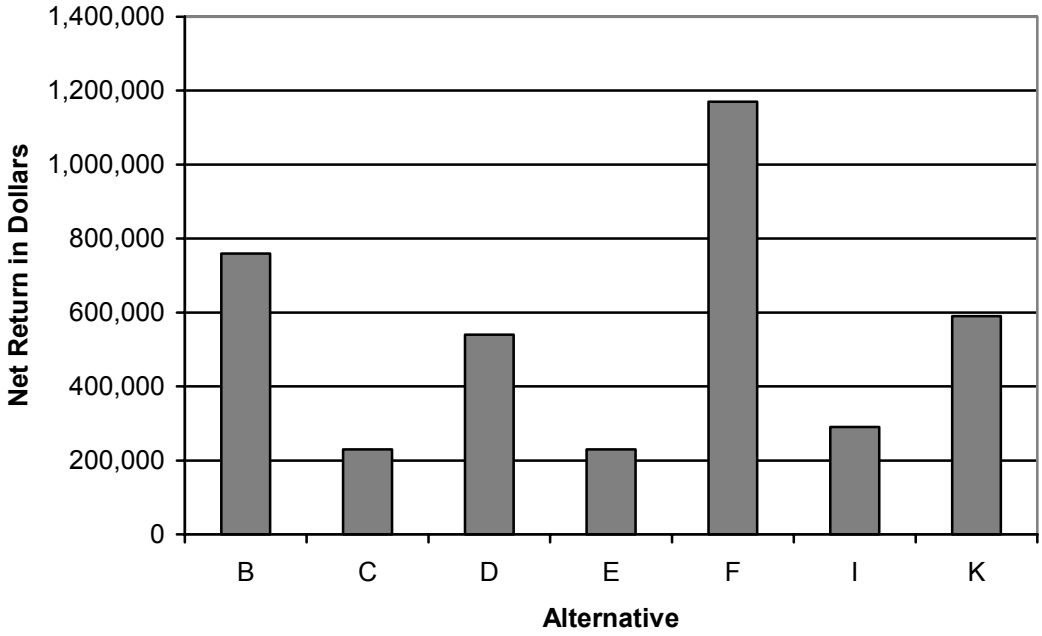


Figure 14
Net return from the timber program per year (decade 1, experienced budget level)



Social and economic environment

Forest contributions to area economy

The White River National Forest provides jobs and income in the planning area through a variety of resource programs. Spending associated with downhill skiing on National Forest System lands dominates, providing over 90 percent of all national forest-related jobs and labor income. The percentage of hunting- and fishing-related jobs in the area is very small relative to other types of recreation. The smallest job provider is timber harvesting, primarily because no large processing facility is located in the area. In total, jobs associated with national forest management activities currently provide nearly a third of the planning area jobs and a quarter of the area jobs and labor income. The forest contributes more to its local economy than any other national forest in the Rocky Mountain Region.

Changes in recreational uses of the forest, agency expenditures (salaries, equipment, contracts), and the use of timber and forage resources have direct and indirect effects on planning area jobs and income. An increase in recreation or timber production may mean an increase in jobs and income to local counties. In addition, if production is decreased in one resource and increased in another, there is a shifting of jobs from one industry to another.

Table 10 displays the change in employment by resource for each alternative. Figures are displayed for both the desired condition and experienced budget levels. The base year of 1994 was used as a starting point for total jobs and income. The table reflects how jobs and income would decrease or increase from 1994 levels. **Table 10** indicates that total jobs attributed to forest use will increase in all alternatives. Increases will range from 21 percent to 29 percent. Nearly all of the increases result from increased skiing and other recreation use. Jobs and labor income resulting from timber harvest are the only indicators that could drop, with potential employment changes ranging from a loss of 22 jobs to a gain of six jobs.

Effects on economic efficiency

Table 11 displays the economic and financial public net value (PNV) (public values less agency costs) for each alternative. All monetary values are expressed in constant dollars, with no allowance for inflation. A 4 percent discount rate was used over a 50-year period (2000 to 2049). The reduction of PNV in any alternative as compared to the most financially or economically efficient solution is the economic trade-off, or opportunity cost, of achieving that alternative.

As shown in **Table 11**, the financial PNV (Forest Service revenues less costs) for experienced budget levels varies from a negative $83 million for Alternative I to a break-even position for Alternative F. What appears to make Alternatives F the highest PNV is high timber harvest levels. Alternatives with preservation emphases show the highest net cost to the taxpayer. There are no agency revenues associated with these emphases, but expenses remain the same. This same pattern is true for the full budget level, but the PNVs are lower. Higher expenses of this level do not generate additional revenues sufficient to offset the budget increase.

The economic PNV (public benefits less costs) is positive for all alternatives at both budget levels. The net value ranges from a low $14.5 billion for Alternative I to a high

of $15.1 billion for Alternative B. There is only a 3 percent difference between the lowest and highest PNV—a difference that may be indistinguishable given estimated accuracies for value and output estimates. The net economic benefits are orders of magnitude larger than the financial gross revenues. This suggests that even with the limited monetary values available for the analysis, society benefits greatly from the White River National Forest.

Many outcomes and ecosystem conditions associated with each alternative are not included in the economic efficiency analysis. Prices for many of these outcomes and conditions have been estimated in the economic literature, but their portability or transferability to other locations and situations is very limited at this time. The USDA and Washington Office of the Forest Service have not established the monetary prices of non-commodity outcomes or conditions for application to forest planning. However, the agency's cost of achieving these outcomes and conditions is included in the economic efficiency analysis.

Table 10
Change to employment by program by alternative in 2010, total jobs contributed

	ALTERNATIVE							
Resource	Base year (1999)	B	C	D	E	F	I	K
Experienced budget level								
Skiing	24,158	24,725	24,725	24,344	24,725	24,725	24,341	24,725
Other recreation	4,648	5,516	5,516	5,509	5,516	5,386	5,366	5,420
Fish and wildlife use	1,845	2,182	2,182	2,182	2,182	2,006	2,182	2,182
Grazing	221	221	221	221	221	243	221	221
Timber harvest	33	77	28	57	28	121	33	66
25% payments	46	59	48	53	48	69	47	56
Forest Service expenditures	333	333	334	334	334	333	333	334
Total forest management	**31,284**	**33,113**	**33,054**	**32,700**	**33,054**	**32,883**	**32,523**	**33,004**
Percent change from 1999	---	5.8%	5.7%	4.5%	5.7%	5.1%	4.0%	5.5%
Full budget level								
Total forest management	**31,284**	**33,325**	**33,245**	**32,910**	**33,245**	**33,122**	**32,707**	**33,220**
Increase from experienced budget level	---	212	191	210	191	239	184	216

Table 11
Economic and financial efficiency (present net value over 50 years in millions of 2000 dollars)

	ALTERNATIVE						
Experienced budget level	***B***	***C***	***D***	***E***	***F***	***I***	***K***
Forest Service revenues	245	205	223	204	283	200	238
Public benefits	15,418	15,378	15,011	15,377	14,966	14,956	15,388
Costs	-283	-283	-283	-283	-283	-283	-283
Financial net revenues	-38	-78	-60	-79	0	-83	-45
Economic net benefits	15,135	15,095	14,728	15,094	14,683	14,673	15,105
Full budget level							
Forest Service revenues	272	218	247	216	328	207	265
Public benefits	15,445	15,391	15,035	15,389	15,011	14,963	15,416
Costs	-424	-424	-424	-424	-424	-424	-424
Financial net revenues	-152	-207	-177	-209	-96	-217	-159
Economic net benefits	15,021	14,966	14,611	14,964	14,587	14,538	14,991

Vacant grazing allotments

The closure of vacant allotments eliminates the use of these areas for domestic livestock production in the future and removes them from the suitable land base. While closing vacant allotments does not reduce current permitted animal unit months, it does reduce future management flexibility by eliminating the possibility of using these areas to resolve future conflicts between livestock grazing and other resources or provide forage in drought years. See the vacant allotment alternatives map for the location of these areas.

The acres that would be removed from the suitable land base by the closing or partial closing of vacant allotments is shown in **Table 12**.

Table 13 displays how the allotments vary by alternative in terms of whether they should be retained, closed, or partially closed.

Decisions to retain or close vacant allotments will be made on an allotment by allotment basis and will be separate from the record of decision for the FEIS.

Table 12a
Acres suitable for cattle grazing by alternative

	ALTERNATIVE						
	B	*C*	*D*	*E*	*F*	*I*	*K*
Acres presently suitable for cattle grazing	960,841	960,841	960,841	960,841	960,841	960,841	960,841
Management area prescriptions excluding grazing (RNA's)	0	19,069	23,421	11,009	16,180	32,220	4,324
Acres proposed for full or partial closure in this alternative	0	150,484	134,279	195,144	80,730	160,664	152,034
Total suitable acres (cattle) for this alternative	960,841	791,288	803,141	754,689	863,931	767,956	804,483

Table 12b
Acres suitable for sheep grazing, by alternative

	ALTERNATIVE						
	B	*C*	*D*	*E*	*F*	*I*	*K*
Acres presently suitable for cattle grazing	1,167,261	1,167,261	1,167,261	1,167,261	1,167,261	1,167,261	1,167,261
Management area prescriptions excluding grazing (RNA's)	0	22,268	27,772	12,020	18,151	38,335	6,374
Acres proposed full or partial closure in this alternative	0	200,472	178,781	264,026	108,261	218,004	198,428
Total suitable acres (sheep) for this alternative	1,167,261	944,521	960,708	891,215	1,040,849	910,922	962,459

Table 13
Number of vacant allotments recommended for retention, partial retention, and closure

	ALTERNATIVE						
Recommended status	***B***	***C***	***D***	***E***	***F***	***I***	***K***
Cattle							
Allotments recommended for retention	23	5	6	4	10	13	6
Allotments recommended for partial retention	0	3	4	0	2	3	4
Allotments recommended for closure	0	15	13	19	11	7	13
Sheep							
Allotments recommended for retention	28	8	6	4	18	4	9
Allotments recommended for partial retention	0	4	8	0	4	1	4
Allotments recommended for closure	0	16	14	24	6	23	15
Total vacant allotments	**51**	**51**	**51**	**51**	**51**	**51**	**51**

How to find out more about the Revised Forest Plan

The White River National Forest is committed to helping individuals and groups in our communities understand the impact that the Revised Forest Plan will have on their activities. Full sets of all official documents may be found in the following locations:

- Your local library
- On our website, www.fs.fed.us/r2/whiteriver
- A CD-ROM available from your local Forest Service office

If you would like to request a CD-ROM containing the full set of documents, or have questions and would like to speak with a Forest Service employee, following is a list of our offices on the White River:

Aspen Ranger District
District Ranger Jim Upchurch
806 West Hallam
Aspen, CO 81611
970-925-5277

Blanco Ranger District
District Ranger Bill Hahnenberg
317 East Market Street
Meeker, CO 81641
970-878-4039

Dillon Ranger District
District Ranger Jamie Connell
680 River Parkway
Silverthorne, CO 80498
970-468-8400

Eagle Ranger District
District Ranger Cathy Kahlow
125 West 5th Street
Eagle, CO 81631
970-328-6388

Holy Cross Ranger District
District Ranger Cal Wettstein
24747 US Highway 24
Minturn, CO 81645
970-827-5715

Rifle Ranger District
District Ranger Dave Silvieus
0094 County RD
Rifle, CO 81650
970-625-2371

Sopris Ranger District
District Ranger Bill Westbrook
620 Main Street
Carbondale, CO 81623
970-963-2266

Supervisor's Office
Forest Supervisor Martha Ketelle
900 Grand Avenue
Glenwood Springs, CO 81601
970-945-2521