

APPENDIX A

PUBLIC INVOLVEMENT AND RESPONSE TO COMMENTS

INTRODUCTION

This appendix describes the public involvement process used in the *Forest Plan* revision for the Arapaho and Roosevelt National Forests and Pawnee National Grassland. Key events are included that occurred during public involvement scoping. The compilation of actions and results from those events are also included. Direction for scoping is found in 40 CFR Part 1501.7. More specific "public participation" direction is found in 36 CFR 219.6 planning regulations.

STEP 1—INITIAL SCOPING

The original *Forest Plan* was finalized in May, 1984. The *1984 Plan* was appealed by the Colorado Mountain Club. In July 1987, the Chief remanded to the ARNF-PNG portions of the *1984 Plan* and *Final Environmental Impact Statement (FEIS)* for further financial and economic analysis of the timber program. In May 1989, the Regional Forester with the concurrence of the Forest Supervisor entered into an agreement with the Colorado Mountain Club to suspend action on the remand and to initiate a revision of the Plan in 1990.

In May and June, 1990, the Forest sponsored planning forums. The purpose was to discuss land and resource management issues from the viewpoint of interested people; to identify current management direction aspects that might need change; and to identify and describe any new land or resource issues that should be addressed in the *Revised Plan*. The forums were held in Fort Collins, Greeley, Boulder, Idaho Springs, and Granby and were attended by 100 individuals representing many diverse interests.

In July, 1990, the Forest published a 20-page newsletter that provided information about Forest and Grassland resources, uses, and management. The public was asked to tell the Forest Supervisor their views about Forest and Grassland management and the future of these public lands. Nearly 10,000 copies of the newsletter were printed and distributed.

A Notice of Intent (NOI) to revise the *1984 Forest Plan* was published in the Federal Register in July, 1990. In this NOI, the public was asked to comment on the scope of the analysis associated with the Revision.

During October, 1990, the Forest and Grassland held nine open houses with 160 people participating. These were casual, drop-in events to provide people with information about the

Plan revision effort and to encourage them to comment about forest management activities.

In September, 1990, the Forest contacted 60 local government officials, state officials, and federal officials requesting written comments to assist with the revision scoping effort. In addition, the Forest met with Federal and State agencies having natural resource/environmental responsibilities. Written comments and concerns discussed at the meetings were considered with other comments in the scoping process. Participating agencies were:

- Bureau of Land Management, USDI
- Rocky Mountain National Park, USDI
- U S Environmental Protection Agency
- Fish and Wildlife Service, USDI
- Colorado Department of Natural Resources
- Colorado Division of Parks
- Colorado Division of Water Resources
- Colorado Division of Wildlife
- Colorado Natural Areas Program
- Colorado State Forest Service

In October, 1990, the Forest established a scientific working group comprised of scientists from Colorado State University, the University of Colorado, the U.S. Fish and Wildlife Service National Ecology Research Center, and the Rocky Mountain Forest and Range Experiment Station. There were ten scientists in the group representing a cross section of academic disciplines. As part of the scoping effort, this group helped to identify issues and concerns the Forest should address during the revision.

Between July, 1990 and December, 1990, the Forest spoke to a variety of special interest groups at their request. The main objective was to explain the revision process and how groups can become involved. These meetings were a part of an ongoing effort to establish positive working relationships with users and interest groups. Participating groups were:

- Colorado Mountain Club
- Sierra Club
- Colorado Cattlemen's Association
- Timber Purchasers/Industry Representatives
- Larimer County 4-Wheel Drive Club
- Northern Colorado Water Conservancy District and Municipal Users
- Colorado OHV Coalition
- Crow Valley Grazing Association
- Pawnee Grazing Association
- Clear Creek Mining Association

STEP 2—ISSUE IDENTIFICATION

The Forest received 600 responses during the comment period. The initial comment period ended November 15, 1990, however, it was extended to December 31, 1990 due to continuing response from the public. Responses came from nearly 500 individuals, 30 organizations, 30 businesses, 21 government officials, and 11 internal meetings.

There were approximately 170 respondents from Boulder County, and 200 from Clear Creek, Grand, Jackson, and Gilpin Counties. Denver metro and Fort Collins/Loveland each had over 70 respondents. Weld County had 17. The remainder of the respondents were from other parts of Colorado, Wyoming, and other states.

Comments from the rural areas centered on economic and social concerns with the majority of respondents being employees of timber-dependent industries. Comments from the Front Range varied but the main emphasis was on environmental and ecological issues. Comments from organizations related to specific areas of concern and covered a broad range.

Each letter was read and analyzed, as were all comments received from meetings and other response forms. Over 3,400 comments were gathered. These comments were then screened by the Interdisciplinary Team (IDT) to identify comments that could and should be addressed in the Forest Plan Revision.

A scoping document, Planning Action No. 1, Identification of Purpose and Need, was prepared in March, 1991 that summarized all aspects of the scoping and identification process. This document contains information regarding scoping received through 1990. All letters received after 1990 are maintained in the Planning Records along with the initial letters received during scoping.

STEP 3—CONTINUED PUBLIC INVOLVEMENT

Forest officials met with individuals and groups throughout the process to provide information and explanations of the Revision. Newsletters and other revision-related information has been sent to over 3,500 individuals, organizations, and agencies and were used to keep the public informed and involved in the Revision process.

DEVELOPMENT OF ISSUES AND TOPICS

The IDT developed issues from public and internal comments, the Five Year Evaluation Report, and the remand analysis. A single issue may have been developed from many similar comments. Some issues were developed based on a single comment. The IDT reviewed the issues to determine their significance or the degree of change to the programs related to the issue, the intensity of feelings about the issue, and the potential effect on other resources if management direction were to change. Topics were composed of single issues or several closely related issues.

ACTION DETERMINATION FOR TOPICS IDENTIFIED DURING SCOPING

A variety of actions were taken in response to the topics identified during scoping. Comments were grouped into topics based upon the substance of the underlying issue. This grouping led to more efficient consolidation of comments into topics. The possible actions and the criteria to determine what action to take with these comments are shown below. Appropriate action was determined by IDT review of issues within each topic.

Revision Topics: These were topics where new data, new knowledge, new laws or changed public concerns required a fresh look at how the *Forest Plan* was working.

Amendment Topics: These were relatively minor changes that could be completed before the revision. The one topic included in this category was the Forest Landownership Adjustment Plan completed in 1992.

Implementation Topics: These were areas where there was no evidence that the existing Forest Plan was not working. Usually, it was because the Forest Plan had not been fully implemented, or that funding was not available. Wilderness management was a topic where existing direction is adequate and concerns were a result of direction not being fully implemented.

Legislative Topics: These were topics where legislative action was needed to answer the issue or concern. The main concern here was related to changes to the 1872 Mining Act, grazing fees, and recreation user fees.

Research Topics: These were topics where no decision could be made at this time because of lack of knowledge. In some cases, the research needs were included in the revision for referral and action by the Forest Service research community. Other items were referred to the Rocky Mountain Forest and Range Experiment Station.

Topics for Other Governmental Entities: These were topics where the Forest Service does not have jurisdiction, such as reintroduction of extirpated species.

Topics Outside the Scope of Forest Planning: These may be topics within the scope of the Forest Service but beyond the ability of Forest Plan to deal with such as timber harvesting in the Northwest or greater emphasis on recycling of wood products.

No Action Topics: These were comments which were merely observations or statements requiring no action such as the "I like to camp in ZZZ campground."

IDENTIFICATION OF REVISION TOPICS

The Forest identified in Planning Action No. 1, Identification of Purpose and Need the areas of the Plan which need changing and described how the revision topics were chosen. The areas needing change were divided between major and minor items based on the amount of change needed and the effect those changes might have on Forest programs.

Major topics are the focus of the Forest Plan Revision. This category includes topics for which resource conditions, technical knowledge, or public perception of resource management have created a possible need for change in the 1984 Plan. These topics generally would be significant changes to the Plan and involve choices in management direction where there is no public consensus on the best course of action. Major topics form the basis for plan alternatives.

A number of items were identified that do not meet the above criteria for revision topics. In general, these items represent minor adjustments to management direction and there is general consensus on the needed adjustment. These minor topics could be handled through many simple changes to the Plan but were most efficiently addressed during Forest Plan Revision.

There have been modifications to the list of topics presented in Planning Action 1. Following is the list of revision topics as described in Chapter One of the Draft Environmental Impact Statement (DEIS). These topics have become the primary focus of the Forest Plan Revision effort.

Biological Diversity (biodiversity) including old growth, fire management, fisheries management, riparian area management, threatened and endangered species management, and wildlife-related items;

National Forest and Residential Intermix areas;

Oil and Gas Leasing;

Recreation-related topics, including recreation settings, scenic resources and Wild and Scenic Rivers,

Roadless Areas;

Timber Management, including suitable lands, Allowable Sale Quantity (ASQ), silvicultural practices, firewood opportunities, and below-cost sales;

Travel Management including public access and road standards; and

Water Yield Management and instream flows.

The minor adjustments that were made during the revision cover the following topics:

Fire Suppression;

Information, Education and Interpretation;

Land Uses,

Range Management;

Recreation Management including skiing;

Research Natural Area recommendations;

Soil Productivity;

Water Quality Standards and Monitoring; and

Infrastructure

PUBLIC INVOLVEMENT

Public involvement activities, during the last 18 months, held in conjunction with the Forest Plan Revision featured five methods of reaching the public. These methods included conducting open houses and field trips for the public, writing personal letters, producing newsletters, having one-to-one personal meetings, and putting together media programs

The approach to all interested public groups has been one of listening and responding with an honest answer of what has happened in the past, how the various alternatives may address planning actions in the future, and focusing on the concerns of the people rather than using public involvement as a forum for voting. Every group and individual has an important view of how they see things, but no one idea solves all problems

OPEN HOUSES AND FIELD TRIPS

During March and April of 1994, eight open houses were held in and around the Forest and Grassland giving people an opportunity to comment on alternative ways of managing the Forest and Grassland. Over 350 people attended and commented on the alternatives, the roadless area inventory, and wild and scenic rivers inventory. Feedback from the open houses included 170 personal letters, 100 comment sheets, and two petitions with over 400 signatures on each.

During the summer and early fall of 1994, the Forest Service invited interested individuals to join any of six day trips to discuss Forest Plan revision topics. These trips provided the opportunity for the public to talk with one another and Forest Service employees about revision topics while viewing the resources in question. Over 100 people took part in the trips and conversations addressed timber cutting, National Forest and residential intermix, recreation, biodiversity, water facilities, and endangered species.

During the open houses and field trips, participants had the opportunity to have their names and addresses added to mailing lists for future mailings and to receive more information about the planning process.

INDIVIDUAL MEETINGS

On occasion, individuals met with Forest Service officials at their office, at a Ranger District Office, or Supervisor's Office to address a group's or individual's concerns. A summary of the meeting is taken with key points being provided to those staff, districts, and IDT members who have a working interest in the meeting.

NEWSLETTERS

During the past 18 months, three newsletters have been published (giving a total of six since the planning process first began more than four years ago). These newsletters have been used to

keep various individuals and groups apprised of the latest information and the status of the planning process

The newsletters have discussed specific issues, such as oil and gas leasing, wild and scenic rivers, management area direction, and alternatives. The newsletter was also used to respond to questions or concerns addressed at the meetings or those posed by letter writers, and as a forum to announce meetings, and report on previous meetings, open houses, and field trips

LETTERS

There were people who would not or could not attend public/private meetings and who did not request a meeting, but still had specific concerns they wanted addressed. Sometimes they called, but more often they choose to write about subjects such as travel management, roadless areas, and biodiversity. Responses to letters were prepared by staff, districts, and/or IDT members who had a working interest in the subjects.

MEDIA VISITS

Realizing that not everyone could attend a meeting, request a meeting, or write with questions and concerns, television talk shows were used to reach others. A talk show in early 1995 gave the Forest Supervisor a 60-minute opportunity to discuss the Plan in detail and answer questions.

Additional meetings with newspaper reporters were used to explain the planning process and procedures. These contacts were used to lay the groundwork for when the draft *Revised Plan* and *DEIS* become available for public comment.

DRAFT REVISED FOREST PLAN AND DRAFT ENVIRONMENTAL IMPACT STATEMENT

The draft *Revised Forest Plan* and draft *Environmental Impact Statement* were mailed to the public in December 1995 and January 1996. The Federal Register Notice of Availability was published in March 1996 and the comment period closed in June 1996 allowing nearly six months for people to review and comment on the documents.

During that six month period, Forest and Grassland staff members conducted open houses, gave briefings, met with interested groups, and participated in other activities to inform people about the draft *Plan* and *DEIS*. Seven different open houses were held at various locations around the Forests and Grassland. The open houses provided an opportunity for people to come and ask questions, get information about the organization and content of the planning documents, discuss issues with Forest and Grassland staff members, view electronic and paper maps, and leave comments. Forest Leadership Team members visited county commissioners, State and Federal agency representatives, Federal Congressional Aides, and others to conduct briefings about the planning documents. A few meetings were held with groups to answer their specific questions

about the draft *Plan* and *DEIS*. The Forest Supervisor participated in a televised discussion about the draft *Revised Forest Plan* in January 1996

COMMENT ANALYSIS

As a result of the public comment process, the Forest and Grassland received approximately 1,500 letters with approximately 5,000 comments. The comment analysis process started in June 1996. The Council on Environmental Quality (CEQ) regulations require that all substantive comments be "assessed and considered" for preparation of the final documents. There are five possible actions in response to public comments. These are:

- 1 Modify alternatives, including the proposed action.
- 2 Develop and evaluate alternative not previously given serious consideration by the agency.
- 3 Supplement, improve or modify the analyses.
- 4 Make factual corrections.
- 5 Explain why the comments do not warrant further agency response, citing the sources, authorities, or reasons which support the agency's position and, if appropriate, indicating those circumstances which would agency reappraisal or further response (40 CFR 1403.4(a))

Each letter was read and the comments identified. The comments were grouped by the five categories listed above, the revision topic, and the subject matter or resource area. Similar comments were combined for preparing responses. Responses varied depending on what the commenter requested.

There were many comments requesting that Alternative B be modified (category 1). There were few comments recommending changes to any of the other alternatives. The modifications people recommended involved changing the management area allocations, changing management direction, improving the clarity of management direction, and changing land suitability allocations. Much of the work was focused in this area between draft and final *Forest Plan* and *EIS*.

There was a comment recommending that additional alternatives be considered (category 2). The Forest Leadership Team felt the current range of alternatives addressed the concern raised in the comments so no additional alternatives were added for the FEIS. Additional rationale is contained in the Response to Comments section.

There were many requests to supplement, improve or modify the analysis presented in the draft documents (category 3). In some cases, additional analysis work was completed to respond and, in other cases, it was not. However, our rationale is provided in the response to comments and in our planning records.

Factual corrections were made and incorporated into the final documents.

Many comments were often personal opinions or expressions of preference and fit into the fifth category. These were either incorporated into the overall final review of the alternatives or we explained our rationale for not making a further response. For example, many commenters expressed preference for particular alternatives or urged the decision maker to select that particular alternative. Our final review included reviewing the merits of each alternative to see if another alternative should be preferred or selected. District teams were also asked to review the management area allocations for Alternative B and determine whether components from other alternatives should be incorporated.

COMMENT RESPONSE

Forest and Grassland ID teams completed several major tasks to respond to comments. The suggestions to modify Alternative B were many. Management area allocations, travel management strategy, and land suitability were three areas that received a lot of varied comments on a variety of topics. People's requests were sometimes general. For example, there were many comments requesting additional wilderness or no more wilderness without identifying what particular areas should be changed. Other requests were specific asking that specific areas be changed. For example, many people requested that the James Peak area be designated as wilderness while others specifically requested that it be allocated to a management area that would continue current uses and allow motorized use.

District ID teams were asked to review general comments about roadless areas, wilderness, research natural areas, land suitability, travel management, and others and update the alternatives allocations. They also reviewed any specific comments pertaining to the lands they administer. As a result of these efforts, the travel management strategy, the alternative management area allocations, suitable lands, and other maps were updated and clarified.

The draft *Revised Forest Plan* also received many comments, both general and specific. People generally commented that additional clarity was needed and that activities should be planned based on realistic budgets. Many specific comments were also received, particularly about standards and guidelines. The specific comments were reviewed individually and when the changes fit with the overall intent or helped to improve the clarity they were made. In other cases, changes that did not improve the clarity, that did not provide clarity, or did not provide the desired flexibility were not made. A major effort was undertaken to improve the clarity of forest wide direction by identifying priorities and specifically identifying objectives tied to three potential budget levels. This is a major area of improvement over the draft *Revised Plan*. The monitoring and evaluation chapter was also updated.

The analysis in the EIS was also reviewed and updated in many areas to respond to comments and questions. Each topic was updated based on the updated goals and objectives. Additionally, many topics were extensively updated to address comments we received. For example, the biological diversity topic was updated to address comments on old growth, wildlife, vegetation, and others. Other topics extensively reworked include:

- aquatic and riparian resources to address comments on water yield and other water issues,

- timber, fire and biological diversity to address comments on forest health, timber suitability, and others,
- inventoried roadless areas to address comments on biological diversity, wilderness recommendations, and updated road and trail information;
- travel management to address comments about the controversy over road and trail use; and
- others

Finally, the specific responses to comments were completed and follow this section of Appendix A. The response section is organized by topics. Then the comment or group of comments is described. Finally our response is described. After reviewing and analyzing the comments we received and completing the work described above, the responses were finalized. The responses describe the processes, information, or rationale we used to address the comment. Sometimes the responses will direct the reader to other parts of the documentation where the comment was addressed more fully.

RESPONSE TO COMMENTS ON THE DRAFT *REVISED FOREST PLAN AND DEIS*

BIOLOGICAL DIVERSITY - GENERAL

Comment: Application of "ecosystem management" is not clearly demonstrated.

Response: This requires more than a single statement, paragraph or page to explain because of the complexity and broad scope of this subject. A detailed review of the entire *Forest Plan* and Appendices is necessary to completely understand the intended application at different scales throughout the Forests and Grassland. The basis for applying ecosystem management is probably best introduced in the *Forest Plan*, Chapter One (Forestwide Direction), Sections One and Two.

Comment: Wildlife and biodiversity are important aspects of the ecosystem which should be given high priority for protection and restoration in the *Forest Plan*.

Response: Wildlife and biodiversity have priority emphases, that are assured by the following specific *Forest Plan* direction along with other more general direction. Forestwide goals 1-8 and objectives 1-12 for Biodiversity, Ecosystem Health and Sustainability (*Forest Plan*, Chapter One, Section One, Management Emphasis Goals & Objectives), operational goals, standards and guidelines 28-130, 166 and 183 (*Forest Plan*, Chapter One, Section Two); and Geographic Areas and Management Areas that emphasize wildlife habitat and biodiversity (*Forest Plan*, Chapters Two and Three). The proposed action (Alternative B) ranks high in addressing the needs of many important wildlife habitat and biodiversity components (*FEIS*, Chapter Three, Terrestrial Habitat-Broad Scale Overview and Fine Scale Overview).

Comment: Protect special habitats (old growth, riparian, shortgrass, etc).

Response. Special habitats will be managed so that their important functions will be maintained or improved. See the preceding comment response concerning wildlife and biodiversity having high priority for protection and restoration in the *Forest Plan*.

Comment: Many people felt the Forest Service should use conservation biology concepts as its guiding management. Conservation biology promotes allowing native ecosystems to recover and develop without much human interference. The natural processes are the dominating forces; human uses are allowed where they are compatible. Other commenters felt that the Forest should continue to approach management from a multiple-use, sustained yield view.

Response: Alternative H is based almost entirely on conservation biology concepts. Other alternatives incorporate conservation biology concepts to varying degrees. Conservation biology concepts were used where appropriate in Alternative B (selected alternative). Alternative B incorporates many types of uses. It address the

key resource issues of recreation, intermix, scenic areas, Research Natural Areas, etc while continuing to manage some areas for forest products.

Comment: Colorado Division of Wildlife (CDW) is willing to assist in the monitoring and evaluation for biodiversity.

Response This offer by CDW is gratefully accepted. Such assistance by a partner agency is recognized as essential for successful implementation of the *Forest Plan*, especially in monitoring wildlife population trends.

Comment: What is the basis for landscape linkages and corridors?

Response Connectedness of ecosystems was part of the biodiversity issue, a major revision topic. To address this, the status of connected/disconnected ecosystems and potential effects were considered. Forested and open corridors were identified as important connectors that could be affected by management activities. Examples of species needs are given in the *Final Environmental Impact Statement (FEIS)* for forested corridors with many forest dwelling wildlife, and open corridors with wildlife requiring openness. The significance is that forested corridors are extensive, generally well linked across forested ecosystems, and can be substantially reduced in amount yet still provide important forested travel corridors that are generally well in excess of the minimum 100 meter width (*FEIS*, Chapter Three, Terrestrial Habitat, Mountains, Broad Scale Overview).

As indicated in guideline #40 (*Forest Plan*, Chapter One, Section 2), the basic intent is to ". facilitate multidirectional movement between important habitats ". While landscape linkages are apparent for certain terrestrial wildlife species it can also apply to plants, and in aquatic ecosystems to associated animal and plant life.

Comment: Define basis for determining impacts of motorized use.

Response Impacts of motorized use on terrestrial wildlife are presented for Forests and Grassland (*FEIS*, Chapter Three, Terrestrial Habitat, Broad Scale Overview) and the description of the analysis process is presented in Appendix B to the *FEIS*.

Comment: Alternative analysis needs to quantify differences in fine scale elements, not simply rank alternatives.

Response Ranking of alternatives in the viability assessment for ARNF-PNG (*FEIS*, Chapter Three, Fine Scale Overview) is based on quantified environmental consequences that are presented elsewhere in Chapter Three. Pertinent tables with quantified data are referenced along with the alternative rankings.

BIOLOGICAL DIVERSITY - OLD GROWTH

Comment: Maintain a maximum amount of old growth forests.

Response: In relation to existing amounts of old growth, the proposed action (Alternative B) maintains amounts in decade 1 and increases beyond decade 1. Increases are maximized in ponderosa pine and Douglas-fir (where old growth is presently less than 1 percent of the total acres in these conifer types), and in spruce-fir. Lodgepole pine old growth is slightly increased over time (Table 3.60, *FEIS*, Chapter Three) Only Alternative E would produce more, producing another 1 percent of lodgepole pine old growth by decade 5 (Table 3.62).

Comment: Maintain forest connection between old growth areas and analyze how cutting individual units of old growth will affect forest fragmentation.

Response: Management direction will assure adequate forest connections as demonstrated at the end of the following Environmental Consequences sections of Vegetation Structure, Forested Corridors and Interior Forests (*FEIS*, Chapter Three, Terrestrial Habitat, Mountains, Broad Scale Overview).

Using current Forest data with GIS mapping to approximate the existing situation and incorporating Forestwide direction to maintain or improve continuity, it was possible to predict that potential adverse effects of forest fragmentation are unlikely at the Forest scale. Further analysis and evaluation for proper cutting unit design will occur at the more localized landscape and project levels once areas of cutting units are identified

Comment: Recommend special consideration be given to wildlife species dependent on old growth.

Response Old growth forests are considered fine scale components that require specific attention (*FEIS*, Chapter Three, Terrestrial Habitat, Mountains, Fine Scale Overview) This is because old growth can be quickly reduced to early forest successional states, but once lost are irreplaceable for long periods of time In addition, the low amount of ponderosa pine and Douglas-fir old growth is probably below RNV (*FEIS*, Chapter Three, Terrestrial Habitat, Mountains, Broad Scale Overview, Old Growth Forests) Accordingly, Forestwide direction emphasizes ponderosa pine and Douglas-fir old growth management for retention of existing amounts and increased amounts in the future. The more abundant spruce-fir and lodgepole pine old growth will also be managed to maintain distribution, function and amount. As a result, wildlife species that are oriented to old growth habitat will benefit It should also be noted that there are no wildlife species that are known to be dependent on old growth However old growth provides optimal, productive habitat condition that many species are strongly associated with.

Comment: Why "less stringent" requirements for old growth than in the Forest Service Regional descriptions?

Response. Regional old growth descriptions were available for use in 1992 (Mehl) but most

inventories in the Arapaho and Roosevelt National Forests (ARNF) were conducted between 1990 and 1992. Criteria for ARNF's inventory were developed based on local data; regional workshops in 1990 on spruce-fir, lodgepole pine, Douglas-fir and ponderosa pine old growth involving Forest Service participants from the Regional Office, Forests, Districts and Rocky Mountain Research Station, and are considered consistent with subsequent Regional descriptions in obtaining results (Lowry 1992)

In the second paragraph of the Regional descriptions (Mehl 1992) it states "These old-growth descriptions are not precise definitions. There is a certain amount of subjectivity in defining old growth. Old growth is conceptual and difficult to define precisely." While for spruce-fir, Douglas-fir and ponderosa pine the size and/or number of large live trees is more rigorous in Regional descriptions, the size and/or number of large snags and fallen trees is more rigorous in ARNF's definition. Since mortality tree sizes/numbers generally lag live tree sizes/numbers (i.e., in a stand with 14 inch snags and fallen trees, more and larger live trees are typically present), similar assessments of the same site are expected with either set of criteria. A Commenter also noted that Regional canopy closure criteria are higher than ARNF's, but this is incorrect. The Regional 50 and 35 percent plus attributes are neither "must" or "quality" criteria for these conifer types. However 20 percent plus overhead canopy closure is a prerequisite for old growth with ARNF's inventories

Comment: What is the basis for the estimate that old growth will be adequate for species viability?

Response. No species are known to be dependent on old growth and the proposed action will increase old growth amounts, especially in conifer types where old growth is most limited. In addition, ecosystem functions that include old growth forest will be maintained or improved (*FEIS*, Chapter Three, Terrestrial Habitat, Mountains, Fine Scale Overview). Also reference Biological Diversity - General and Biological Diversity - Old Growth and the Viability Assessment section of this document.

Comment: There should be a quality definition or description of old growth to delineate the highest quality stands.

Response. This was done as described in the ARNF's old growth forest inventory procedure (Lowry 1992).

BIOLOGICAL DIVERSITY - RESEARCH NATURAL AREAS and SPECIAL INTEREST AREAS

Comment: Some commenters felt that specific Research Natural Areas (RNA) should be adjusted in acreage. Another commenter felt that the *DEIS* was incorrect in stating that designating an area as a RNA did not impact Recreation.

Response. All the proposed Research Natural Areas were reevaluated by District and ARNF-

PNG resource teams after reviewing the public comments. Adjustments were made when compatible within the criteria of a RNA. RNAs are few in number, occur in semiprimitive nonmotorized and primitive areas. Little use occurs at present and this is not expected to change.

Comment: Many commenters supported the decision the Forest made in the amount of RNAs to be designated. Some wanted additional RNAs including more low elevation RNAs.

Response: We believe the proposed RNAs are reasonable at this time. See Appendix G of the *Forest Plan* for a narrative of our selection and size criteria as well as more detail on the process used on the ARNF-PNG.

Comment: Some commenters oppose designating RNAs or question the Forest's authority to designate them.

Response: The Code of Federal Regulations 219.25 directs the Forest Service to provide for RNAs during forest planning. Refer to superior level agency emphasis memos. (Robertson 4060-3 memo, 7/19/93; Estill & Burns 4060-3 memo, 11/1/93, Thomas 4063 memo, 5/25/94; Estill 4060-3 memo, 11/29/94)

Comment: Commenters felt that RNA designation is more restrictive than wilderness, particularly towards uses such as Outfitter/Guides and grazing.

Response: It is true that current Forest Service manual direction for RNAs could be more restrictive to recreational uses which degrade the values of a particular RNA. However, these restrictions could not occur without full review and disclosure under NEPA.

Comment: Some people felt that management plans are needed for proposed RNA's prior to their final designation.

Response: Further management planning could be needed for individual RNAs. If this is found to be the case, the process of developing such a plan would be done under another NEPA process and the public would have opportunity for contributing to such a plan (Zwight 1920 letter to Middlekauff, 5/22/96.)

Comment: Some commenters felt that we should not allow snowmobiling in RNAs and SIAs.

Response: Snowmobiling is not allowed in most RNAs. The only RNA on our Forest that allows snowmobiling is the Bowen Gulch RNA. The Bowen Gulch RNA allows snowmobiling in order to reflect Congressional intent for that area. Snowmobiling is allowed in most Special Interest Areas, but could be restricted if the use was degrading the values for which the SIA was established. If snowmobiling becomes an issue in a SIA, it will be handled through the NEPA process.

Comment: Some Colorado Natural Heritage Program conservation (CNHP) sites were recommended to be Special Interest Areas. Some commenters felt that all CNHP conservations sites should be designated as Special Interest Areas.

Response: All sites identified by the Colorado Natural Heritage Program were evaluated as candidates for Research Natural Areas or Special Interest Areas. Those sites that were appropriate were incorporated. Others were not included because their characteristics did not warrant RNA or SIA designation.

Comment: We question the need for any more/new research areas. And, if needed, they should be a maximum size of 300 acres. (Comment was specific to Pawnee National Grasslands.)

Response: Most of the ecosystem types found in the Rocky Mountain Region, including those on the National Grasslands, are poorly represented in RNAs. 300 acres is often inadequate for protecting the ecological integrity of RNAs. RNAs larger than 300 acres usually do a better job of maintaining ecological processes, protecting biodiversity, and representing natural variability.

Comment: With decreasing budgets how can you afford to manage the RNAs?

Response: Reduced Forest Service budgets mean less expenditure for programs across the Forest. We will always prioritize our workload to meet congressional intent while minimally impacting people, services, and resources.

BIOLOGICAL DIVERSITY - THREATENED, ENDANGERED, SENSITIVE OR RARE SPECIES

Comment: Some commenters felt that the monitoring and evaluation of threatened, endangered, and sensitive (TES) species is not adequate. Other commenters felt that better provisions are needed for the protection of TES species.

Response: Direction in the *Forest Plan* (Chapter Four) has been reviewed and modified to assure adequate monitoring and evaluation of TES and other species. Appendix G (*FEIS Appendices*, Section G-1) now has an Analysis of Management Indicator Species which discusses monitoring.

The *Forest Plan* is designed to adequately protect TES species and is estimated to insure viability (*FEIS*, Chapter 3, Terrestrial Habitat, Mountains and Plains, Fine Scale Overviews and *FEIS Appendices H and I*.) The U.S. Fish and Wildlife Service concurs with this determination. Managing for the needs of TES species is an emphasis goal in the *Forest Plan*.

Comment: Recommend implementing the Endangered Species Act and National Forest Management Act by including multi-species recovery plans and habitat conservation plans. Recommend a rare species recovery program.

Response: Developing recovery plans and conservation plans is not a requirement of forest planning. Recovery plans are developed for species listed as threatened or endangered by the U.S. Fish and Wildlife Service (USFWS). While the Forest

Service may contribute to the development of recovery plans, the USFWS is the responsible agency.

In some cases conservation strategies are developed for TES species. These again are usually developed through interagency's efforts and cover larger geographic areas than an individual National Forest. If such strategies are in place, the Forest can incorporate the appropriate information into the *Forest Plan* during amendment or revision, but such strategies are not required as a product of forest plan revision.

Occasionally conservation agreements are developed between agencies to give general guidance on what each agency will do within it's authorities to promote the conservation of a species. Again, this is not a requirement of forest plan revision.

A biological assessment and biological evaluation (*FEIS*, Appendices H and I) were developed to address all of the threatened, endangered, and sensitive species on the Forest or that could be effected by management of the Forest. The USFWS has concurred with the determination for listed species and the measures needed to protect them. Habitats for sensitive species are either not effected by actions addressed in the Revision or standards and guidelines were developed to protect habitats where appropriate.

If in the future, new recovery plans, designations of critical habitat, conservation strategies, or conservation agreements are developed, the *Revised Forest Plan* will be reviewed to determine if it is consistent with new documents.

Evaluation of, and protection for TES species has been provided. There is no requirement that forest plan revisions must produce conservation strategies for each of the individual species present on a Forest.

Comment: Forest direction exceeds agency authority for protection of threatened, endangered, and sensitive species.

Response: The Forest Service is mandated to protect or enhance threatened, endangered, and sensitive (TES) species under a variety of laws, regulations and policies. Some of these are the Endangered Species Act, the National Forest Management Act and Forest Service policy. All of the *Revised Forest Plan* goals, objectives, standards and guidelines fall within these laws, regulations and policies.

BIOLOGICAL DIVERSITY - VEGETATION

Comment: How does Alternative B impact forest structures in the long term?

Response: Estimated structural stage changes in major conifer types due to timber harvest, fire, fuel treatments and forest growth over five decades are presented in Table 3.60 (*FEIS*, Chapter Three Terrestrial Habitat, Mountains, Broad Scale Overview).

Comment: How has the Front Range forest health assessment been factored into the *Plan*?

Response: The Front Range forest health assessment and the analysis and direction found in the *Plan* are based on similar concepts such as disturbance regimes, forest health parameters in fire ecosystems and vegetation structure. As an example, these concepts were used to formulate the goals and desired conditions found in the geographic area descriptions. Also as an example, the Wildland Fire Management Assessment completed for the Forest includes an analysis of high flammability fuels profiles and high values at risk similar to analysis completed in the Front Range forest health assessment (*FEIS*, Chapter 3, Fire, Current Conditions on ARNF, Characterizing Future Fire Events)

Comment: Change the definition of a forest opening; make it a standard, instead of a guideline.

Response: The application of this guideline (*Forest Plan*, #71) follows Regional Forest Service policy. The definition of a forest opening is clear and allows management flexibility on the ground to make case by case determinations of when an opening is an opening.

BIOLOGICAL DIVERSITY - WILDLIFE

Comment: The usefulness of forested corridors that are only 100 meters wide and 20 acres in size is questioned and modification of the definition is suggested.

Response: As demonstrated and discussed (*FEIS*, Chapter Three, Terrestrial Habitat, Mountains, Broad Scale Overview, Forested Corridors) current amounts of forested corridors are estimated to be above RNV, and as such could be substantially reduced while still providing important forested travel corridors that are generally well in excess of minimum width and size limits. The existing situation is generally a well connected forest matrix with abundant, redundant forested travel opportunities that will remain as a forested matrix (rather than narrow stringers of forested corridors) and continue to function well. The use of the word "corridor" is possibly misleading given the existing and foreseeable situation on the ARNF for providing more of a forested matrix with many travel opportunities for wildlife than what is connoted by "corridor." Corridors were expressed by the public as issues and, accordingly, were dealt with in like terminology.

Comment: Change management area prescriptions or other decision maps for wildlife core areas to minimize human impacts on wildlife habitat/populations.

Response: The ARNF-PNG is an urban national forest. As such, we strive for a balance, to protect critical wildlife habitat and still provide for a large number of Forest users. The preferred alternative, Alternative B, provides for protection of wildlife habitats, increasing some, maintaining others. Goal #39 restores habitat to minimize adverse affects of human-caused fragmentation. Many standards are written to minimize

human disturbance (e.g., Standard #50). Many other wildlife goals, standards and guidelines are included in the *Plan* which minimize human impacts (see # 92-109)

Comment: Habitat effectiveness estimates in the DEIS are apparently incorrect for the Pawnee National Grassland.

Response: Several errors in the Grassland, Habitat Effectiveness section of the *DEIS* have been corrected in the *FEIS*, including the misstatement that equated "41 percent" to "one-third." Also, travelway densities of 6.7 and 5.0 miles per square mile (*DEIS*) for non-National Forest Lands and combined lands, respectively, were in error and instead are 1.8 and 1.6 miles per square mile (*FEIS*).

While the overall habitat effectiveness estimate of 60 percent in the *FEIS* is slightly higher than the 59 percent estimate in the *DEIS*, this is due to updated travelway inventory data and is considered reliable based on the best available information

Comment: Protect and enhance existing bighorn sheep habitat and populations.

Response: The following specific direction assures, along with more general direction, maintenance and improvement of bighorn sheep habitat: Forest wide operational goals, standards and guidelines 40, 62, 92-94, 96-98 and 102 (*Forest Plan*, Chapter One, Section Two); and Geographic Areas and Management Areas that emphasize wildlife habitat (*Forest Plan*, Chapters Two and Three)

Comment: Develop habitat for ruffed grouse in preparation to introduce the species into the area.

Response Ruffed grouse are not known to occur in most of Colorado, including the ARNF-PNG They are described as "Casual in northwestern Colorado" (Andrews and Righter 1992). If introduced, ruffed grouse would possibly survive or thrive in certain forested ecosystems. The proposed action would increase aspen and, therefore, likely improve potential ruffed grouse habitat.

Comment: Wildlife corridors and/or migration routes should be maintained including land acquisition where possible.

Response The *Revised Forest Plan* provides for wildlife corridors and migration routes in all alternatives. Several Management Prescriptions, 1.41, 1.42, 3.55 (*Revised Forest Plan*, Chapter 3) and others indirectly maintain or increase corridors and migration routes. Goals, Standards, and Guidelines provide additional direction for maintenance of wildlife corridors, (*Forest Plan*, Chapter 1)

Comment: Change standard and guides to enhance habitat for primary cavity excavators (woodpeckers). Increase/double retention density of snags to enhance wildlife habitat.

Response. While minimum requirements for retention of snags are assured with Forest wide operational standard 56 (*Forest Plan*, Chapter One, Section Two), higher levels of both retained snags and live trees for higher levels of future snags will be provided as needed depending on the local situation. Aside from localized situations that are

presently devoid or at low levels of useful trees for woodpeckers, most forested areas have abundant supplies. Overall amounts are expected to increase as the amount of late successional forest increases over time.

Comment: What is the status of species dependent on early successional stages?

Response This is discussed in Environmental Consequences - Vegetation Structure section (*FEIS*, Chapter Three, Terrestrial Habitat, Mountains, Broad Scale Overview) Effects to management indicator species are discussed in *FEIS Appendix G (Section G-1)*.

Comment: What are the impacts/implications of limited vegetation management?

Response This is demonstrated and compared by alternative in several different ways including estimated changes in structural stages, habitats, fuel profiles, insect/disease potentials, rangelands, timber production and other resource aspects. Understanding direct cause and effect may be difficult because, for example considering management of forest vegetation, Alternative H has the least timber harvest and thinning but has the highest level of prescribed fire. Whereas, Alternative E has the second lowest timber harvest/thinning acres but has the lowest combined acres of timber harvest, thinning and prescribed fire. A review of Chapter Three of the *FEIS* is necessary to understand the impacts and implications of limited vegetation management within either the Forests or Grassland.

Comment: Ski area boundaries should be identified as "disturbed wildlife habitat."

Response: Disturbed habitat is indicated within ski areas in the vicinity of roads and trails that receive at least moderate levels of motorized or nonmotorized use. Obviously for ski areas, human influence occurs during most times throughout the year due to skiers/snowboarders during winter and due to ski hill maintenance during most other seasons

Comment: Maintain the current percent of forested corridors, level of effective habitat of 75%.

Response The ARNF-PNG is an urban national forest. As such we strive for a balance, to protect wildlife habitat at an acceptable level and still provide for a very large number of Forest users. Alternative B provides for adequate protection of forested corridors, reducing levels by approximately 2% over the next decade. Effective habitat, currently at 68% will actually increase to about 72% in the first decade. We minimized human impacts where we felt it was necessary. We also provided for human use of the forest environment.

Comment: Some commenters felt there is a need to establish standards and guidelines to protect prairie dog habitat and populations.

Response *Forest Plan* Goal 105 sets a management goal for a minimum of 12 prairie dog towns on 200 acres and a maximum of 30 towns on 1000 acres. We do not have direction to increase or decrease prairie dog populations. Other standards and guidelines indirectly provide protection to prairie dogs.

Comment: Protect bighorn sheep populations, keep bighorn sheep separate from domestic sheep.

Response: Refer to the response to the comment concerning protecting and enhancing existing bighorn sheep habitat and populations in this section. While domestic sheep are not presently permitted in the Forest, any such proposal would be handled in a manner to assure that bighorn sheep would not be adversely affected.

Comment: The Forest needs population viability information to make informed decision. Describe how the viability will be maintained. There are no quantitative assessments of viable populations to conclude insignificance.

Response: Viability considerations and assurances are presented in the Fine Scale Overview sections for Forests and Grassland (*FEIS*, Chapter Three - Terrestrial Habitat). Also refer to the response to the comment, "Insure that all regionally sensitive species will be protected. .." in this section.

Comment: Identify Management Indicator Species (MIS) and include in *Forest Plan*.

Response: We had not identified MIS in the draft *Plan*. This has been rectified in the final *Revised Forest Plan*. We have identified Management Indicator Communities for the Forests and Grassland that are included in the *Forest Plan* (Chapter 1, Section 2). Each of these communities has management indicator species identified for it. Discussion and analysis of these indicator species is found in Appendix G of the *FEIS*.

Comment: Use accipiter research to refine standards and guidelines for nesting hawks.

Response: The Forest Service used current published research data and personal contact with researchers from the Rocky Mountain Station and the Colorado Division of Wildlife to develop the goals, standards, and guidelines. The standards that pertain to accipiters (hawks) are adequate. The Forest Service continues to use research information to make project decisions.

Comment: Determine the presence of lynx populations and the impact of the *Forest Plan* on lynx populations.

Response: In cooperation with Colorado Division of Wildlife the Forest Service is constantly searching for indicators of the presence of lynx and other species that may exist. Impacts and effects to habitat and viability of lynx are estimated and discussed at the end of the Fine Scale Overview (*FEIS*, Chapter Three, Terrestrial Habitat, Mountains).

Comment: Determine impact of logging on pine marten.

Response: Several important habitats and components to the marten are analyzed, including old growth forests, late successional forests, forested corridors, habitat effectiveness and interior forests in both the Broad and Fine Scale Overview sections (*FEIS*, Chapter Three, Terrestrial Habitat, Mountains). In addition, marten are specifically discussed in the Biological Evaluation (BE) of Sensitive Species (*FEIS*, Appendix H).

Comment: Insure that all regionally sensitive species will be protected. Revised Plan appears to violate NFMA by failing to protect species viability for sensitive species. How will grazing be managed to protect TES?

Response: Similarly, as stated for marten in the response to the previous comment, important habitats and components are analyzed for many sensitive species in the *FEIS* and each is discussed in the Biological Evaluation (*FEIS*, Appendix H). Direction that assures viability of sensitive and other rare species is referenced at the end of the Viability Assessment for Forests and Grassland (*FEIS*, Chapter Three, Terrestrial Habitat). Also reference the response to the comment "Need population viability information to make informed decision. ." in this section. In addition, all sensitive species were evaluated as potential Management Indicator Species. By focusing on those species which are indicators, all other species will also be protected. Individual projects are required to have Bes (see Goal #46 in the *Forest Plan*)

Comment: The Plan does not adequately explain how it will protect populations of birds on the Forest. Allow natural forest succession to proceed for bird habitat.

Response: Habitat features that are important to birds and other terrestrial animal life are discussed, with habitat effects estimated and direction that assures adequate habitat referenced throughout the section 'Biological Elements of the Environment' (*FEIS*, Chapter Three, Terrestrial Habitat). Forest succession will continue to proceed largely without human influence across most of the ARNF.

Comment: The DEIS fails to adequately account for future management, impacts, and mitigation measures of non-system travelways.

Response: In both the *DEIS* and *FEIS* the effects of non-system travelways were estimated for wildlife and other resources. In order to estimate effects, it was necessary to predict future management and develop mitigation measures

Comment: There does not appear to be a thorough analysis in the DEIS of impacts to wildlife resulting from recreation.

Response: Human influence and disturbance to wildlife habitat were analyzed in the *DEIS* and *FEIS* for Forests and Grassland (*FEIS*, Chapter Three, Terrestrial Habitat, Habitat Effectiveness). Recreation is the major human influence and it occurs along roads and trails. This analysis was a major effort in the planning effort and reflects the primary recreational impacts to wildlife. Refer to Description of the Analysis Process (*FEIS*, Appendix B) for methodology in assessing habitat effectiveness

Comment: There is no discussion in the DEIS of the impacts due to snowmobiling on wildlife or other resources.

Response: This is now included in the *FEIS*. Refer to Chapter 3, Terrestrial Habitat and Wildlife, the discussion on lynx and wolverine; Chapter 3, Aquatic and Riparian Resources, the discussion on Effects of Recreation on Aquatic and Riparian Resources, and Chapter 3, Air, the discussion on Effects on Air from Developed/Motorized Recreation.

Comment: Adopting road density standards is recommended.

Response: For reasons given in Description of the Analysis Process (*FEIS*, Appendix B), habitat effectiveness is considered more meaningful than road densities alone. Habitat effectiveness incorporates the same basic resource information (travelway miles) that are used for densities. *Forest Plan* direction for increasing or restricting travelways necessarily involves more than density thresholds, densities which may not be possible because of existing legal access, county and state roads that are beyond Forest Service control, for example. The need for travelway direction that would be more realistic and effective than simple road densities, was identified during implementation of the 1984 *Forest Plan* and during issue identification for revision of that *Plan*.

INTERMIX

Comment: Landowners in intermix should assume responsibility for fire prevention and noxious weed control.

Response: We feel landowners, our neighbors, should assume responsibility for their actions. We also feel that agencies that direct or control private property planning, decisions and actions should take fire prevention and noxious weed control into consideration. We are reviewing our fire response strategy and tactics in the urban interface. This strategy does not preclude first response to wildland fires, the Forest Service will continue to respond. We will continue to work with the public as well as state, county, and city agencies concerning fire prevention and noxious weed control.

Comment: What are the effects of the Revised Forest Plan on private property? How will private landowners be compensated for negative effects?

Response: Our land management allocations and standards & guidelines do not affect private property directly. No compensation is needed or planned since there are no direct effects. We believe in and support private property rights. Any project which could directly or indirectly affect private property rights will be analyzed in a separate NEPA document, which the public will have an opportunity to comment on.

Comment: Interpretation of the definition of intermix is a problem.

Response: Intermix is often used to define or delineate lands considered to be in the wildland/urban interface areas in respect to fire management. The delineation of the Residential-Forest Intermix Management Areas (MA 7.1) do not use the same criteria, therefore, it would appear that the *Revised Forest Plan* does not fully consider all of the areas within the wildland/urban interface areas. This is not the case. The wildland/urban interface areas are contained in several of the Management Area allocations and the Wildland Fire Management Assessment analysis completed for the Forest took these lands into consideration.

Comment: Complete control of wildland fire should be the only approach.

Response Direct control of wildland fires in the wildland/urban interface areas is the appropriate management response. Wildland fire management strategies have been established for the entire Forest to direct the appropriate management response for unplanned ignitions that escape initial suppression action. (*FEIS*, Chapter 3, Fire Management, Managing Unplanned Ignitions)

INVENTORIED ROADLESS AREAS

Comment: Inventoried roadless areas and wilderness areas continued to be an area of major controversy between draft and final Plan. Commenters questioned whether the roadless area inventory was conducted according to requirements. One particular area of concern was the use of "outside sights and sounds" as a criteria affecting the capability of an area to be recommended for wilderness. There were also requests for a reevaluation of all roadless areas and roadless areas adjacent to current wilderness areas.

Response The Forest Interdisciplinary (ID) team was careful to follow national and regional requirements in conducting the roadless area inventory for the Draft and Final. Several activities took place between Draft and Final. The roadless area inventory was updated using the most recent information on roads, trails and other activities and conditions. Each district reviewed comments received on the Draft about specific roadless areas and comments directed to roadless areas and wilderness recommendations in general. These comments included requests to consider changes to provide additional areas and increase the amount of wilderness recommendations or backcountry nonmotorized areas. They also included requests to consider reducing the amount of roadless areas recommended for wilderness or backcountry nonmotorized areas to allow more active management. After reviewing the comments and considering these questions, they decided whether to make any changes to the management area allocations (The next comment and response section discusses management area changes made between draft and final.) *FEIS*, Appendix C describes the process used and provides additional information on inventoried roadless areas. Planning records contain the specific details and results of the roadless area inventory.

The use of "outside sights and sounds" was removed as a reason for an area to be considered "capable" or "not capable" of being wilderness. All roadless areas that were considered "not capable" in the Draft due to presence of "outside sights and sounds" went through the capability analysis part of the process again. The purpose of these steps is to insure that inventoried roadless areas would be managed in a way that best fits the resource characteristics and best contributes to the overall priorities for the Forests and Grassland.

Comment: Some people recommended that all roadless areas be recommended for wilderness. Others were looking for specific areas to be recommended as a new wilderness area or to be added to an existing area. Examples of areas that were mentioned included: Comanche Peaks, North Lone Pine, Mount Evans, Kelly Creek and others. There were also comments that additional ponderosa pine areas needed to be included in areas recommended for wilderness. Other commenters said there is already too much wilderness and that there should be no further wilderness recommendations. These people wanted to keep options open for uses prohibited in wilderness.

Response: Two major changes resulted from the review and update of the inventory and the comments to increase or decrease the amount of area recommended for wilderness. The roadless area inventory for the Draft included 336,051 acres while the inventory for the Final has 330,230 acres, a decrease of 5,821 acres. The change was due mostly to having additional road and trail information available for the Final Alternative B recommended 28,306 acres for Wilderness designation in the Draft and recommended 8,551 acres in the Final.

The decrease in areas Recommended for Wilderness is due to changing the West White Pine area and areas adjacent to the Comanche Peak Wilderness on the Estes-Poudre district from MA 1.2 Recommended for Wilderness to MA 3.5 Forested Flora and Fauna and other management areas. This was important to provide opportunities for managing and improving wildlife habitat and treating an area with potential heavy fuels problems bordered by private and other ownership. There were a few other minor changes. The need for different plant community types including ponderosa pine and other low elevation types were evaluated but no additional areas were recommended for wilderness. Districts felt that it was important to maintain some options for more active management in many of these areas. This is part of the reason why the areas on the Estes-Poudre District were not included in the final recommendations for wilderness.

Comparison of Areas Recommended for Wilderness for Alternative B between Draft and Final

Area Name	Draft	Final
Cache la Poudre	1,336	0
Comanche Peak	14,799	5,141
Indian Peaks	2,993	2,993
White Pine	9,178	0
Mount Evans	0	417
Total	28,306	8,551

Making these changes was important to address the need to maintain or improve wildlife habitat and address fire and fuels concerns. The characteristics and resource capabilities of these areas lend themselves to a more active management approach.

than a less active role. Many people would have preferred these areas remain recommended for wilderness but there is little consensus on this issue and the changes are in the best long-term interest of meeting the resource needs for these areas

Comment: Some commenters felt that James Peak needed to be designated as a wilderness area. Other commenters felt that the proposed designation as MA 3.1-Special Interest Area was an acceptable emphasis for the area. Another group of commenters recommended other management areas such as MA 1.3-Backcountry Recreation, MA 3.3-Backcountry Motorized or any Management Area that would allow jeep travel, mountain bike use or other uses.

Response The staff from the three districts that administer the James Peak area reviewed all the comments. The capability analysis was also updated between Draft and Final. The James Peak area was judged to be capable of providing wilderness but most of the area was kept in MA 3.1 Special Interest Area. An area in the southern part of the James Peak area was changed from MA 3.1 to MA 3.5 Forested Flora and Fauna to provide more emphasis on managing habitat for bighorn sheep on the Clear Creek Ranger District.

Two of the reasons for not changing the management area or recommending the area for wilderness are that many human-made structures are contained within the area and the views and noises from features outside the area like the Moffat Tunnel and Highway 40 do not contribute to a feeling of being in a wilderness. The Arapaho Roosevelt National Forest also already has many high elevation wilderness areas. However, the James Peak area is a unique and special area and the Special Interest Area management area prescription recognizes these special characteristics. Standards and guidelines in the Special Interest Area designation for James Peak provide measures to protect the unique characteristics of the area and allows for specified uses. This designation provides a balance between continuing the existing uses of the James Peak area and protecting it from over-use. The Special Interest Area designation also maintains the roadless condition of the area and would not preclude future wilderness designation. (See also *FEIS*: Appendix C)

Comment: Do not allow motorized use in roadless areas.

Response The decision to allow motorized use for areas on the Forest and Grassland, including roadless areas, was done as part of the management area allocation process. The process of management area allocation was done by ID teams at each district. These teams looked at resource characteristics and the theme of each alternative and determined what management area prescription would fit best. Resource characteristics these teams considered included whether the area was roadless or not, how much and what type of old growth was in the area, how the area was being used, and many others. These teams then developed a travel management strategy that fit well with the management area prescription, resource characteristics, and the theme of the alternative. Each alternative ended up with a different amount of motorized use in roadless areas based on this process (*FEIS*, Roadless Areas section)

Alternative H allowed almost no motorized use in roadless areas except when it might be needed for restoration work. Alternatives A, C and I allowed motorized use in many or most of the roadless areas. The ID team looked at a wide variety of options for this issue because of the amount of controversy and level of concern. The alternative selected for implementation will determine how much motorized use is allowed. Overall, the goal is to have a mix of motorized and nonmotorized recreation opportunities so there is likely to be some motorized use in some roadless areas and no motorized use in others.

See also the comment response concerning roadless areas under old RARE II direction in the Travel Management section of the document

OIL AND GAS LEASING and MINERALS

Locatable Minerals:

Comment: Some commenters asked about the status and schedule of mineral withdrawals. Other commenters felt that the Forest Service should use withdrawals to protect historic and tourist values of small mountain communities. Some commenters felt that areas such as the Eldora Valley, all RNAs, all SIAs, Winnegar Gulch Road Area, Management Area 1.41 (Core Areas) and Management Area 1.42 (Core Area Restoration) should be withdrawn.

Response: Mineral withdrawal is a term generally used in reference to federal land that is unavailable for the mining of hard rock locatable minerals. Lands open to mining operations under the General Mining Law of 1872 include all areas of the Forest except those formally withdrawn from mineral entry by Congress or the Secretary of the Interior. Leasable minerals are subject to exploration and development under leases, permits, or licenses granted by the Secretary of the Interior, with Forest Service consent. Leasable minerals can be withdrawn by law or regulation, or areas may not be leased by Forest Service management direction, such as decisions in this *Revised Forest Plan*. Because mineral leasing is a discretionary decision by the Forest Service, withdrawal from leasing is seldom recommended.

The objectives and policy for withdrawals are discussed in the Forest Service Manual, Special Uses Management-Withdrawals, FSM 2761.02-.03. The objectives include protecting United States improvements and other unique values. The ARNF-PNG considers withdrawals for areas with a history of mineral findings and where the management direction is not compatible with use under the mining laws. Table 3.27 of the *FEIS* shows acres potentially withdrawn from mineral entry by alternative. *FEIS*, Appendix F outlines the decisions made concerning leasing, the leasing and development process, and the specific stipulations that will be provided to proposed leases.

Comment: Some commenters felt that the Forest Service should restrict mining activities on the Forest. Some commenters felt that the Forest Service should withdraw all National Forest locatable mineral lands to prevent mining claims from becoming building sites. Some commenters felt that mineral exploration is desirable and there should be no withdrawals.

Response: The objectives of Forest Service minerals management are provided in FSM 2802, and discussed in the *FEIS*, Chapter 3, Minerals and Geology section. The General Mining Law of 1872 provides direction covering hard rock minerals on lands reserved from the public domain for National Forest purposes. Except as otherwise provided, all valuable mineral deposits, and the lands in which they are found, are free and open to exploration, occupation, and purchase under regulations prescribed by law. Withdrawals remove lands from locatable mineral entry.

Alternative B provides a balance between protection of areas where mineral development could have unacceptable impacts, and ensures mineral development will be accomplished in an environmentally sound manner. The ARNF-PNG considers withdrawals for areas with a history of mineral findings and in which the management direction is not compatible with use under the mining law.

While claims may be developed to recover the mineral resource, the Forest Service has the right to examine the claim for validity, and to contest the claim if appropriate. Claims cannot be used for activities other than mining unless they are patented (become private land).

Leasable Minerals:

Comment: Some people felt that all lands within Research Natural Areas and Special Interest Areas should be withdrawn from mineral entry.

Response: RNAs and SIAs may be protected from locatable mineral entry by withdrawal. That decision can be made for each RNA and SIA. Management Areas 2.2 (RNAs) and 3.1 (SIAs) direction states that these areas will be withdrawn from mineral entry when necessary to protect the values for which the area was established or created.

Withdrawal from leasing is not normally required as authorizing or not authorizing leasing is a discretionary decision by the Forest Service. Existing laws and regulations also provide substantial opportunities to accommodate both surface resources and the recovery of leasable minerals. In addition to not being leased, these areas could be leased for oil and gas recovery but with the No Surface Occupancy stipulation (NSO). NSO means no surface development may occur on the parcel. No drilling, road or pipeline construction, or production activities is allowed on part or all of the lease. Directional drilling from a well location on lands

adjacent to the RNA or SIA must be used to access the oil and gas deposit. On the Pawnee National Grassland, the three RNAs may be leased for oil and gas development with the NSO stipulation.

Comment: The *FEIS* cannot make the "e" decision to authorize the BLM to lease parcels. This decision and analysis must be made when parcels are proposed for leasing.

Response The decision process is described in the *FEIS*, Appendix F. The "d" and "e" decisions refer to direction provided in 36 CFR 228.102(d) and (e). A "d" decision identifies lands administratively available for leasing and an "e" decision is a leasing decision for specific lands authorizing the BLM to offer lands for lease. 102(d) provides direction for the Forest Service to notify the Bureau of Land Management as to the areas or Forests and Grassland-wide leasing decisions that have been made, based on analysis such as that completed in this *FEIS*. These lands are administratively available for the industry to examine and propose leases for specified parcels. 102(e) provides that when specific administratively available lands have been proposed for lease, the Forest Service will review the area or Forests and Grassland-wide leasing decision and authorize the BLM to offer the specific parcels for lease after verifying that the leasing of those lands has been adequately addressed in a NEPA document (for example, this *FEIS* and ROD), and is consistent with the *Forest Plan*, ensuring that the conditions of surface occupancy identified in the leasing analysis are properly included as stipulations in resulting leases, and determining that operations and development could be allowed somewhere on each proposed lease, except where stipulations will prohibit all surface occupancy (the No Surface Occupancy stipulation is used)

If it is determined during the above verification that NEPA has not been adequately addressed, or that significant new information or circumstances require additional environmental analysis, that analysis will be done before a leasing decision for the specific lands will be made. At that time, the decision may be made not to authorize leasing of those parcels, or additional stipulations may be required to protect surface resources.

Washington Office Interim Direction 2820-93-1 directs that both the "d" and "e" decisions be made in the same document and Record of Decision to minimize delays in the leasing process and to improve efficiency and effectiveness of the leasing analysis. When a specific parcel is proposed, the Forest Service must verify that the "e" decision made in the ROD is still valid. If it is not, the appropriate environmental analysis must be completed, and the decision will be subject to appeal.

Comment: Some commenters felt that all alternatives have too much area available for leasing on the Pawnee National Grassland. A sufficient range of alternatives (including no leasing) was not analyzed.

Response Additional information has been provided in *FEIS*, Chapter 3, Minerals and Geology, Summary of Projected Surface Disturbance Effects from Oil and Gas

Activities. A comparison by alternative of acres available for leasing and stipulations on the Pawnee National Grassland is provided in the *FEIS*, Chapter 3, Table 3.36. Each alternative examined different leasing options. The no action alternative was not possible due to the 58,133 acres of private mineral estates under the Grassland surface. The development of private minerals is a deeded right, and surface use can not be prohibited by the Forest Service. If no federal minerals were leased on the Grassland, development of the private estate could, and would, occur

Alternative H does not authorize leasing on the National Forest

Comment: Some commenters felt that the impact of oil and gas development was not sufficiently analyzed for its impact on wildlife, habitat effectiveness, scenery, or visual quality.

Response The effects analysis and discussion for these resources is provided in the *FEIS*, Chapter 3, in the Minerals and Geology, Terrestrial Habitat and Wildlife, Scenic Resources, and other sections. The acres of surface disturbed and other effects from drilling, production, mining, and other activities was used in the analysis of Forest-wide effects of resource management.

Comment: Extend the timing limitation for Northern Goshawks on the Redfeather District.

Response The limitation was discussed with the Districts and modified to No Surface Occupancy within 200 meters of active nests (*Forest Plan*, Appendix D, No Surface Occupancy Section)

Comment: Geophysical prospecting should have the same restrictions as development.

Response: Geophysical prospecting will have the same mitigations as development for all timing limitations and some controlled surface use stipulations. However, since geophysical prospecting may be possible on slopes steeper than 60% or areas with high erosion potential with no significant impacts, proposals will be analyzed on a case by case basis.

Most geophysical prospecting procedures are a low impact activity. As a result, they may not be prohibited in No Surface Occupancy areas. An example of such an activity is vibroseis prospecting (explained in the *FEIS*, Chapter 3, Minerals and Geology) that leaves almost no evidence of activity on surface resources. Also, geophysical prospecting may be needed to acquire data on geologic formations where directional drilling due to the No Surface Occupancy stipulation is required to protect surface resources. The geophysical data can be analyzed to determine the probability of the occurrence of oil and gas formations and the economic viability of development. Such information is needed as directional drilling is much more costly than normal vertical operations.

Comment: Reduce impacts of development and exploration roads on the Pawnee National Grassland.

Response: When exploratory wells are proposed on the Grassland, existing roads and two-track routes will be used as much as possible to access the well location. If the well is successful and field development is proposed, permanent routes will be planned to minimize resource impacts, and may not include the routes used for the exploratory wells. A mitigation to reduce the effects of roads is to require co-located production facilities for several wells, where technically feasible. When these routes are no longer needed for the oil and gas activity, and are not needed by the Forest Service for resource management, they are reclaimed by the industry to Forest Service specifications

Comment: Use native species in reclamation.

Response: Native species are used as the final desired vegetation. However, as some natives establish very slowly, cover crops of other species that are sterile or will last only one or two growing seasons may be used to provide cover and minimize erosion

Comment: Some commenters felt that the Pawnee National Grassland should be preserved for its diversity. Other commenters felt that the Forest Service should reduce or eliminate leasing.

Response: The objectives of Forest Service minerals management are provided in FSM 2802, and discussed in the Minerals and Geology section of the *FEIS*, Chapter 3. Mineral exploration and recovery is a valid use of the National Forests and Grasslands, as provided by law, regulation, and policy. Alternative B provides a balance between protection of areas where mineral development could have unacceptable impacts and ensures mineral development will be accomplished in an environmentally sound manner

Comment: Slow down the rate of extraction to insure energy resources for future generations.

Response: An analysis of the mineral production needed by this and future generations is beyond the scope of this *FEIS*

Comment: Some commenters felt that funds from oil and gas leasing are not a major economic factor.

Response: The *FEIS*, Chapter 3, Social and Economic Elements section agrees with your statement. However, Weld County does depend on these funds and is affected when the amount decreases, primarily due to lower grazing fees and falling oil and gas production

Comment: Add standards for uranium leasing on the Pawnee National Grassland.

Response: The standards have not been added. If uranium leasing is proposed by industry, the effects of possible development and needed stipulations and mitigations to protect surface and subsurface resources will be addressed in the appropriate NEPA documentation, probably an EIS. The processes used for development have changed

significantly since leases were proposed and examined on the Grassland in the mid 1980s, and standards and stipulations for these activities are beyond the scope of this *FEIS* and *Forest Plan*.

Comment: Oil and gas stipulations should be consistent with those of other Forests and Grasslands.

Response This has been done. Refer to the *Forest Plan*, Appendix D, for further explanations. The Routt National Forest and adjacent BLM Districts were consulted.

Mineral Materials:

Comment: Add standards for mineral material permitting.

Response The Forest Service has complete discretion regarding permits for mineral materials such as gravel, with the possible exception of private mineral rights specifying these minerals on the Grassland. The procedures are discussed in FSM 2850 and regulations at 36 CFR 228, Subpart C, and standards were not added in the *Forest Plan* for permitting.

RECREATION

Comment: Some commenters felt that developed recreation areas and facilities should be limited to high use impact areas that can be managed to standards. Others doubt that the Forest Service will receive sufficient funding to be able to bring existing developed areas and facilities to standard. Some commenters felt that existing facilities should be brought up to standard before spending moneys for new recreation areas and facilities. Some commenters felt that user fees collected at developed recreation areas should be reinvested for the management and general improvement of existing areas and facilities.

Response The Forests and Grassland continues to recognize the importance of providing developed recreation opportunities for the public. The Forest has, however, been faced with rising costs for materials and supplies to maintain developed recreation areas and sites to proper health and safety standards. Coupled with inflation is the dilemma of budget cuts and personnel downsizing. Given this scenario, the Forest has made it a priority to invest limited developed recreation dollars to bringing existing areas and facilities to standard; reducing user congestion and conflicts at certain areas, and minimizing any additional resource impacts at these existing areas and sites. New developed recreation opportunities are a lower priority and will only be constructed when budgets allow.

Congress has given the Forest Service the authority to charge user fees for some areas. Most of the money from these fees will return to the site or program where it is collected. The objective is to increase the money available for managing the recreation use in that area. The Forest Service is also participating in public/private partnerships that help manage and maintain facilities and will be looking for new opportunities.

Comment: Comment on recreation use tended to fall into two groups. One group expressed concern that increased use would result in additional resource impacts and user conflicts. They recommended more limits and restrictions or other methods to prevent or minimize environmental impacts or protect public safety. A second group was looking for additional opportunities either through expanding or improving existing facilities or by developing new facilities. New facilities could include items like: trailhead structures, campgrounds, dispersed camping areas, trails and others. Following are some of the specific suggestions made by commenters:

Establish satellite parking lots with shuttle buses to move people in and out of congested areas.

Increase law enforcement activities in both heavily used areas and where user conflicts occur.

Limit the type of recreation, number of users by area, and location.

Expand existing campgrounds to redistribute use.

Do not add or expand campgrounds or vehicle parking.

Establish recreation use capacity limits and make them standards.

Prohibit campsites in backcountry, municipal watersheds, and high country areas.

Designate areas that are suitable for dispersed camping.

Identify areas of conflict with wildlife and protect these areas.

Restrict party sizes.

Do not restrict party sizes.

Add trailheads to facilitate public use and provide sufficient space for parking and camping.

Add or open trails for activities like cross country skiing, snowmobiling, horseback riding and others. (See also travel management.)

Do not add loop trails.

Note: road and trail management and ski areas are part of the recreation program but they are discussed in the Travel Management and Recreation-Ski Areas sections of this document.

Response: The list of comments on recreation indicate the different views people have about recreation use and how it should be managed. Although the *Forest Plan* and *FEIS* do not identify specific sites, the issues of congestion, overuse and increasing recreation use trends were discussed as programmatic problems. This information was updated between draft and final.

Each alternative has a strategy for addressing these needs at a program level across the Forests and Grassland as a whole that was displayed in the *FEIS*. Addressing the problems for specific areas comes in the next step of *Plan* implementation. The *Forest Plan* has management direction that provides for increasing different types of opportunities and placing additional restrictions or limits to current use, when and where appropriate (*Forest Plan*, Chapters 2 and 3). However, the purpose of the *Plan* is not to make decisions about specific areas but to set programmatic direction that provides for additional opportunities and protects the environment. *Plan* implementation is when the decisions will be made on which specific sites might be upgraded or where certain uses might be restricted to avoid damage or public safety problems. The *Forest Plan* contains the management direction to aid in making those decisions but the actual decisions will be based on specific areas and their characteristics.

Monitoring and evaluation activities related to developed recreation use and user impacts will provide information to identify the highest priorities so corrective management can take place or necessary restrictions can be implemented. We will ask for public participation in identification of developed recreation area and site problems, information gathering regarding these problems, and joint efforts in resolving or eliminating problems.

Comment: Some recreation comments indicated that the analysis in the draft *EIS* was insufficient or that more analysis was desired. For example, some commenters wanted the *Forest Plan* to identify dispersed and developed recreation areas and facilities that are experiencing user congestion and/or over use. Another example is a request to verify and more fully discuss dispersed recreation use trends on a Forest-wide basis, by Districts, and specific areas where possible. Another suggestion was to establish desired conditions for forty years into the future.

Response: The information presented in the *DEIS* and *FEIS* is a compilation of more detailed information from each ranger district on the Forests and Grassland. The discussion presented in the *FEIS* allows meaningful comparisons between alternatives at a programmatic level so much of the detail was summarized to provide a broader look at recreation issues. However, the recreation information used to compile the description in the *FEIS* is located in the planning records. This information does include use trends and work needs at a finer scale.

The recreation and other goals in the *Forest Plan* (Chapter 1) are timeless and establish desired conditions for the future. These are not targeted at any particular time period but they do set a direction for the ARNF-PNG to head. The difficulty in projecting the many factors that might affect desired recreation conditions makes it difficult to establish specific desired conditions. For example, it is very difficult to imagine what types of outdoor recreation equipment might be available in ten years or forty years. Trying to establish desired conditions anticipating these types of changes is very difficult, so broad direction is developed that can be updated as

needed. The monitoring and evaluation program will be an important component to ensure that the Forests and Grassland can provide quality recreation opportunities for the future and protect the environment.

RECREATION - SKI AREAS

Comment: Some commenters felt that there should be no further expansion of existing ski areas. Other commenters felt that we should expand existing ski areas and develop new ones, or continue to permit operation at Berthoud Pass. They felt that operation of a ski area was a traditional use of this land and provided a source of income into the local community.

Response: A full range of alternatives was analyzed to consider ski area allocation and designation, see *FEIS*, Chapter 3, Existing and Potential Ski Areas Management area allocations carefully considered all resources and potential uses.

The *FEIS*, (Chapter 3, Existing and Potential Ski Areas) allocates Berthoud Pass as a developed ski area. This decision carefully considered all input, local resource information and public recreation usage. This decision was complex and difficult and had significant “pros and cons” which were weighed to make the final allocation; including the comments noted

TIMBER

Comment: Some commenters felt that the Forest should maintain or increase the amount of timber available for harvest, the Allowable Sale Quantity (ASQ). Other commenters felt that the ASQ should be decreased.

Response. The *DEIS* considered a range of alternatives, from a low of 900 thousand board feet of timber harvested per year to a maximum of 16.8 million board feet per year. The alternatives used an analysis based on acreage of tentatively suitable timber lands. A range from 3 percent to 52 percent of the tentatively suitable acres were evaluated as suitable and available for harvest. The effects of the different alternatives can be seen in the *FEIS*, Chapter 3, Timber Production Section, Environmental Consequences.

Comment: Some commenters felt that the Forest should emphasize uneven aged, selective logging practices.

Response Uneven-aged management is an appropriate silvicultural system for most forest types (*Revised Forest Plan*, Chapter 1, Standard 61). Final determination of the silvicultural system applied will be determined by a certified silviculturist to meet

the management objectives for the landscape or stand of trees being considered for treatment. However, in the FORPLAN model, even-aged management was the system used to simplify the model and because it will be the predominate system used for the forest types the Forest is managing.

Comment: Some commenters question whether clearcutting is an acceptable silvicultural tool.

Response Clearcutting is an appropriate silvicultural method of even-aged management in certain forest types (see *Revised Forest Plan*, Chapter 1, Standard 61) and locations. We will use clearcutting when it is an optimal method for specific situations. All of the clearcutting that is planned is in the lodgepole pine type since it responds best to this harvest method in areas that are prone to windthrow, infested with dwarf mistletoe, and not suitable to a shelterwood harvest. See *FEIS*, Chapter 3, Timber Production Section, Effects Compared Among Alternatives, discussion on clearcutting lodgepole pine

Comment: Some commenters felt that the Forest should not allow "below cost" timber sales.

Response Forest managers are not required by law or policy to make a profit on timber sale projects. However, it is policy to operate timber sale projects in the most cost efficient manner practicable to achieve the objectives outlined by the *Forest Plan* and to produce a program where long-term benefits exceed costs. A financial efficiency analysis and, as needed, an economic efficiency analysis will be completed for each timber sale project alternative that is formulated and examined in detail during the environmental analysis. The information can be used to select the most efficient alternative that achieves the desired objectives and improves the financial position of the timber sale program. The *Forest Plan* analysis does not review individual timber sale projects. However, the FORPLAN model does analyze the present net value of the timber sale program in general for each of the alternatives. This analysis is documented in the *FEIS*, Appendix B, Description of the Analysis Process

Comment: Some commenters felt that we should limit timber harvest to small areas, using no new road construction.

Response Alternative H evaluated limited harvest to small areas and proposed the closing of past-used timber roads which would result in a net reduction in timber sale roads. The preferred Alternative B allows for a minimal amount of new road construction, approximately 5 miles per year for the first five decades to achieve the desired objectives. See the *FEIS*, Chapter 3, Table 3.103 for a table comparing road construction and reconstruction for all alternatives.

Comment: Some commenters stated that they are dependent upon the ARNF-PNG timber program for a substantial percentage of their [timber] supply needs. They ask that the Record of Decision be written with a firm commitment to fully fund and supply the full ASQ.

Response The Forest can only affirm that it will pursue sufficient funding to produce the full ASQ. It is our desire to fund sale preparation activities to supply the ASQ. Two budget levels were analyzed for each alternative. The first is based on funds necessary to fully implement the *Revised Forest Plan*. The second is reduced, based on the experienced level of funding the Forest has received to implement the 1984 *Forest Plan*. Ultimately the level of funding received by the Arapaho and Roosevelt National Forests and the Pawnee National Grassland will be determined by the level of appropriations from Congress and how these funds are prioritized and distributed nationally and regionally.

Comment: Some commenters felt that the Forest should use salvage logging of standing timber to reduce fire hazards.

Response The Forest does use salvage logging as a tool to reduce fire hazards when it will meet management objectives and it is practicable and feasible. High fire hazard is considered a high priority on the Arapaho and Roosevelt National Forests and the use of salvage logging was considered in all alternatives to varying levels. However, the amount actually conducted will depend on implementation of the management area direction and the *Forest Plan* standards and guidelines, particularly on areas other than those identified as suitable and available for timber management.

Comment: Some commenters felt that the Forest should provide alternatives to slash burning to protect air quality.

Response Air quality is considered important in both the *FEIS* and *Forest Plan*. Alternatives for slash treatment will be considered on a project level basis. If burning is determined to be the preferred method of treatment, project level analysis, mitigation and monitoring will be conducted to assure compliance with the Clean Air Act.

Comment: Some commenters felt that the Forest needs to address visual impacts to Rocky Mountain National Park when planning timber sales.

Response Impacts to adjacent land owners including Rocky Mountain National Park are considered at the project level analysis when planning timber sales.

Comment: Some commenters want to know how the *Forest Plan* is meeting future timber demands.

Response The Arapaho and Roosevelt National Forests play a minor role in the overall timber supply (Rideout and Stone 1992) and, therefore, will not contribute significantly to the future timber demands. However, the maintenance of a forest products industry is vital to the accomplishment of the forest management activities on the Forest, including management for forest health, wildlife habitat, and reduction of hazardous fuels. It is important to provide a consistent and dependable supply of forest products so that the industry can factor that into meeting their total need.

Comment: Some commenters want to know if timber harvest for fuels reduction in the intermix increases the allowable cut?

Response. Timber harvest may occasionally occur in the intermix management areas for fuels reduction, wildlife habitat improvement, forest health or other reasons. Not all intermix areas are available for timber harvest even for these reasons. No intermix area is currently available and, therefore, does not contribute to the allowable cut. Funds to harvest in the intermix will most likely, but not always, come from sources other than timber dollars. Estimates of the volume harvested, in addition to the allowable sale quantity, to meet other vegetation management purposes has been made for each of the alternatives See *FEIS*, Chapter 3, Timber Section, Table 3 104 for estimated quantities.

Comment: Some commenters felt that the Forest should provide more timber harvesting opportunities for smaller local operators.

Response The Forest will continue to offer sales suitable for small operators. The Forest continues to offer small sales, but it is a concern of this Forest and the Forest Service in general that in order to put up small sales, we need to successfully sell and harvest them. Another consideration in offering small sales is the need to treat an area as efficiently as possible. This may equate to treating an area with one larger sale instead of two or more smaller sales.

Comment: Some commenters felt that there should be an alternative that emphasizes forest health.

Response All alternatives emphasize forest health at varying levels. No alternative is a single resource alternative therefore we do not have an alternative specifically for forest health. The lower montane (ponderosa pine and Douglas-fir) forest ecosystems have been identified as the most at risk to severe, large-scale disturbances. In addition, these are the same areas where there is potential conflict between human use and disturbance processes invoked primarily by fire, insects and disease The preferred alternative will have the most positive effect on ecosystem health in these areas by reducing or minimizing the increase of mature or over-mature conditions which are susceptible to disturbance processes.

Comment: Standard 59 requiring restocking five years after final overstory in shelterwood harvest violates the law as shown in the Long Draw case, Ayres et al. v. Espy.

Response In the Long Draw Case decision Judge Babcock held that the 1992 timber sale decision was illegal under NFMAs' five-year regeneration requirement because the decision did not ensure that, for all shelterwood cuttings, a final removal or harvest would take place so as to begin the running of the five-year restocking requirement

Standard 59 merely reflects the terms of the regulation, 36 CFR 219.27© (3) Judge Babcock did not strike down the regulation, only its application on the Long Draw timber sale Judge Babcock merely sought to prevent application of this regulation in a manner that would “effectively defeat the five-year restocking provision altogether . by never making the ‘final’ harvest cut ” (Ayers v Espy, 873, F Supp.455, 465 (D.Colo. 1994) One way in which the regulation and this standard can be applied to avoid Judge Babcock’s concern it to make a finding when the

initial shelterwood cut is authorized that it is expected to regenerate adequately within 5 years after final harvest. Of course, such a finding would be tentative due to the length of time between initial entry and final harvest and the finding should be reviewed at each subsequent timber harvest entry.

Comment: Some commenters felt the we need to clarify and/or justify culmination of mean annual increment (CMAI) ages in FORPLAN.

Response: The discussion of CMAI is complete and can be found in the *FEIS*, Appendix B

Comment: The discussion of dwarf mistletoe in the *DEIS*, Chapter 3, pgs 265-268 is negatively biased to justify treatment.

Response: The discussion on dwarf mistletoe was meant to be as factual and objective as possible to describe the effects and management implications of this parasite. Given that approximately 59% of the tentatively suitable lodgepole pine acres are infected with dwarf mistletoe and only 38% of the total acres have been determined to be suitable and available for timber production, the presence of this parasite has not been used as a justification for treatment.

Comment: Some commenters wanted the Forest Service to clarify how timber harvesting can or will be used to accomplish old growth objectives in the *Plan*.

Response. Usually timber harvest to benefit or speed up old growth stages is done by selectively removing individual or groups of trees to meet the goals and guidelines, 116-122, in Chapter 1, Section 2 of the *Forest Plan*.

Comment: Economic impact of regeneration practices needs to be factored into the cost of timber sales.

Response: The financial efficiency analysis completed for the *FEIS* did consider the cost of estimated regeneration practices programmatically. The financial analysis completed for each proposed timber sale project will consider the cost of regeneration practices in detail at the project level basis.

Comment: There should be a standard to require some slash to be redistributed back to the cut areas.

Response Forest Plan forestwide standard #56 requires that snags and woody debris be retained in accordance with average minimums specified in Table 1.8, and forestwide standard #65 requires that woody debris is retained on harvested or thinned sites

Comment: Some commenters felt that the Forest Service should not increase the demand for fuelwood.

Response The Forest Service nor the ARNF-PNG regulates or tries to regulate fuelwood demand. The Forest offers fuelwood opportunities as an appropriate use. We will continue this in the future. However, our records show a stable or downward trend of this use. Opportunities to fulfill a modest increase in demand, should it develop, may be possible if it accomplishes desired management objectives.

Comment: Clarify why there are lands suitable and scheduled for timber harvest in watersheds of concern.

Response Watersheds were categorized and identified as watersheds of concern, for a variety of reasons, (FEIS, Appendix B). Scheduled timber harvest, per se, does not adversely impact a given watershed. Impacts are determined at the project level and will include analysis of all proposed activities including but not limited to harvest units, road building and reconstruction, and any rehabilitation associated with the timber sale as well as the reasons the particular watershed was placed in that category Forest wide standards, guidelines, and the Watershed Conservation Practices Handbook insure overall protection of Forest watersheds

TRAVEL MANAGEMENT

Comment: Change management area prescriptions or boundaries to maintain or enhance four wheel drive, OHV or other motorized opportunities. Do not reduce OHV opportunities. Restrict or prohibit motorized vehicles from the backcountry, riparian zones and/or wetlands. Reduce motorized use or recreation as a way to limit environmental damage. Provide single track motorized trails. Keep motorized and nonmotorized trails open. Close both nonmotorized and motorized trails seasonally or permanently. Keep roads and road systems open. Restrict motorized use to designated areas (15 listed). Consider a range of alternatives for OHV use.

Restrict snowmobiles/winter motorized use to designated trails and routes. Reduce snowmobiles in backcountry nonmotorized areas. Do not restrict snowmobile use, provide more opportunities.

Response. The above comments all have a common thread that can be addressed together. Hundreds of comments are actually paraphrased above, but the intent seems very clear Interested parties want to enjoy their National Forests and Grassland for the foreseeable future though they may disagree on whether they want to see an increase or decrease of winter and/or summer specific travel activities on public lands Some commenters expressed their concern in terms of the resource they wanted to protect or the experience they wished to enjoy

The Forest Service is mandated by law to provide a broad range of recreation opportunities On the ARNF-PNG, this also includes all seasons of the year, both motorized and nonmotorized, and a variety of experiences. The Forests and Grassland complied with this direction by taking into account resource protection needs, desired management objectives, current uses and trends, public input and preferred alternative that uniquely fits these lands The final land allocations provides an appropriate mix of year-round, seasonal, motorized, and nonmotorized opportunities on the Forests and Grassland, based on the overall direction of that alternative and analysis of effects to the resources A number of holistic reviews

were done by season and by mode, and in concert with resource information to determine this final mix. Quality and diversity of experience were also factors.

The demand for the diversity of travel opportunities on the ARNF-PNG has increased so dramatically that multi-modal designations for travel will be common. However, this does not imply that all areas will provide all uses. In considering the quality and uniqueness of the resources and recreation experiences it is intended that capabilities of the land will be matched with the uses and opportunities that best fit (*FEIS*, Chapter 3, Travel Management.)

It is not the intent of the Arapaho and Roosevelt National Forests and Pawnee National Grassland to deny any user group or individual access to the public lands, but rather to provide for the common objective of enjoyment of the Forests and Grassland, through a mix of access, product removal, recreation, solitude, and resource protection while maximizing long term net public benefits. The type of access and season of use allowed in certain areas and travelways will be limited or increased, as the case may be, in an attempt to meet the primary emphasis of the selected alternative and specific direction contained on the *Forest Plan*.

For specific modes, the *Plan* addresses user demand and resource concerns through allocation strategies and spatial distribution. In all management areas, priorities of resources and modes of travel have been clarified. The strategic direction is the result of careful consideration of the large amounts of pertinent information and input. Special emphasis and concerns are supported in these decisions. The strategies shown in each geographic area are integral in implementation of all road and trail decisions in the future.

All modes of travel were analyzed based on expected usage, in the context of each resource and opportunity. Through monitoring questions included in the *Revised Plan*, the effectiveness of desired travel strategies will be evaluated over time.

Comment: Do not legalize routes illegally used by OHV users. Maintain or leave open rather than close or obliterate existing or historic four-wheel roads or OHV routes. The Forest Service must show why roads/trails must be closed.

Response The *Forest Plan* does not make specific decisions about each travelway. It sets in place the overall ARNF-PNG travel management strategy, from which route by route decisions are made as part of *Plan* implementation. The *FEIS* analyzes the effects of all known travelways using this strategy, whether currently part of the "official system" or not. In each geographic area (*Forest Plan*, Chapter 2), specific travel strategies have been clarified. These strategies did consider existing and historic uses. Project level decision making (road by road, trail by trail) will be guided by the *Revised Forest Plan* travel strategies. At that time, changes in management to existing roads and trails, conversions to trails, addition to the official transportation

system or obliteration of "ways" will be determined. During implementation of the *Plan*, all newly created and unauthorized routes will be revegetated to repair resource damage

Comment: Recommend elimination of impacted trails from recreation use maps.

Response This is a strategy to consider, however, by not including these trails on a map, this creates an impression that these trails do not exist as well as giving an incomplete picture of the travel system available to all Forest users. Impacted trails must be dealt with individually to develop an appropriate management strategy and mitigation measures

Comment: Recommend stricter enforcement of OHV regulations and stiff fines for violators. If motorized use of roads and trails cannot be properly patrolled and regulations enforced, they should not be designated or opened. Need to increase budget to enforce travel management regulations.

Response With completion of the Forest wide travel management strategy in the new *Forest Plan*, project decisions can finally be made about existing travelways. This will lead ultimately to the ARNF-PNG Travel Management Plan, indicating all roads and trails open to travel, by mode of use. Signing within the Forest and displaying on maps will communicate final decisions to the public. These steps are the key to enforcement of regulations for all user groups, because the public will be able to clearly understand where specific modes of travel are permitted and where they are prohibited. Clarification of appropriate use will in many cases result in "self-policing" and a number of groups have already offered to aid in user education during implementation. Costs to manage a fully designated system will actually be less for these same reasons. Within the *Plan* analyses, levels of enforcement and maintenance have been considered for planned budgets. A monitoring and evaluation item has been added as well to stay current on this question

Comment: Retain all existing standards and guidelines especially those related to motorized use. Check consistency of travel management in the 1984 *Forest Plan* with the *Revised Forest Plan*.

Response The public has indicated a need to change the 1984 *Forest Plan*, including its standards and guidelines, to provide a better travel management strategy for the future. All existing portions of the 1984 *Plan* have been reviewed and either retained, revised or discarded as part of the *Plan* revision process (*Forest Plan*, Chapter 1, Sections 1 and 2)

Comment: Manage mountain biking similar to other trail uses. Limit mountain bike use to roads only. Limit motorized vehicles, including trail bikes to roads only. Restrict OHV use of single lane hiking trails. Keep ATV's off roads with motor vehicles. Do not allow motor vehicles on single track trails.

Response In an attempt to provide meaningful recreation and a variety of experiences for user groups and plan for projected growth of specific uses, the Forests and Grassland intends to continue to allow mountain bikes and motorized vehicles on designated

trails Some trails will be reconstructed to more safely accommodate these uses or mitigate resource concerns. This would be directly dependent on available funding and partnership opportunities. The demand for travel opportunities on the Forests and Grassland, and the limited number of roads and trails available to provide these uses makes it difficult to dedicate travelways to only single or very limited uses, however, this does occur in some areas based on local conditions. Known conflicts or safety issues are dealt with on a travelway by travelway basis.

Comment: Don't construct additional roads or trails.

Response: In the future, very few new roads and trails will actually be constructed. However, there remains a small need in some areas to construct new travelways as required for resource extraction activities, access to private inholdings, and specific recreational opportunities. Reconstruction or relocation of existing travelways will be preferred to new construction when objectives can be met. Project level NEPA will be completed for these activities.

Comment: By the closure of roads in the preferred alternative the *Revised Forest Plan* violates the Americans with Disabilities Act and the Rehabilitation Act.

Response: The *Revised Forest Plan* emphasizes the mix of use and protection for all interested parties and considered a range of alternatives to provide for it in varying degrees. Road and trail closures or restrictions are implemented for a variety of reasons and are not intended to discriminate against the elderly or physically impaired. Some routes are closed to protect wildlife habitat during critical periods, to protect soil and water resources, or prevent excessive use. Others may remain open, and resource concerns mitigated, to emphasize specific uses in those areas. Neither Act mandates the Forest Service provide access for the physically challenged on every road, trail or acre within its jurisdiction.

Comment: Develop a Forest-wide travel management plan. Develop a plan to reduce conflicts between skiers and snowmobilers. Recommend a winter (snowmobile) recreation use plan to permit more snowmobiling opportunities. Commenter needs more qualitative information to evaluate alternatives.

Response: We agree. These comments are similar to the many we received in our monitoring and evaluation of the 1984 *Forest Plan* and the reason why this issue was identified as having a "need to change." The *Revised Forest Plan* attempts to better display the travel management strategy for the entire Forests and Grassland for all uses, though it will not make project level decisions. Those will require site specific review and analyses, tiered to the *Revised Plan*. Much effort was spent between draft and final versions of the *Plan* to better define and display travel strategies, including a presentation of land use allocations by mode of travel, and in a general way the Forest considered user group conflicts.

The information shown in the draft was good and did represent the objectives of each alternative, but to clarify and aid in implementation, considerable effort was spent between draft and final versions of the *Plan* to better define and display these "travel

strategies". This includes presentation of land use allocation by mode of travel in chart form rather than narrative, fine-tuning of Geographic Area direction to resolve potential user group conflicts in a general way, and improving our maps. (*Forest Plan*, Chapter 2)

It is intended that by focusing on these strategies and clarifications, implementation will result in final travel management plans, by Ranger District and Grassland.

Comment: Travel Management work being done for the *Revised Plan* is new and the public has not had a chance to comment or review it.

Response Between the Draft and the Final, the Forest spent significant time clarifying information, maps and geographic area direction. Comments received to the draft were both specific and broad related to travel, many asked for new decisions but the majority asked for the information to be better displayed or easier to follow. That was the focus of the effort; review and consider comments, correct errors, and more clearly state what is intended. The information being displayed is not new at all, though hopefully, it is easier to understand

Comment: Historic motorized use should continue in roadless areas as per RARE II direction.

Response The direction in the RARE II EIS is no longer operational, because it was direction that was designed to fill a gap until the first round of Forest Plans was completed. (For the ARNF-PNG this was the 1984 *Forest Plan*.) The Forest Service has gone beyond the RARE II EIS, in time, in planning, and in extensive public involvement on contemporary roadless issues. The RARE II EIS says we "may" continue OHV use, not that we must, and goes on to imply that once that first round of Forest Plans was done, a process which included analyses and discussions about the future of roadless areas, new management direction could be established

See response to comment about not allowing motorized use in roadless areas in the Inventoried Roadless Areas section of this document

Comment: How will the Forest manage additional roads when current funding does not allow the existing travel system to be maintained?

Response The Forest identifies maintenance priorities each year based on final budget from Congress. Proactive management of the travel system is as important as the actual maintenance work done each year. Many of the forest roads do not actually require significant maintenance when located properly, designed for expected levels and types of use, or when managed by seasonal closures. Partnerships with user groups has become a significant way of maintaining and signing roads and trails as well as aiding in educating and enforcing travel management objectives. The Forest may be forced to make changes to its travel strategy when significant budget reductions occur or find new partners, however, the *Revised Plan's* strategy has been designed with consideration of expected budget levels. In any strategy, additional seasonal or permanent closures, as well as changes in acceptable modes of travel for specific

routes, may be needed to protect heavily impacted resources or demonstrated conflicts. The public will be involved in these decisions.

Comment: *Plan* needs to recognize and respond to the 1992 Monitoring and Evaluation report, concerning the current and future travel system.

Response: The changes incorporated into the *Revised Plan* recognize the need to better describe and display how travel will be managed on the ARNF-PNG and more fully respond to this issue. It also recognizes and responds to other monitoring results (Planning Action 1) that have been received. This includes a holistic approach to travel modes and uses, consideration of the capacity and uniqueness of areas to accommodate various kinds of travel, better maps and description of the travel strategy, and key items to be monitored and evaluated in the future. Each of these components are expected to lead, ultimately, to better implementation of the *Plan* in the future.

WATER

Comment: The *Plan* needs to address how the Forest will work to preserve or increase water supply through the development of scientific information, collaboration with state agencies and partnerships with landowners to meet long term strategic direction.

Response: The Forest Service will continue in its efforts to provide research on the effects of vegetation management on water yield. Much of the seminal research on this topic has been performed at the Fraser Experimental Forest, located on this Forest. One of the goals for water resources, in Chapter Two of the *Forest Plan*, directs us to cooperate with the State and with local users in protecting water supplies.

Timber harvest, though reduced from the 1984 *Forest Plan* will continue to increase water yield from treated stands. See the water yield analysis in the *FEIS*, Chapter Three, Aquatic and Riparian Resources section. Water rights established and managed through the State will continue to be recognized. Permits and easements needed to exercise these water rights will be authorized and maintained consistent with law and *Forest Plan* direction.

Comment: Some commenters felt that the *Forest Plan* needs to recognize the primary water supply purpose for which the National Forests were originally established. Water supply must be recognized as a primary use of the National Forest System lands.

Response: Water originating from the Forest, as documented in the Organic Act of 1897 establishing National Forests, will continue to be one of the most important uses considered in managing the Arapaho and Roosevelt National Forests and Pawnee National Grassland. National Forest System lands are managed to standards which

provide for municipal and domestic water supply needs. The *FEIS*, pages 92-93, further defines the legal requirements the Forest is expected to meet in providing quality water for water supplies.

Comment: The Forest should clearly identify those watersheds needing protection for domestic water supplies. Municipal watersheds should be protected. The Revised Plan should show the future use/enlargement of municipal raw water supply.

Response: We recognize the role in providing water quality and quantity from Forest watersheds. It is assumed that all water coming off the ARNF-PNG is or could eventually be used in domestic water supplies. We cannot predict the extent or timing of future water development on the Forest, other than to expect that it will occur. Development of water supply is driven by factors other than Forest Management objectives. Such development will be considered as it is proposed.

The 1996 amendments to the Safe Drinking Water Act direct the States to identify source areas for public water supplies. Public water supplies are those that serve at least 25 people or 15 connections (42 U.S.C. 300f). Most of the watersheds on the Arapaho-Roosevelt National Forests qualify as source areas. The Forest Service will soon be working with the State to positively identify all source-area watersheds.

The Safe Drinking Water Act does not require source areas to deliver water of potable quality with no need for treatment. In fact, waters in pristine areas usually need treatment due to natural waterborne parasites such as giardia.

The Watershed Conservation Practices (WCP) Handbook (FSH 2509.25) contains standards and design criteria to protect water quality in compliance with the Clean Water Act. If these WCPs are properly applied, pollutant delivery to streams and lakes should be minimized. Any waters or aquatic sites that have been degraded should begin to recover. Our goal is to ensure that the physical, chemical, and biological integrity of waters in all watersheds will be sufficient to provide a safe source for domestic and municipal supply.

Comment: Identify sites for dam construction.

Response: Dam construction is allowed in all management areas (MAs) except those where it is specifically prohibited (Wilderness MAs 1.1, 1.2, Wild and Scenic Rivers MA 1.5, Research Natural Areas 2.2, etc). The Forest will respond to State and local requests for dam construction on a site specific project proposal in all areas except the above areas where it is inconsistent with the management objectives.

Comment: The documents need to analyze the effect of vegetation and snow management on streamflow and water production.

Response: The *FEIS* does analyze the effects of vegetation management (timber harvest, wildfire, and prescribed fire) on water yield. See *FEIS*, Chapter Three, Aquatic and Riparian Resource Section. Tree removal through timber harvest, prescribed or

natural fire, or through the effects of insects and disease does increase on site water availability and can lead to increased streamflow.

Snow management other than timber harvest has limited potential to increase streamflow without significant cost. Vegetation management has a greater potential to increase water yield than snow management and the cost to taxpayers is significantly less. In addition to the cost, many of the locations on the Forest which are suitable for snow management, those with high snowfall, long windward fetches, and few trees, are located in wilderness areas, where such structures are prohibited.

Comment: Some commenters stated the need to analyze the effect of vegetation and snow management on TES species and habitat. An inconsistency is noted between the Forest Service attempt to maintain streamflow through bypass flows and endangered species conditions imposed on holders of special use authorizations, on the one hand, and the agency's resistance to enhancing (or even maintaining) water yield through timber and snow management.

Response See the comment above regarding the effects of vegetation management and snow management on water yield.

While it is possible that increased flows resulting from increased water yield may benefit threatened and endangered species along the central Platte River in Nebraska, it is unlikely because there is currently no legal mechanism to protect those flows from the headwaters to the central Platte River. It is highly likely that much of the flow would be diverted at one of the many intervening water diversions in Colorado or Nebraska. While the cumulative effect of all water uses in the Platte Basin may contribute to depletions which have put the endangered species at risk, the most effective way to reduce the risk may not be by increasing the flow at the headwaters. Both the U.S. Fish and Wildlife Service (USFWS) and the State of Colorado apparently recognize this dilemma. In recent land use authorizations for water supply facilities on the Forest the USFWS, in order to avoid jeopardy to endangered species, required the payment of funds which could be used to improve habitat or purchase water closer to the central Platte River rather than the bypass of water from the facilities. A briefing report on the Platte River endangered species program agreement between the States of Colorado, Nebraska and Wyoming and the Department of Interior (Colo. Dept. of Nat. Resources, 1997) discusses the regulation and re-regulation of water from several downstream reservoirs and storage projects but does not discuss the possibility of increasing flows from the headwaters through vegetation management.

Comment: The DEIS and draft Forest Plan documents confuse the Forest Service authority to regulate the use of water in the State of Colorado. This confusion is illustrated by the description of special use permits for water facilities as "water use permits". The Forest Service has no authority to permit water use, or regulate the use of water in the State of Colorado.

Response: The reference to "water use permits" has been corrected. The Forest Service does have authority to permit occupancy of National Forest System lands for any kind of structure or facility including those used for water diversion, transmission and storage. The Forest recognizes the State of Colorado's jurisdiction over water administration and use while authorizing land use permits that fulfill mandates in all laws affecting National Forests.

Comment: The Forest should be managed to maximize water yield.

Response: Maximizing water yield is not a priority for programs and investments on the Forest. Maximizing water yield was considered but eliminated from detailed alternative consideration. *FEIS* alternatives represent different mixes of uses that meet biologic, physical, social and economic needs of the Front Range area and the ARNF-PNG.

Comment: Several commenters requested that the Forest Service classify all watersheds with existing facilities as being managed to increase water yield objectives under the 9B Prescription. The Revised Forest Plan should retain and utilize the Management Prescription 9B (Water Yield). Commenters take issue with statements in the DEIS that the 9B prescription has not had strong support.

Response: The water yield management prescription was allocated in the *1984 Forest Plan* and was considered for the *Plan* revision but was dropped from further consideration for several reasons. First, in light of increasing concerns regarding biodiversity and ecosystem health, the Forest has decided to reduce the emphasis on water yield management. Second, at the time the *1984 Plan* was written, it was believed that only some silvicultural practices would increase water yield, specifically small patch clearcuts or clearcuts that were relatively narrow with respect to the prevailing winds. However, more recent research indicates that nearly all timber harvest, including small and large clearcuts and various partial harvest methods can increase water yield. Therefore, we believe that is more practical to implement water yield increases through the regular timber harvest program than through special management prescriptions.

Comment: What are the criteria for bypass flows, how are they determined, and how are they applied.

Response: The criteria and application of bypass flow are discussed in the *FEIS*, Chapter Three, Aquatic and Riparian Resources section. These criteria cover existing and new water facilities.

Comment: The Plan needs to protect/preserve water yields from existing water rights/facilities?

Response: See the above comments on protection of water yields and streamflow associated with existing water rights/facilities.

Comment: Comments on the Water Conservation Practices (WCP) Handbook include that there was limited opportunity to review and concerns that the WCPs must be in

the *Forest Plan* to be enforceable. Many commenters said protection measures for soil, water, and riparian resources were too vague; that there were major omissions; and that by relying on the draft Watershed Conservation Practices (WCP) Handbook, direction was not binding.

Response: The final *Forest Plan* has incorporated as goals, standards and guidelines all Region-wide Watershed Conservation Practices (WCPs) as standard direction to protect soil, aquatic, and riparian systems from all land-disturbing actions (Chapter 1, Section 1, # 3 through #24). These *Forest Plan* goals, standards and guidelines cannot be changed except through *Plan* amendment or revision.

The Forest Service Regional Office mailed a draft Watershed Conservation Practices Handbook to 60 external interests in September 1995 for review and comments. Nineteen of these interests returned comments by December 1995. After responding to comments and reworking the document, the WCP Handbook was adopted as an official handbook on Dec 26, 1996 and as such is part of the Forest Service directives system. (FSH 2509.25). In addition, the draft *Forest Plan* on page 3 explained that the Handbook was out for public review and described how to get a copy for those interested in reviewing the entire document. Therefore, sufficient time was available for public review between the draft and final *Revised Forest Plan*.

The WCPs include 16 standards and 69 design criteria. These management requirements were developed over several years with input from Federal and State agencies and public interests. They are standards and guidelines that exceed State Best Management Practices (BMPs), and are designed to cover all Forest Service activities. They are backed up by research and field experience.

Comment: Recommend reintroduction of beaver to enhance watershed management.

Response: The Forest could use beaver reintroduction as a watershed management tool by working with Colorado Division of Wildlife. Currently, we have no specific plans to do so.

Comment: Discrepancies exist between the draft *Forest Plan*, the *DEIS* and the Watershed Conservation Practices Handbook.

Response: To eliminate any discrepancies, the final *Forest Plan* and *FEIS* rely on the Watershed Conservation Practices handbook as direction. The WCP Handbook was the basis for practices applied in determining effects in the *FEIS*.

Comment: The *Plan* should provide aquatic habitat standards.

Response: We believe that standards provided by law, Forest Service directives, the Watershed Conservation Practices, and additional standards and guidelines are sufficient to protect aquatic resources at the programmatic, Forest Plan level. Additional protection measures may be implemented at the project level if site specific analysis indicates a need.

Comment: The draft *Plan* standards and guidelines for water quality are not acceptable.

Response: Requirements in the Clean Water Act and the regional Watershed Conservation Practice Handbook are adequate to protect water quality when implementing the Forest Plan. Some goals have been added beyond law and WCP Handbook requirements in Chapter 1, Section 1 and standards in Chapter 1, Section 2, Water Resources of the *Forest Plan*. Additional protection measures may be implemented at the project level if site specific analysis indicates a need.

Comment: Terminology for hydrology and fisheries needs to be defined to allow clear understanding by individuals and interests outside the Forest Service.

Response: The aquatic and riparian resources sections of the *Plan* and *FEIS* have been edited in an attempt to add clarity. We hope this helps to clear up confusion over terminology.

Comment: Identification of land suitable and scheduled for timber harvest in watersheds of concern should be reconsidered.

Response: Insufficient information is available from a coarse filter assessment such as the watershed assessment to preclude consideration of any management activity. However, information gained from the assessment does serve as an alert. Activities planned in high risk watersheds may be subject to modifications such as imposition of further protection measures or reduction in scope of the activity, based upon site-specific analysis.

Comment: How will the *Forest Plan*, and recommended actions contained in the *Forest Plan* be affected by changes in the Watershed Conservation Practices Handbook?

Response. Because of the extensive review and revisions which the Watershed Conservation Practices Handbook has undergone, it is anticipated that the standards in the Handbook will remain quite stable. The design criteria, which are on-the-ground practices used to achieve the standards, will be subject to periodic review. Because the Handbook is part of the Forest Service directives system, it is incorporated by reference into the *Forest Plan*. Any changes in the Handbook will therefore be incorporated into the *Plan*.

Comment: How will grazing be managed to ensure compliance with the Clean Water Act. Continued grazing would not be appropriate in watersheds with degraded riparian areas or where Greenback cutthroat trout exist.

Response. Application of practices in the Watershed Conservation Practices Handbook assures grazing will be managed within requirements of the Clean Water Act. Allotment by allotment assessments have been scheduled beginning in 1996 to determine suitability of individual allotments for grazing in association with riparian/water quality needs. Assessments of site specific impacts to TES species are part of these assessments.

Comment: Acknowledge legal agreements that recognize municipal watersheds (e.g., Silver Lake).

Response: Legal agreements contained in other documents are not affected by this document. Special use permits will, as soon as practicable, be brought into compliance with the Direction contained in the *Forest Plan*.

Comment: The documents need to define what constitutes watershed and stream health.

Response: Appendix B of the *FEIS*, watershed assessment methods, for a description of watershed condition classes.

A menu of stream health matrices is used to assess stream health. These matrices focus on bed, bank, and water quality factors. If only one matrix is out of balance, then stream health is judged to be impacted. The Forest Service regional office is developing a standard method that describes how these matrices should be used to rate stream health.

Comment: What are the criteria for, where is the location of reference streams mentioned on page 117 of the *DEIS*?

Response. We are only beginning to identify reference streams for the Forest. Because of this, it was perhaps premature to discuss them in the *DEIS*. However, we thought it important to discuss the concept that one of the best ways to identify the extent of stream impacts is to compare it to a stream with minimal disturbance which shares the same physical characteristics.

A menu of stream health matrices are used to assess both the reference and study streams. These matrices focus on bed, bank, and water quality factors. If only one matrix is out of balance, then stream health is judged to be impacted. The Region is developing a standard method that describes how these metrics should be used to rate stream health.

Comment: What is the priority for restoration of degraded watersheds?

Response: Priorities for restoration of degraded watersheds depend on the local needs and Congressional funding priorities. Inventories of stream and riparian condition are now being completed. Once inventories are completed and analyzed, management action can be prioritized and scheduled for treatment.

Comment: Recreational use, timber harvest, grazing and mining will cause water quality problems for domestic and municipal water supplies.

Response: The 1996 amendments to the Safe Drinking Water Act direct States to identify source areas for public water supplies. Public water supplies are those that serve at least 25 people or 15 connections (42 U.S.C. 300f). Most of the watersheds on the Arapaho-Roosevelt National Forests qualify as source areas. The Forest Service will soon be working with the State to positively identify all source-area watersheds.

The Safe Drinking Water Act does not require source areas to deliver water of potable quality with no need for treatment. In fact, waters in pristine areas often need treatment due to natural waterborne parasites such as giardia.

The Watershed Conservation Practices (WCP) Handbook (FSH 2509.25) contains standards and design criteria to protect water quality in compliance with the Clean Water Act. If these WCPs are properly applied, pollutant delivery to streams and lakes should be minimized. Any waters or aquatic sites that have been degraded should begin to recover. Additional protection measures may be implemented at the project level if site specific analysis indicates a need. Our goal is to ensure that the physical, chemical, and biological integrity of waters in all watersheds will be sufficient to provide a safe source for domestic and municipal supply.

We also recognize that some problems will continue to occur, despite our best efforts. Acidity and metals pollution, a legacy of past mining will continue to occur on some streams and can only be cleaned up at great expense. There will also be times when watershed conservation measures are not applied or are not completely effective. The Forest does not have sufficient staff or funding to prevent all such occurrences. When we become aware of such problems, we will work with domestic users and municipal providers to correct them.

Comment: *The 1984 Forest Plan for the ARNF-PNG acknowledges that at least 240,000 acre-feet of additional water may be produced from management of ARNF lands.*

Response: The *1984 Forest Plan* does state that water yield from the Forest could be increased by 240,000 acre feet without degrading water quality (p. II-80). However, this was not stated as a goal. Rather, it was a theoretical construct of the water and sediment yield model used to predict effects of the vegetation management program proposed by the *Forest Plan*. The model predicted existing, proposed and threshold water yields for each watershed on the Forest. The 'threshold' yield was the point where the model predicted major increases in the rate of sediment production when water yields exceeded that amount. The 240,000 acre foot figure was calculated by subtracting the threshold yield from the existing yield for each watershed, and summing that amount for all watersheds on the Forest. It did not account for any other constraints, such as provisions for sustainable timber production or viable wildlife habitat (Dave Rosgen, former ARNF Forest Hydrologist, personal communication, 11/16/97)

Water yield analysis prepared for the *Revised Forest Plan* and *FEIS* indicates that clearcutting produces an average of 0.912 acre feet of water per acre harvested. In order to produce 240,000 acre feet of water through timber harvest, approximately 219,000 acres on the Forest would need to be kept in a clearcut condition. The acres which are suited and available for timber harvest for each alternative considered in the *FEIS* are as follows: Alternative A-365,301, Alternative B-188,000, Alternative C-334,357; Alternative E-43,113; Alternative H-21,353, and Alternative I-310,574. Of the alternatives, only alternatives A, C, and I even provide enough area which could be clearcut. And, NFMA only allows clearcutting where it is the optimal method of harvest, therefore, maintaining this amount of acreage in a clearcut condition would most likely not satisfy the mandate of the law.

Comment: The Forest has been and is proposed to be managed in a manner which has increased forest density and decreased the quantity of water produced.

Response: We believe that the density of forest vegetation has increased throughout this century. The primary cause seems to be from successful fire suppression, rather than from lack of timber harvest. Nevertheless, allowable sale quantities have declined over the near term, from 30 million board feet (MMBF) in the *1984 Plan* to 6.7 MMBF in the *Revised Forest Plan*. It should be noted that the planned use of prescribed fire to treat vegetation has increased substantially in the *Revised Plan*.

The *1984 Forest Plan* estimates that at the end of the fifty year planning cycle (1981-2030), water yield would have increased by 23,000 acre-feet per year. For the *Revised Forest Plan*, the combined effects of timber harvest and fire should produce an increase in water yield of 9050 acre-feet per year at the end of the fifty year planning cycle.

AIR QUALITY

Comment: Monitor effects of snowmobiles on air quality.

Response: Activities such as snowmobiling have low air quality impacts on the Forest. These effects are considered local and temporary. The snowmobile activities which take place on the Forest occur in areas with no high pollution periods or non-attainment status (*FEIS*, Chapter 3, Effects on Air from Developed/Motorized Recreation)

BUDGET

Comment: Several comments were received on how the budget affects Forests and Grassland work. Some comments requested that realistic funding levels and the impact of budget cuts be discussed or displayed. Other commenters wanted to know whether land allocation decisions, such as intermix, could result in additional funds to address management concerns. Some people suggested that additional funding be provided for monitoring and evaluation to measure environmental effects, particularly on wildlife. Another suggestion was to display the cost of preparing the *Forest Plan* and the loss of dollars for ongoing management activities.

Response. A strong effort was made to estimate realistic budget levels and the impacts of different budget levels. Supplemental tables in the *Plan* and *FEIS* display different budget levels and the type and amounts of activities and outputs for each one. These estimates were used to set the objectives contained in Chapter 1 of the *Plan*. The difference between the type and amounts of activities and outputs is the impact of budget changes whether they are positive or negative. The *FEIS* discusses two budget levels for all alternatives; an "experienced" budget level (approximately 13.5

million dollars) and a "full implementation" budget level (approximately 19.5 to 20 million dollars). Although we submit budget requests based on projections of yearly needs, which considers *Forest Plan* direction, these needs are not the same every year. It is also important to realize that the Forest Service does not control what allocations are ultimately received. Congress controls all Federal budgets and the agency must implement what is funded.

Land allocation decisions do not have much effect on the overall budget. Some allocations such as the amount of acres in Wilderness or Wild and Scenic Rivers do influence the budget for those areas but do not seem to influence the overall budget amount. The complexity and cost of management associated with intermingled land ownership patterns is being recognized and has a little influence on budget amounts but it is not a major factor.

Monitoring and evaluation activities such as inventories, interdisciplinary analysis, habitat trends, and assessments were included in the budget for all alternatives. Monitoring and evaluation activities are also more tightly linked to the goals and objectives in Chapter 1 of the *Forest Plan*.

The amount spent on revising the *Forest Plan* was not included in any of the *Revised Forest Plan* documents because the focus of these documents is on the future and the estimated costs of implementing the *Plan*. If anyone is interested, they can work with our planning staff to receive this information.

DOGS

Comment: *The Draft Forest Plan contained direction in MA 1.1-Wilderness that required 90 percent compliance with dogs on leash requirements within five years or else dogs would be prohibited in wilderness areas. Many commenters said that dogs should not be banned in wilderness for many reasons. Some commenters supported prohibiting dogs if they were not kept leashed. Other commenters suggested that dog restrictions be adjusted to fit situations or conditions of specific trails.*

Response: The direction presented in the draft *Plan* to prohibit dogs in wilderness if 90 percent compliance with leash requirements was not achieved was dropped for the final *Plan*. Requirements to keep dogs on leashes are already in place in some areas and can be added for other areas using existing regulations where needed. Forests and Grassland staff members will be working with organizations and volunteer groups to get voluntary compliance with leash laws so that these areas are maintained in a wilderness condition and provide desirable experiences for visitors.

FIRE

Comment: Commenters stated the Forest needed a fuel management, fire control and fire suppression plan. Others recommended review of a fire detection system with inclusion of forest lookouts as part of system and would like to see an assessment of forest fire detection capability.

Response: The yearly updated Fire Management Plan describes current fire management actions in support of *Forest Plan* direction. Variable fire danger conditions on the Front Range has supported an aerial detection system along with ground patrol/suppression resources, responsive to fire danger and ignition potential. This review (assessment) is contained in the National Fire Management Analysis System planning and budgeting process. Deadman Tower, west of Red Feather Lakes, is the sole remaining lookout tower on the Forest. It is staffed during the most of the fire season by volunteers for the purpose of fire detection and public information. When not staffed by volunteers it will be staffed on an as needed basis for fire detection purposes. The percent of fires by size class would indicate that the detection system currently used is relatively effective. Sixty-nine percent of the fires are discovered and suppressed at 1/4 acre or less, 94 percent at less than 10 acres, and 97 percent at less than 100 acres. It is not economically feasible or logistically possible to implement a detection system that would lead to the immediate control of all unplanned ignitions all the time under all weather conditions.

Comment: Commenters recommended that prescribed burns not occur near intermix/developed areas and that Landowners in intermix should assume responsibility for fire prevention, noxious weed control.

Response: Structural fire protection is the responsibility of State and local governments; the operational role of the ARNF-PNG in the wildland/urban intermix is wildland firefighting, hazard fuels reduction, cooperative prevention and education, and technical assistance. The Federal Wildland Fire Management Policy & Program Review (12/18/95) identifies protection priorities as (1) human life and (2) property and natural/cultural resource. Relative values to be protected, commensurate with fire management costs, will determine priorities between property and natural/cultural resources. Current analysis is taking place on the Forest to determine responsibilities (who and how) for protection in the wildland/urban intermix.

The treatment of hazardous fuels in the wildland/urban intermix areas is a high priority. Prescribed burning is only one tool that will be considered as a treatment option in those areas. It will be used only when the risks can be successfully mitigated.

Comment: Commenters suggested using prescribed fire to improve wildlife habitat quality and quantity and to reduce fuel loading. They also suggested increasing prescribed burns to reduce fuels and enhance vegetation diversity. They suggested the Forest reintroduce fire as a vegetation management tool in ponderosa pine and Douglas-fir ecotypes. Commenters wanted clarification

how fire will be used to enhance forest health. Some wanted the Forest to allow natural wildfires to burn in wilderness and to reintroduce fire to maintain a diversity of high elevation wilderness areas.

Response The *Forest Plan* recognizes the need to implement an aggressive prescribed fire program. On-going analyses will identify specific sites where fire will be used to maintain ecosystem health and integrity, and where fire will be used to provide protection to developments. The *Forest Plan* identifies the use of pre-settlement fire regimes as a baseline to establish prescribed fire program strategy. Monitoring and evaluation will determine appropriate variations in pre-settlement fire regime frequency, severity, extent, and seasonality. Where feasible in wilderness/backcountry areas prescribed natural fires (lightning ignitions) will be used to achieve and maintain desired conditions. The Fire Management Action Plan identifies the current year's prescribed fire program.

HAZARDOUS MATERIALS

Comment: What is effect of Minute Man Missiles and associated hazardous materials on Pawnee National Grassland.

Response The existence of the ten Minute Man missile installations on the Pawnee National Grassland is a matter of national defense and policy set at a level much higher and broader than the scope of this *Plan* revision. These fenced sites are under the strict security and control of the U.S. Air Force. The safety controls for all hazardous materials associated with the operation of the installations is also the responsibility of the U.S. Air Force.

HERITAGE RESOURCES

Comment: Identify heritage resources eligible for the National Register before eliminating "travelways".

Response Consideration of heritage resources is part of all decision making, and more specifically, ground disturbing activities such as construction or obliteration. Sites found potentially eligible for the National Register will be identified and protected until the full evaluation is completed.

LANDS AND SPECIAL USES

Comment: Recommend land acquisitions to consolidate ownership and enhance management, including intermix. Do not dispose of existing Forest Service lands. Acquire existing isolated mining claims where possible. Acquire private

lands where roads negatively affect forest resources. Consolidate checkerboard land pattern in Cherokee Park. Adopt land ownership adjustment plan to support reservoir enlargement/pipeline operation.

Response: The Forest wide direction (*Forest Plan*, Chapter 1) provides the goals and objectives for the multiple use priorities for the Forest. The Forests and Grassland intends to utilize the land ownership adjustment strategies described in each geographic area in Chapter 2 of the *Plan* (rather than identify a specific strategy for each parcel) to create the optimum ownership pattern needed to meet these overall management objectives. This information also provides direction and needed flexibility to use a mix of acquisition, exchange, and disposal methods to meet these needs while allowing for the uncertainty of future staffing and budgets, willing sellers, and specific adjustment opportunities

Comment: Granting Right-of-Way (ROW) permits should be a priority. Would like a status assessment of viability of recreation residences.

Response: The ARNF-PNG strategy in each of these areas is to mirror national policies, priorities and direction. Under the preferred alternative, ROW was given emphasis in Chapter 1, Section 2, Administration of Rights-of-Way of the *Revised Forest Plan*.

Comment: Need to check for consistency/compatibility with the Routt/Med Bow; Coordinate with the Medicine Bow-Routt National Forests on utility corridors. Conflicting standards for utility corridors would/could impact or close many existing corridors. Designate (City of Boulder) water supply facilities as existing utility corridors. Clarify what is meant about "non-expandable" for currently designated utility corridors. Are Recreation Opportunity Spectrum (ROS) classifications necessary for existing utility corridors. The utility corridor prescription should be a component of the affected environment.

Response: A coordination meeting was held to check and resolve consistency and compatibility issues with the Medicine Bow-Routt National Forests.

Expansion and non-expansion of corridors are site specific decisions and not *Forest Plan* decisions. Resource concerns and direction will guide project level decisions. Adjacent area consistency was not clearly explained in the draft. The Management Area 8.3 prescription was reassessed and changed to state that it will be compatible with the management area throughout which the corridor passes. This resolves not only ROS but Visual Quality Objectives and other resources conflicts.

Water supplies were not considered corridors because they do not serve as transcontinental facilities. They are relatively short distribution utilities rather than systems that may need to cross the Forests or Grassland or connect to other non-Forest facilities

Utility corridors were reviewed as part of the affected environment relative to resources and use of the Forests and Grassland. New facilities will have an additional review as site-specific NEPA will be required for individual projects

LANDS AND SPECIAL USES: Outfitter and Guides

Comment: Maintain or decrease current level of outfitter and guide use. Maintain or increase outfitter-guide use including increasing party size limit in Wilderness to current *Forest Plan* level of 25.

Response The *Revised Forest Plan* directs a maximum party level of 25 in Wilderness unless designated differently as a result of the Limits of Acceptable Change (LAC) process. Through the LAC, each Wilderness area will be analyzed to consider unique features or situations which may result in a decrease from 25. The factors which may lead to a decrease from the standard of 25 would include, increase in soil compaction, loss of vegetation, decrease in water quality, increase in disturbance to wildlife, or unacceptable increase in contacts with other humans.

Outside of Wilderness areas, the level of outfitter-guide use is determined by the level of public demand for a particular service, the capacity of the area to support various uses, the management area direction and the goals and desired conditions of the particular geographic area. Each area is analyzed individually to determine the appropriateness of issuing outfitter and guide permits and, if so, at what level.

Comment: Increase emphasis of outfitter-guides in planning documents.

Response Outfitter and guide permitting allows a legitimate use of the National Forest. The presence and level of this use is determined by site specific analysis as outlined in the LAC and/or NEPA processes. This use will be further addressed in the Recreation and Administrative sections of the Forest wide Direction (*Forest Plan*, Chapter 1) and in the Dispersed Recreation (4.3) and in the Wilderness (1.1) Management Area direction (*Forest Plan*, Chapter 3.)

Comment: Recommend that the Forest increase its emphasis on outfitter-guides to better serve the recreating public.

Response: The level permitting outfitter-guides will be determined by public demand for a particular service (determined by public comment and geographic area goals). Where a new demand is identified and as Forest budget allows, a carrying capacity study will be conducted to determine the appropriate level of use by permitted outfitters.

GENERAL PLANNING PROCESS

Comment: Livestock grazing should have been a revision topic.

Response Livestock grazing was originally a revision topic. However, as the issue was analyzed in more detail, it did not appear that any major changes were going to be made to the 1984 *Plan* direction on rangelands or livestock grazing. Based on this, it was moved from the list of major revision topics to the list of minor revision topics (See the Analysis of the Management Situation, June 1993 in the planning records.)

However, rangelands and livestock grazing were fully analyzed and management direction was updated to meet current needs.

Comment: Some people were concerned that politics might influence the decision process for the *Plan*.

Response: As part of the executive branch of government, the Forest Service tries to carry out its mission of caring for the land and serving people within the guidelines it is given by the Administration and the Congress. The Forest Service also tries to work with other agencies and local and state governments within this same framework. The natural resources the Forest Service manages are highly valued and the issues associated with them are often extremely controversial. As a part of government, politics form part of the decision space within which the agency must operate along with technology, the resources, public desires, laws, and others. While politics are a part of the decision making process, it is only one factor that is considered when trying to make a decision about the *Revised Forest Plan*.

Comment: Many multiple-use activities are restricted in the draft (and final) *Forest Plan* that are allowed by law.

Response: Part of the purpose of the *Plan* is to determine how and where activities should take place given resource characteristics and management objectives for an area. Restrictions are put in place for a number of reasons including protecting or maintaining ecosystem health, ensuring public safety, protecting places of interest, or others. While the Forest Interdisciplinary Team has tried to minimize restrictions, it is important that restrictions are put in place when they are needed.

Comment: Some commenters wanted a minimum impact strategy to be established.

Response: The goal or strategy of the Forest Service is not to simply minimize impacts. The agency is responsible for taking actions to care for the land and provide goods and services to the American public. In some cases, the actions that are taken are for minimizing or reducing current or potential future environmental impacts. However, some actions are taken to provide goods and services that can cause impacts. In many cases, the agency tries to minimize the impacts while providing these goods and services but that is not required nor is it desirable in some instances. Part of the purpose of the *Forest Plan* is to establish management requirements to protect the environment and the *Revised Plan* has a large number of standards and guidelines for that purpose. Although a minimum impact strategy is not being established, management requirements are being established to protect the environment and ensure the health of the ARNF-PNG ecosystems.

Comment: Several letters questioned whether the *Revised Plan* and *FEIS* should conform to or adopt the 1995 Resources Planning Act (RPA) Assessment goals which has not been approved.

Response: The references to the 1995 RPA goals were removed from the final *Revised Plan* and *FEIS*.

Comment: Commenters wrote that the management area prescriptions and Forest wide standards and guidelines contain significant changes from the 1984 *Forest Plan* and there has not been an adequate opportunity to comment on them, particularly since they are part of a Regional Menu of Management Area Prescriptions and Standards and Guidelines. There were also concerns that the impacts of these changes were not analyzed.

Response The management area prescriptions and Forest wide standards and guidelines have changed from the 1984 *Forest Plan* and have evolved constantly since the Forests and Grassland officially began the revision process in July, 1990. There have also been numerous opportunities since 1990 to comment on the prescriptions and standards and guidelines that are being used in the final *Plan* and *FEIS*. The opportunity to comment on the draft *Plan* and *DEIS* was the latest opportunity and many commenters made suggestions for changes that were evaluated and resulted in some modifications. Some other opportunities to comment included open houses and field trips in 1994, numerous newsletters inviting people to call or write with questions or comments, the ability to comment on a preliminary list of standards and guidelines in 1992, working groups in 1990, and the ongoing opportunity to work with Forests and Grassland during the process. Several of the current management area prescriptions are either a direct result or their content was heavily influenced by public comments and suggestions including

- MA 1 41 - Core Habitats Existing,
- MA 1 42 - Core Habitats - Restoration;
- MA 3.21 - Limited Use Areas,
- MA 3.55 - Corridors Connecting Core Areas,
- MA 5.13 - Forest Products;
- MA 5.5 - Forest Products and Dispersed Recreation; and
- MA 7 1 - National Forest-Residential Intermix

In addition, many smaller changes to the prescriptions and standards and guidelines resulted from the comments received during the revision process.

In July 1993, the Forest Service Regional Office and the revision forests (Arapaho Roosevelt and Pawnee, Black Hills, Rio Grande, and Routt) agreed to a more standardized menu for management area prescriptions and Forest wide standards and guidelines to provide increased consistency between units. The management area prescriptions menu resulted in standardized numbering scheme and titles with a corresponding theme that described the overall emphasis or priority for that management area. Forests had the flexibility to write additional goals and desired condition statements and add standards and guidelines to meet local needs and address public concerns. Only a few changes resulted from implementing this menu to the ARNF-PNG management area prescriptions. The public comments the ARNF-PNG received prior to that time were carried forward because of the flexibility given to the Forests. There have been several changes since 1993 including a major reordering of the numbers but the prescriptions still retain many of the ideas and suggestions received from the public.

The Forestwide standards and guidelines were handled very similarly to the management area prescriptions. Resource specialists met to consolidate the efforts of each of the revision forests, ensure consistent wording, and eliminate duplication with laws, regulations, and the Forest Service Directive System (Manuals and Handbooks). Most of the standards and guidelines the ARNF-PNG developed were in the Regional Menu unless they duplicated other legal or agency direction. The Forests and Grassland staff was also able to make changes and add new standards and guidelines to this Menu based on comments by the public or new identified needs by managers.

The Regional Menu of Prescriptions and Standards and Guidelines was developed not to exclude the public, but to provide a level of consistency (for increased public understanding) between Forests and Regions, and to provide a starting point for *Forest Plan* revision. The public is invited to comment on the standards and guidelines, but through the National Environmental Policy Act process of the *Forest Plan* revision itself. The Menu of Standards and Guidelines and Management Area Prescriptions is continuously changing based on public comments and the other needs of the individual Forest Plan revisions in the Rocky Mountain Region. It is an evolving Menu and public comment contributes to its development and ongoing updates.

The impacts of adding new management area prescriptions is not from adding them to a Menu but in applying them to particular areas on the Forests and Grassland. The impacts of these land use allocations were analyzed for each alternative, including the impacts of management activities and other uses that are most likely to occur, at a programmatic level.

We believe that the public has had many opportunities to comment on the management area prescriptions and Forest wide standards and guidelines since the revision process started. While it may appear that a Regional Menu impedes the ability of the public to influence or comment on these items, those people interested in the ARNF-PNG revision process have helped determine what prescriptions and standards and guidelines appear in the menu and the contents of that direction. The impacts of implementing that management direction has also been analyzed through the analysis of effects for each alternative. The management area prescriptions and Forest wide standards and guidelines included in the ARNF-PNG final *Plan* and *FEIS* are the result of a process of public participation and involvement and interdisciplinary team review by Forest and Regional specialists that began when the revision process formally started in 1990.

Comment: The Forest Service should conduct an economic efficiency analysis to determine the cost of impacts on forest flora, fauna and soils.

Response An economic efficiency analysis was prepared for each alternative (see *FEIS*, Chapter 3, Social and Economic Elements and *FEIS* Supplemental Tables). All pertinent budget costs were included. Some costs (or impacts) of forest management

are not quantifiable, and must be described qualitatively. Such limits to quantitative analysis are generally recognized by analysts and Council on Environmental Quality (CEQ) regulations. Descriptive analysis is used throughout the *FEIS* where it is appropriate, and can be found in Chapter 3 for flora (biological elements), fauna (terrestrial habitat and wildlife), and soils. The decision criterion of "net public benefit" requires the decision-maker to collectively consider all quantitative and qualitative information before rendering a decision

ALTERNATIVES

Comment: Several comments were made about the "no action" alternative, identified as *Alternative A* in the *DEIS* and *FEIS*. One comment was that the "no action" alternative should be more like or exactly like the 1984 *Forest Plan* because the current method of analyzing the no action alternative is not legally correct. Another comment was that *Alternative A* is not a "no action" alternative because of the changes to management area allocations, standards and guidelines, and *Plan* outputs.

Response: We actually considered two "no action" alternatives during the revision process. The ID team found that it was not possible to develop a single "no action" alternative that matched both the management direction and the estimated levels of goods and services in the 1984 *Forest Plan*. One "no action" Alternative that matched the output levels of the 1984 *Plan* was considered but dropped from detailed study because other alternatives demonstrate or other analysis work was available to understand the consequences of achieving the goods and services. *Alternative A*, a second "no action" alternative considered in detail in the *DEIS* and *FEIS* was developed to match the management direction of the 1984 *Plan* as closely as possible but reflects new data and information compared with that available in 1984. For these reasons, we believe that we properly considered a "no action" alternative in the *DEIS* and *FEIS* as required by NEPA and to provide a reasoned choice to the decision-maker and to disclose information to the public. (See also *FEIS*, Chapter 2-Description and Comparison of Alternatives: General Description of Alternatives and Alternatives Considered and Eliminated)

Comment: Several comments stressed the need to examine a sufficient range of alternatives to promote a reasoned choice or that the range of alternatives examined was not adequate.

Response: The Forest developed and analyzed an adequate range of alternatives which responded in different ways to the revision topics developed during public scoping. Ten alternatives were considered during the revision process. Four alternatives were considered but eliminated from further detailed study. Six alternatives were analyzed in detail. The alternatives considered provide varying output levels, effects levels, different patterns (allocations) of management areas, and respond differently

to the major revision topics and issues. The alternatives were all reviewed and updated, if necessary, using the comments received from the public and any additional data available since the completion of the *DEIS*. (See also Chapter 2-- Description and Comparison of Alternatives: General Description of Alternatives and Alternatives Considered and Eliminated)

Comment: Many comments were received by people supporting or advocating selection of different alternatives, particularly Alternatives A, B, E, H, and I.

Response We appreciate the time that people spent looking through the documents gathering the information to make their own decisions. The responsible official has gone through the same process to make a selection of a preferred alternative and the alternative to implement. When people suggested that we select or that they preferred a certain alternative we reviewed the reasons they gave for that preference or selection. We tried to use those reasons to make adjustments to the alternatives, including the preferred alternative, whenever possible.

EFFECTS ANALYSIS

Comment: Commenters wrote that the *DEIS* did not disclose cumulative effects as required by the National Environmental Policy Act (NEPA).

Response. The *DEIS* and *FEIS* (Chapter 3) do include cumulative effects as required by NEPA. Sections discuss past, present and reasonably foreseeable actions based on the best information available and estimates by resource specialists. The purpose of the effects analysis is to provide enough information for the decision-maker to make an informed decision based on the scope and the programmatic nature of the *Forest Plan*. The detail of the analysis in the *FEIS* is of sufficient detail to meet the requirements of the decision-maker.

Comment: A *Plan* implementation schedule is necessary to meet the cumulative impacts analysis requirement.

Response Activity, use, and output levels were estimated for program areas on the ARNF-PNG (see *Revised Forest Plan* and *FEIS* Supplemental Tables). These figures are estimates of annual activities and Forests and Grassland use for the first decade, and in some cases, the fifth decade. The figures in these tables are an estimated schedule of *Plan* implementation and they were used to determine cumulative impacts

Some commenters were specifically concerned about the timber sale implementation schedule. The *Revised Plan* and *FEIS* do meet the requirements for a timber sale implementation schedule. 36 CFR 219.16 states that the selected forest management alternative includes a sale schedule which provides the allowable sale quantity. This statement is referring to sale schedule as defined in 36 CFR 219.3, which states, "Base sale schedule. A timber sale schedule formulated on the basis that the quantity of timber planned for sale and harvest for any future decade is equal to or greater

than the planned sale and harvest for the preceding decade, and this planned sale and harvest for any decade is not greater than the long-term sustained yield capacity." Therefore, a "sale schedule" per 36 CFR 219.6 is referring to the projected level of timber harvest over time (of which ASQ represents the harvest in the first decade). It is not referring to a listing of specific timber sales to be offered

The National Forest Management Act does not specifically require that sale schedules be part of a forest plan, and neither does the Forest Service Directive System. The portions of the Directive system (FSH 1922.15, paragraphs (6) and (8)) that addressed sale schedules, were rescinded in the Federal Register on August 14, 1996. However, we do produce sale schedules as part of our normal *Plan* implementation process, and one is available from the ARNF-PNG headquarters

PLANNING PROCESS DOES NOT MEET LEGAL REQUIREMENTS

Comment: Some comments stated that the planning process used by the ARNF-PNG does not conform to the planning regulations. The reasons commenters gave included: (1) Local and state governments were not involved in the planning process and that regional and national issues were not considered; (2) the ARNF-PNG has not maintained the multiple use mission required by NFMA and other laws; (3) timber management and suitability were improperly considered contrary to the regulations.

Response: The ARNF-PNG has followed the NFMA regulations in conducting the planning process. The public and local and state governments have been consulted and their concerns evaluated and considered in the development and analysis of the draft and final *Forest Plan* and *FEIS*. However, issues were not always resolved as recommended by the public and the various state and local governments that were involved in the process. This is because the Forest Service has tried to balance the concerns from a variety of interests and develop a plan that provides for sustaining forest and grassland ecosystems while providing for desired uses and outputs. Local and state agencies and the public often do not agree with each other so the Forest Service is forced to make the best choice it can with the information available. Other sections of *FEIS*, Appendix A describe the process in more detail and lists many of the people and agencies contacted.

Regional and National issues are also considered in the documents. Issues of biological diversity, water yield, timber suitability, aquatic and riparian health are just a few examples of Regional and National issues that were evaluated in the course of this process. The ID team went through several analysis processes to determine the overall scope and significant issues to be analyzed in depth. (Note: The planning record contains many documents and letters documenting this process. Summary of Public and Internal Comments, Planning Action No. 1: Identification of

Purpose and Need, Planning Action No. 2: Planning Criteria, and Analysis of the Management Situation are formal documents that summarize the overall process used)

The *Revised Plan* does provide for multiple use. The proposed action (Alternative B) balances the need for maintaining viable and sustainable ecosystems and the desire of people to use the forest for recreation, obtain forest products, mine, extract oil and gas, and graze livestock. The other alternatives also provide for multiple use but result in different amounts of these uses.

Timber management and suitability were analyzed according to the regulations. Since the 1984 *Plan*, all lands on the ARNF have been evaluated for timber suitability and they were reviewed during the *Plan* revision analysis. The timber resource land suitability stages described in the planning regulations were followed. Appendix B of the *FEIS* contains the results of this analysis.

MONITORING AND EVALUATION

Comment: Plan objectives must be stated and then implemented. More monitoring is needed for these set goals and objectives.

Response We agree the monitoring and evaluation chapter (*Forest Plan*, Chapter 4) was not sufficient and not tied to measurable goals and objectives. Forest wide Direction (Chapter 1 of the *Revised Plan*) was revised extensively by identifying the priority goals and associated objectives. Once this task was completed, the monitoring and evaluation chapter was revised by adding a section on legally required monitoring item and updating the list of monitoring questions. The list of monitoring questions were linked more closely to the goals and objectives in Chapter 1.

Comment: Monitoring and evaluation strategy should be more detailed. The current approach is weak. The current chapter does not provide sufficient guarantee that monitoring activities will take place or be able to monitor the effectiveness of standards and guidelines or the validity of *Forest Plan* assumptions.

Response We agree that monitoring and evaluation is very important but believe that the monitoring and evaluation chapter is detailed enough to provide adequate monitoring and evaluation. Monitoring needs vary year-to-year and so do the budgets we receive. We feel it is important to have some flexibility to adapt to changing circumstances and that it is inefficient to develop a highly detailed monitoring strategy that is likely to change each year. An overly specific monitoring and evaluation chapter is inappropriate for a programmatic document. Although the section on monitoring features was updated, it was removed from the *Plan* appendices and placed in the planning records for this reason.

What specifically gets monitored each year will be a function of the issues facing the ARNF-PNG based on input from the public, the annual work planning process, and the budget provided by Congress. The ARNF-PNG staff is committed to implementing the strategy. We are likewise committed to working with interested individuals, groups; local, state, and other Federal agencies; and local, state, and Federal government representatives to ensure the commitment is met and that an appropriate focus on critical needs is maintained.

Comment: Several specific suggestions were made for additions or improvements to the monitoring and evaluation chapter. The suggestions were to ensure that air quality, noxious weeds and intermix issues were included.

Response: The monitoring and evaluation specifically has monitoring questions directed at air quality goals and objectives. Intermix is not specifically mentioned but many issues important to intermixed lands are listed including: High Fire Hazard, Recreation, Travel Management, Boundary Management, and others. Noxious weeds are not specifically mentioned but are part of Forest Vegetation issues.

PUBLIC INVOLVEMENT PROCESS

Comment: The public commented on inadequate opportunities to provide input to the draft *Forest Plan* and *DEIS*. A concern was also expressed that there was a lack of involvement by local people and local counties in the planning process.

Response: The public involvement process is explained in more detail in the *FEIS* Appendix A. The public was involved from the beginning of the revision of the *Forest Plan*. The first forum was held in May, 1990. In September of 1990 local, state and federal officials were contacted to make written comments to assist with the scoping efforts. Special interest groups and the scientific community were also contacted during this time. Newsletters were sent periodically and documents like the Analysis of Management Situation and draft Forest wide standards and guidelines were mailed for public comment, review or information. This process was ongoing during the development of issues and revision topics. The results from this involvement were that two alternatives developed by public groups were incorporated into the analysis, management area prescriptions were added, and many other changes to a variety of documents were made.

During the eighteen months before the *DEIS* and draft *Forest Plan* were issued, there were numerous open houses and field trips, newsletters were mailed to those expressing interest, individual meetings were held, letters were answered and the media was used to involve more people. Federal congressional representatives, State and County government officials, State and County agencies and other Federal agencies were specifically contacted about the release of the draft *Plan* and *DEIS*. Follow-up meetings were held if desired by the individual or the group.

Several meetings were held between draft and final *Plans*. A meeting was held for the travel management issue and one for the timber management and timber suitability issue so we could discuss the comments we received and whether they were being interpreted correctly. We also laid out our ideas on processes to address the issues raised. A newsletter was mailed summarizing the comments we received. Forests and Grassland staff have also attended a variety of meetings or discussed questions or concerns on the phone or in person with individuals, groups, or government officials many times since the draft was released.

This is just a short summary of some of the opportunities available for people to be involved in the *Plan* revision process. We have kept the process open and listened to the concerns that people have raised. Although we have not been able to satisfy everyone's request, their comments and concerns were evaluated and considered in the process. The final results of this *Forest Plan* revision process are greatly improved because of the amount of involvement and the changes that resulted from public involvement.

Comment: Use partnerships, cooperative agreements, volunteers, and other methods to deal with complex issues, reduced budgets, reduced staffing and other concerns.

Response. The Forests and Grassland are currently utilizing partnerships, volunteers, and cooperative agreements in many management aspects and will continue to do so. We expect that their use will continue to increase as *Plan* implementation begins. We strongly agree with this comment (see *Revised Forest Plan*, Chapter 1).

Comment: The ARNF-PNG must offer an open public dialogue between the end of the comment period and the final decision.

Response. We believe that the monitoring and evaluation strategy in Chapter Four of the *Revised Plan* provides the best solution to this concern. Some commenters suggested that a Supplemental *DEIS* and *Revised Plan* is needed because they believe that parts of the documentation were insufficient. Others wanted to informally review the changes made between Draft and Final documents so there was an opportunity to make final adjustments before a Record of Decision was approved. However, another formal or informal review period further lengthens an already long and costly process. The changes made between Draft and Final are a direct result of internal and external comments on and are within the scope of the draft *Plan* and *FEIS*. By using the monitoring and evaluation strategy, concerns about *Plan* management direction can be reviewed and updated if needed without delaying implementation on other parts of the *Plan* any further. We are firmly committed to the Monitoring and evaluation strategy and think it provides a good opportunity to address this concern without delaying the process further.

STANDARDS AND GUIDELINES

Comment: One set of comments dealt with the effectiveness of Forest wide standards and guidelines. One group of commenters said that more restrictive standards and guidelines were needed and that they were weakened from the 1984 *Forest Plan*. One specific suggestion was to change many of the guidelines to standards. Another group felt they were too specific and should be loosened up. Concerns were also expressed that the standards and guidelines were ambiguous and were left too open to interpretation possibly causing some serious unintended environmental impacts.

Response Trying to achieve an effective set of Forest wide standards and guidelines has been one of the most time consuming parts of the revision process. The difficulty has been to develop direction that does not stymie forest management because it is too overly controlling to be implemented or is too loose to be effective or meaningful. We feel that the standards and guidelines in the final *Forest Plan* are within this effective range and set the appropriate amount of strategic management direction. ID team members from the ARNF-PNG, other Forests completing revisions, and the Regional Office worked hard to write these standards and guidelines clearly to avoid ambiguity and unintended environmental impacts so they could be implemented effectively. However, while it is important to write clearly and unambiguously, there needs to be some room for flexibility and interpretation by line officers and project ID team members so that standards and guidelines can be applied in many situations involving a variety of activities over hundreds of thousands of acres.

Public review and comment have also been a part of this effort. The Forests and Grassland have received suggestions for standards and guidelines periodically throughout the revision process. Public and scientific working groups provided ideas in 1990. We published a draft set of Forest wide standards and guidelines in October, 1992 that many people reviewed and commented on. The ideas from these comments were part of the input that ARNF-PNG team members contributed to the development of the Regional Menu of Forest wide Standards and Guidelines. We also received many suggestions, both general and specific, on the draft *Plan* released in January, 1996. Generally, the set of standards and guidelines was reviewed one final time for appropriateness and effectiveness between the draft and final *Forest Plans*. Specifically, each individual comment about a standard or guideline was considered and, when appropriate, changes were made to improve the clarity or quality of the standards and guidelines.

Standards and guidelines have been an area of major concern throughout the revision process. We believe that the standards and guidelines in the final *Forest Plan* provide the proper balance between being too loose to be meaningful and too tight to be overly restrictive. This set of standards and guidelines is a result of many years of work by Forest and Regional ID team members and line officers. Further, the set is a logical result of the comments and suggestions from many interested people from the public and the natural resource expertise of forest managers and ID team members.

Comment: How will potentially retroactive standards and guidelines be applied to existing special use permits.

Response Generally, it is not necessary to apply the *Revised Plan's* standards and guidelines retroactively, and NFMA does not specifically require revision of pre-existing occupancy and use authorizations. The law generally does not favor retroactive application of new rules. The responsible official has the discretion under the National Forest Management Act (NFMA) to decide whether or not to apply the standards and guidelines retroactively. However, there may be occasions, on a case-by-case basis, when it is desirable to modify pre-existing authorizations if they are not consistent with newly established standards, including the standards and guidelines in the *Revised Plan*.

Comment: Standards and guidelines are needed to insure that legal obligations will be met. Also, standards and guidelines should have specific references to their source (Code of Federal Regulations or Forest Service Policy) and an explanation as to why the standard is necessary.

Response We have tried to eliminate standards or guidelines that duplicate our Manual and Handbook system, policy, the Code of Federal Regulations, and laws. All of these types of direction and policy already apply to the ARNF-PNG, thus duplication of this direction as standards and guidelines is unnecessary and redundant. As a result, there are few standards and guidelines that come directly from the Code of Federal Regulations or Forest Service Policy. Sometimes it is desirable to add additional detail or direction to our Directive System. In those cases, we could note the related reference as part of the description of the standard or guideline, but this is not necessary. In many standards and guidelines, there is no one particular Directive System rule, law or policy that drove the creation of the standard or guideline. Attempts to create a list of related direction would be time consuming and not particularly productive.

We try to avoid having standards and guidelines conflict with other direction. If you are interested in a particular standard or guideline, however, we can work with you to provide related references or clarification about how and why it was developed. The Regional Office, rather than the Forest Supervisor's Office, might be your best help here. Regarding an explanation of why each standard or guideline is necessary, it varies with the issue, resource, and the Forest. We believe that in the vast majority of cases, the reasons for the development of a particular standard or guideline are self evident. But, again, if you have questions about a particular piece of direction or standard or guideline, we will be glad to work with you. In this case, the staff of the ARNF-PNG are your best source of information.

RANGE

Comment: Close grazing allotments where significant ecological and resource damage or unsatisfactory condition occurs.

Response We believe grazing is an appropriate use of the National Forests and Grassland, though not everywhere. Resource damage or unsatisfactory condition may or may not be reasons to eliminate grazing in a particular allotment. Forest wide standards and guidelines are in place to protect resources and site specific analysis will determine any needed corrective actions, which may include closing the allotment. The Forest is currently in year three of a 15 year schedule to examine all active allotments on the ARNF-PNG. Site specific analysis will occur at that particular time.

Comment: Close all vacant grazing allotments. Do not close current vacant grazing allotments (maintain ranching lifestyle).

Response: We are proposing to close 75 vacant allotments in the *Forest Plan*. This action is proposed because 61 of these allotments have been vacant from 20 to 40 years. The trend for grazing is downward on the Forest, mainly due to ranchers selling or developing property for subdivisions and increased recreation use. Analysis was completed in the *FEIS* to determine suitability and capability for rangelands. This analysis determined which allotments were capable and suitable for grazing. The 75 allotments to be closed were determined to be not suitable for grazing (See *FEIS*, Appendix B, section called Range Capability and Suitability for Livestock Grazing). Reasons for closing include, allotments with very little capable lands on the NFS lands, subdivisions within the allotments, intermix of federal and private land, or where grazing was not compatible with area objectives. We are also proposing to leave 51 allotments open for grazing. Site specific analysis will be done on these allotments over the next 12 year period to determine and adjustments will be made at that time.

Comment: Eliminate all grazing; Reduce grazing levels; Maintain existing levels or increase grazing.

Response Various actions relating to grazing levels were analyzed in the *FEIS*. We believe grazing to be an appropriate use on the ARNF-PNG and have proposed a balanced viewpoint and grazing level in the *Forest Plan*. We are also implementing a long term schedule to analyze effects on a site specific allotment level. We are now in year 3 of the schedule and will have completed analysis of 14 allotments by the end of the 3 year period.

Comment: Utilize scientific evidence to resolve conflicts between grazing and other uses.

Response We use many tools in making decisions, scientific evidence is one of them. On an urban forest such as the ARNF-PNG decisions must also take into account the human dimension equal to the scientific. Many decisions come down to trade-offs.

and are a mix of social, political and scientific base input. We may not be clear when we make these trade offs and when a decision is more social or politically based. We continue to improve in our communication with the public in this respect.

Comment: Need to determine condition of 57,700 acres on the Pawnee National Grassland.

Response: These 57,700 acres were listed in an undetermined status with respect to nesting and cover habitat for the Mountain Plover. (The entire 57,700 acres is currently being grazed by cattle.) The Mountain plover is a candidate species to be listed as threatened or endangered and the complete habitat needs of the bird are not completely known. The 57,700 acres in undetermined status is a result of an EIS completed, in March 1994, for the Mountain Plover Management Strategy on the Pawnee National Grassland. Research has been continuing since 1994 to determine the bird's habitat requirements. As a result of this research, 43,735 acres has been determined to be suitable Mt Plover habitat leaving 13,965 still in an undetermined status. The EIS for the mountain plover is available for review at the Pawnee National Grassland office.

Comment: Use rotational grazing system.

Response: We use a variety of grazing systems on the Forests and Grasslands. Site specific analysis helps us determine what systems to use. The long term schedule will determine this analysis.

Comment: Qualify the role of economics in rangeland management.

Response: The jobs and income generated from grazing is discussed in Chapter 3, Social and Economic Elements Environment, range management section of the *FEIS*.

SCENIC/VISUAL RESOURCES

Comment: Visual quality/Scenery management objectives need better explanation.

Response: The Forests and Grassland system is wholly based on the National system. Additional information and detail can be found in the U.S. Department of Agriculture #462, National Forest Landscape Management, Volume 2, Visual Management System which is available in most Forest Service offices. Key direction is found in the geographic and management area narratives.

Comment: Explain the effect of Front Range air quality on Forest visual quality.

Response: A Forest goal (*Forest Plan*, Chapter 1, Section 2, Part 1: Physical Resources, Air) is to protect the Forests and Grassland ecosystems from unacceptable on-Forest air pollution- caused impacts, including particulates which impact visual quality. However, the impacts due to off-Forest air quality is outside the jurisdiction of the ARNF-PNG. Our obligation is to work with the State and/or Counties to identify potential on- and off-Forest impacts based on our monitoring of the Air Quality.

Related Values (see *FEIS*, Chapter 3, Air) anywhere on the Forests or Grassland, including the wilderness areas.

SOCIAL AND ECONOMIC

Comment: Change management areas to reflect the nature of small mountain communities.

Response Our response must be a general one since the comment is general in nature. Some local communities, homeowner associations, and county government agencies and representatives have worked with the Forests and Grassland during the revision so their interests were considered in the *Plan*. District staff members, who were largely responsible for the management area allocations, were very familiar with local community needs during the allocation process. They also reviewed and made changes to management areas in response to comments on two different occasions. We believe that the final *Revised Plan* is sensitive to the needs of the many small communities in and around the ARNF-PNG. If specific problems develop, there is also an opportunity to further review management areas and make amendments to the *Forest Plan*.

Comment: Extractive uses should pay full market value for forest resources.

Response Fees for using or extracting forest resources are established in many ways using processes that are beyond the scope of the *Forest Plan Revision*. Most fees schedules or bidding processes are established at the national or regional level. People interested in this topic are welcome to contact Forests and Grassland staff members for further information.

Comment: Economic values should be determined for non-market and non-use values to allow comparison with commodity production.

Response Analyzing economic efficiency is approached systematically to allow meaningful comparison of alternatives. Determining economic values for non-market or non-use values is done by the Forest Service Regional Office and provided to the Forests and Grassland in an internal memo. Using these values, an economic efficiency analysis was prepared for each alternative. This economic efficiency analysis included all pertinent financial returns (actual money paid to the U.S. Treasury) and economic benefits from non-market or non-use values to the extent they were quantifiable (see *FEIS*, Chapter 3 Social and Economic Elements and *FEIS* Supplemental Tables).

Comment: Several comments were received about relating the *Forest Plan* to local social and economic needs and the impacts that the *Plan* may have on counties. One specific concern was how grazing fit into the impact assessment.

Response The social and economic impacts to counties and areas influenced by Forests and Grassland activities were estimated (see *FEIS*, Chapter 3: Social and Economic Elements). This analysis looks at the social and economic characteristics within the

area of influence and how they might change based on changes in population, income, employment, and payments to local governments. Grazing was considered as part of this analysis along with other uses such as recreation, timber, oil and gas, and others. Refer to the discussion in the *FEIS* Chapter 3 and *FEIS* Appendix B for details about the results and the process used.

SOILS

Comment: Clarify the contradictions regarding the 85 percent rule especially concern the travelway system of roads and trails.

Response The travelway system, itself, is not considered part of the evaluation for the 85 percent rule. However, if the travelways are not designed and maintained, they can cause offsite concerns that may exceed the 85 percent rule. At the project level mitigation measures will be implemented to minimize soils impacts due to construction, reconstruction or recreation use on roads and trails.

WILD AND SCENIC RIVERS

Comment: Recommend designating new or expanding existing Wild and Scenic River areas, including North St. Vrain, Rock and Cabin Creeks, and North Fork of the Cache la Poudre River.

Response. Our alternatives provide a range of Wild and Scenic River designation options. The Record of Decision recommends the North Fork of the Cache la Poudre River for inclusion in the Wild and Scenic Rivers system but does not recommend the North St. Vrain nor Rock and Cabin Creeks for such designation.

Comment: Do not recommend any additional Wild and Scenic River designation.

Response Our alternatives provide a range of Wild and Scenic River designation options, including no recommended Wild and Scenic River designation. The Record of Decision recommends the North Fork of the Cache la Poudre River for inclusion in the Wild and Scenic Rivers system but does not recommend the North St. Vrain nor Rock and Cabin Creeks for such designation.

Comment: We disagree that the North St. Vrain, Rock and Cabin Creeks are well enough protected by RNA designations. These areas are "suitable" for protection and should be recommended to permanently preserve these values.

Response We believe RNA designation provides greater protection to the values of the North St. Vrain, Rock and Cabin Creeks than Wild and Scenic River designation. The goal of an RNA is to preserve and maintain biological diversity with minimal human intervention or disturbance.

Comment: On Page 28-30 of the draft *Plan*, there is no prescription for scenic rivers. Though none are designated currently on the ARNF-PNG and none are proposed, there still should be a scenic river prescription in case any rivers are later proposed for this designation.

Response: Any rivers proposed and designated in the future for Scenic River classification will be amended to the *Revised Plan*. This would include the prescription description and a map showing the actual management area allocation. We do not believe a description of a management area not allocated on the Forests or Grassland belongs in the *Plan*.

Comment: On page 45, #10 of the draft *Plan* reads "Prohibit development of utility corridors or sites within designated wild river segment". This statement needs to be deleted since the Wild and Scenic Rivers Act does not prohibit development of utility corridors or sites within designated wild river segment. FSH 1909.12 says utilities should be discouraged but allowed when no reasonable alternative exists. At the minimum, this needs to be a goal or a guideline as a standard would be too restrictive. If retained, it needs clarification and must state that where any designated utility corridor currently crosses a Designated and Eligible Wild River segment, any additional facilities added within the utility corridor are exempt from this goal or guideline.

Response: The FSH reference is correct (FSH 1909 12, Chapter 8.2). We have eliminated this statement from Management Area-1.5 Designated and Eligible Wild Rivers.

Comment: On page 45 of the draft *Forest Plan*, one of the standards for Designated and Eligible Wild rivers is No. 9: "Do not authorize new water development projects." Also on page 364 of the *DEIS* it is stated that the entire North Fork of the Poudre from its headwaters to Dale Creek would be recommended for designation as a wild and recreational river in Alternatives B, E, and H. It continues by stating "Designation would eliminate the opportunity for major water-resource development projects over the entire 30 miles of corridors, and place other constraints on management in the corridor." As noted on page 48, Appendix D of the *DEIS*, "when Halligan Reservoir is expanded, its waters may extend into the lower portion of the study area, in Segment 6." The City of Fort Collins and the North Poudre Irrigation Company own a conditional storage right which allows them to enlarge and store additional water in Halligan Reservoir. The right to enlarge Halligan Reservoir to its conditional storage capacity should not be precluded or affected by what is contained in the *Forest Plan*. In fact, the lower part of Segment 6, which the *Plan* says will be recommended to Congress as a wild river, lies outside the forest boundary, and therefore, is not included in any management area. It is inappropriate to make recommendations in the *Plan* that may affect the storage and use of water downstream and outside the forest boundaries.

Response: We have rewritten the document so that this issue is cleared up. In Appendix D of the *FEIS* the descriptions and the map shows the recommended section of the North Fork only extending as far east as the Roosevelt National Forest eastern boundary.

The mileage and acreage figures in the *DEIS* were calculated only to the Forest Boundary and not Dale Creek. and, therefore, remain the same in the *FEIS*.

Comment: The Nature Conservancy's Phantom Canyon Preserve and associated conservation easements on adjacent private land in the North Fork drainage should be considered in any studies and subsequent planning for wild and scenic designation. The proposed Laramie Foothills preserve (in process with possible GOCO funding) should also be considered in North Fork Wild and Scenic designation.

Response The Forest Service will assist, advise, and cooperate with any State agency, landowners, private organization, or individual to plan, protect, and manage river resources as provided for in Sec 11(b)(1) of the Wild and Scenic River Act. Since a majority of the North Fork of the Cache la Poudre River touches the National Forest, the ARNF-PNG has the lead responsibility for studying the river. We chose the lower portion of the river boundary to be at the National Forest boundary. This Forest is not making recommendations on privately or State owned lands downstream of the Forest boundary.