1997 Revision - Black Hills National Forest Land and Resource Management Plan

RECORD OF DECISION

BLACK HILLS NATIONAL FOREST

Falls Within the States of South Dakota and Wyoming

Falls Within the Counties of Lawrence, Meade, Pennington, Custer, and Fall River in South Dakota; Crook and Weston in Wyoming

Date of Decision: March 13, 1997

This document contains the decision and rationale for selecting a modification of Alternative G in the Final Environmental Impact Statement as the Revised Land and Resource Management Plan for the Black Hills National Forest. This Plan provides programmatic direction for the next 10 to 15 years.

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Introduction

"The Black Hills is one of the Nation's greatest natural resources. ...Nowhere else on the continent can be found an area of such diversity within such a relatively restricted space." -- **Sven Froiland, Emeritus Professor of Biology, Augustana College, 1990**

Professor Froiland is correct in describing the Black Hills as one of the Nation's richest treasures. Yet, the biological diversity of this "island on the plains" is only one of the things that makes this place special. The name alone reminds us of its historical and spiritual significance. This was the setting for many voices and names and characters: General Custer, Wild Bill Hickok, Calamity Jane, Seth Bullock, Crazy Horse, Sitting Bull, Black Elk, Harry Longabaugh (the Sundance Kid) and Teddy Roosevelt. For many people, the Black Hills has a special place "in the heart." For American Indians, this is sacred ground. For hundreds of thousands of visitors each year, the Black Hills National Forest is a place where memories are made.

Mount Rushmore National Memorial, the Black Hills National Forest, and nearby National Parks draw national and international tourists. The beauty of the forests and meadows provides a backdrop for year-round recreational activities.

The Black Hills is also one of the best examples of multiple use management in the United States. The first timber sale on Federal lands in the Nation was in the Black Hills in 1899. Approximately five billion board feet of timber have been harvested over the past 100 years. Still, there are more trees now than at the turn of the century. Early accounts of the region describe grasses as "gold above the ground." Stewardship of forage and range over the decades has provided for both livestock and wildlife needs. The Black Hills contains one of the richest mineral deposits in the country, including the legendary Homestake gold vein which was developed into the largest gold mine in the Western Hemisphere.

Yet it remains a place of breathtaking beauty. The Black Hills National Forest is a place where many of the basic needs of people have been met for decades. The challenge is to keep it productive while ensuring that future generations will benefit from its rich natural diversity, beauty and history.

WHAT THIS RECORD OF DECISION (ROD) IS

This Record of Decision (ROD) describes my decision on the Revised Land and Resource Management Plan (Revised Forest Plan or Revised Plan) for the 1.2 million-acre Black Hills National Forest, and my reasons for that decision.

It also modifies a draft of the Revised Plan released in December, 1996, with an accompanying Final Environmental Impact Statement (FEIS). The December draft appeared as Alternative G in the FEIS. The December draft and Alternative G in the FEIS is being modified in this ROD as shown in the Appendix. There are changes to objectives, standards and guidelines for soils and watershed protection, ecosystem management, silviculture, wildlife, scenic integrity. There are changes to the monitoring chapter. There are some changes in the definitions. Finally, there are changes for the Sand Creek and Pilger Mountain areas.

The modified Plan is a logical outgrowth of this alternative. As such, it is within the range of alternatives disclosed in the FEIS, a range that the public could reasonably anticipate that the Forest Service consider. The public's comments on the alternatives in the Draft Environmental Impact Statement (DEIS) and FEIS also apply to the modified alternative I have selected. Indeed, the alternative was modified because of comment received on the DEIS, and since release of the FEIS.

Typically, a ROD is published for a Forest Plan concurrently with the FEIS. I delayed the ROD so I could further assess the reaction of the public to the alternatives. The additional public comment I have received during this time is also discussed in this document.

The requirements for a ROD are part of the analysis process established by the National Environmental Policy Act (NEPA), described in 40 CFR 1505.2.

A separate FEIS Addendum has been concurrently released with this ROD. It contains errata for the FEIS and discusses comments from government representatives since December. It should be considered as part of the FEIS.

WHAT A FOREST PLAN IS

A Forest Plan for the Black Hills National Forest, as well as for each Forest in the National Forest System, is required by the regulations implementing the National Forest Management Act of 1976 (NFMA), which was an amendment to the Forest and Rangeland Renewable Resources Planning Act of 1974 (RPA).

The purpose of the Forest Plan is to provide a framework for multiple use and the sustained yield of goods and services from National Forest System lands in an environmentally sound manner. NFMA regulations at 36 CFR 219.10(g) require that a forest plan be revised on a 10-year cycle, or at least every 15 years.

As a management strategy, the Revised Plan and FEIS provide a programmatic framework for decision-making on the Forest for the next 10 to 15 years. The Forest Plan sets forth goals, objectives and limitations to actions in the form of standards and guidelines, both Forestwide and on subdivisions of the Forest called "management areas". It establishes a framework for monitoring and evaluation. Pursuant to NFMA, the Forest Plan identifies land that is suitable for

timber production and determines the timber allowable sale quantity as well as estimates of other goods and services.

Adoption of the Plan does not create any on-the-ground environmental changes. Nor does it dictate that any particular site-specific action must occur. Before an action may take place, several events must transpire. First, a site-specific action (e.g. a timber sale, or an Allotment Management Plan) must be proposed and found to be consistent with the Plan. Next, the action is subject to NEPA and NFMA analysis and public comment. Finally, the Forest Service must adopt the action. Thus a Forest Plan is just one part of a multiple-level decision-making process.

All activities, many of which are interdependent, may be affected by annual budgets. If the budget changes for any given year covered by the Plan, the projects scheduled for that year may have to be rescheduled. The Forest Plan is not a budgeting tool. It provides flexibility for a number of budget scenarios and some of these are disclosed in the FEIS.

For the above reasons, the Plan does not provide a guarantee of outputs, but rather provides systematic guidance for management. For a complete discussion of what a Forest Plan is, please see "Overview of Forest Planning and Project Level Decisionmaking" by the Natural Resources Division, Office of General Counsel, February 17, 1997. By reference, I am incorporating this document as part of this ROD.

PURPOSE AND NEED TO REVISE THE PLAN

The existing Forest Plan for the Black Hills National Forest was approved on August 19, 1983. There have been 33 amendments to the existing Plan. Revision of the Forest Plan is now needed to satisfy regulatory requirements and to address new information about the Forest and its uses. The Forest Plan is being revised not just to meet the law, but to make it a more effective and reliable tool for resource management.

Public comment indicates that most people like the way the Forest has been managed. Many aspects of the 1983 Plan are not changed. However, the Revised Plan does respond to changing conditions of the Black Hills. It also reflects the advancement of ecosystem science over the past 15 years and puts more emphasis on monitoring.

Examples of changed conditions over the past 15 years include increased use of the Forest, encroachment of pine trees into meadows, the effective thinning of ponderosa pine stands due to an acceleration of the commercial timber program, and impacts on wildlife and plants which have been formally designated as sensitive.

Meanwhile, inventory information concerning the Forest's land and water resources is more precise than it was 10 years ago. For instance, during this revision process, the interdisciplinary team used information about soils, trees and growing conditions from over 30,000 individual sites on the Forest. In 1983, Forest staff relied on only 409 sites to provide information about conditions on the Forest. This improved information has shown that the original calculations used in the determination of the suitable timber land base were inaccurate, and that the determination of the allowable sale quantity needed be revised. The

update in the allowable sale quantity is especially critical because of the importance of timber harvest as a tool to achieve ecosystem management objectives, and because a reliable estimate of available supply is needed by industry.

As provided in 36 CFR 219.10(g), this decision will remain in effect until the Plan is again revised, which is scheduled to be in 10 years (2007) but no longer than 15 years (2012). In the FEIS, effects are displayed for a longer time-frame, so that long-term effects of alternative choices can be disclosed. Short-term opportunities, problems, or conflicts may arise in managing the Forest that were not anticipated in the Plan Revision. When this occurs, the Plan can be adjusted through rescheduling, amending, or revising.

Public Involvement Conducted

The staff of the Black Hills National Forest has conducted a lengthy public involvement process for this Revised Plan. Based on monitoring and evaluation of the existing Plan, the Forest Supervisor filed a notice of intent to revise the Plan in the Federal Register on October 27, 1989. Direct contact was made with local and state government officials, as well as tribal governments and spiritual leaders. A series of open houses and media coverage in early 1990 resulted in hundreds of comments from all across the nation, but mainly from people who live in and near the Black Hills. A document identifying the purpose and need for revising the Plan was developed based on the comments as well as Forest Service professional opinion. It was made public in June 1990.

As early as August 1990, the interdisciplinary team began data collection for the Analysis of the Management Situation, which was released to the public in April 1992. During this time, public field trips were conducted for interested parties to discuss the issues on the ground.

By November 1992, eight alternatives had been developed, and they were presented to the public in a series of open houses held in December. At the open houses, and through media disclosures, the Forest solicited comments from the public concerning the alternatives.

During this time, a new alternative was submitted by Biodiversity Associates/Friends of the Bow. This alternative was analyzed and described in the DEIS. A series of core habitat areas and connective corridors across the Forest would be established by this alternative. This alternative was seriously analyzed by the interdisciplinary team. In parts of the country where natural disturbances (wildfire, extreme winds, etc.) are infrequent and widely separated, an alternative like this would benefit species that had evolved in and were native to large blocks of old growth (core habitat). However, because the natural disturbance regime of the Black Hills (fire, insect outbreaks, winds, etc.) tends to fragment closed canopy stands, most native species and sensitive species in the Forest would generally not benefit from this approach. In addition, it would have reduced the capability of the Forest to contribute to the local economy. Therefore, the alternative was presented in the DEIS as an alternative considered and dropped from further consideration.

A proposed (Draft) Revised Forest Plan and DEIS were released to the public in June, 1994 with a 120-day public comment period. Later, the comment period was extended an additional 45 days to December, 1994. Comments on the DEIS, and public involvement associated with its release are summarized in Appendix A of the FEIS. There were 5,400 comments from 1,750 individuals or organizations. Most of the people who commented were from South Dakota or Wyoming, but other comments were received from people in 48 states. Individual responses to each comment have been prepared and are available upon request.

During the public comment period, the Black Hills Regional Multiple Use Coalition submitted "The People and the Land Alternative", including recommendations, a map, and an associated computer model. Many local government representatives formally endorsed this alternative, and the planning process was slowed down to fully analyze this new alternative. However, the interdisciplinary team found that while the recommendations, map and computer model all appeared to be logical when viewed independently, they could not be integrated. Additional questions were forwarded to the Coalition for their consideration. An analysis of the alternative showed that the harvest level recommended by the group could not be sustained while managing for other multiple use objectives suggested in the alternative, including visuals, botanical areas, late successional conditions, and wildlife habitat. Since many letters of support for the alternative were largely based on its allowable sale quantity, the alternative was modified to provide that level at least for the next ten years. An alternative at the maximum legal sustained level was already included in the DEIS and carried forward into the FEIS. Between the two alternatives, the environmental effects of these two scenarios were disclosed to the public in the FEIS.

At the same time, Biodiversity Associates furnished additional information on their alternative. They modified the alternative by allowing some activities within the core area, such as livestock grazing. They also further described the desired future condition to allow for disturbances. The modified alternative is described in the FEIS.

The Revised Forest Plan and FEIS were released in December, 1996. I have used the time since the release of the FEIS to assess the reaction of the public to the preferred alternative. I have met with local government officials and other community leaders. I have reviewed additional letters received during this time and visited with many individuals.

There have been many comments that "The People and the Land Alternative" was misrepresented and not properly considered. During this time, I have reviewed the analysis and I find the information disclosed in the FEIS to adequately represent the range of environmental and social effects likely to occur under this Alternative. The Coalition has noted differences in their original proposal and the way the Alternative was analyzed, but these differences did not affect my decision.

Biodiversity Associates, the Sierra Club, and other environmental groups have requested that a supplemental DEIS be prepared at this time. However, I find the DEIS, public comment process, and FEIS to be adequate and I do not believe that a supplement is warranted.

Public involvement will continue. As implementation of the Revised Plan is monitored, we will inform and involve the public and local, state and tribal representatives. This is discussed later in this document.

Alternatives Considered

In making my decision, I have considered the nine alternatives described in detail in Chapter Two of the FEIS. Six of these alternatives (A, B, C, D, G, and H) were in the DEIS and are slightly modified in the FEIS. As discussed earlier, alternative G has been further modified in this ROD. Alternative I, from Biodiversity Associates/Friends of the Bow, was disclosed in the DEIS, but not considered in detail. Additional information during the DEIS comment period was used to incorporate aspects of another alternative and more fully describe the alternative in the FEIS. Alternative J, a modification of "The People and the Land Alternative", was added based on comments from local multiple-use advocates. Alternative X was added in the FEIS to describe what would happen if the existing timber harvest level was continued for one more decade.

Important points about the alternatives are listed in the FEIS beginning on page II-4. The alternatives were developed with the understanding that much of the existing Plan is adequate, and that unless there was an issue or concern, it was not necessary to change the direction.

The following descriptions of the alternatives are very simplified. The alternatives are more fully described in the FEIS in Chapter Two and Appendix M.

ALTERNATIVE X maintains the timber harvest level of the current Plan for one more decade while staying within the bounds of the standards and guidelines of the current Plan. Because this harvest level is higher than the long term sustained yield, this level cannot be sustained, and timber harvest drops by 26 percent in the second decade.

ALTERNATIVE A (the no action alternative) retains all of the standards and guidelines of the 1983 Plan, while adjusting the allowable sale quantity based on updated models and information. Both alternatives X and A essentially retain the management areas from the current Plan, although there are minor changes in numbers and titles.

ALTERNATIVE B maximizes the sustained flow of Forest products, including wood products and water yield. It also has high amounts of acreage available for off-road vehicle use.

ALTERNATIVE C drives more of the Forest's tree stands into a mature, older condition. More of the Forest would be managed to provide semi-primitive recreational opportunities. Three areas (Beaver Park, Sand Creek and Inyan Kara) would be recommended to Congress for Wilderness designation, while 120.6 miles of streams would be recommended to Congress for inclusion in the Wild and Scenic River System.

ALTERNATIVE D emphasizes vegetative diversity reflective of pre-settlement conditions. The amount of grass/forb conditions within forested stands would increase via timber harvest and prescribed fire. Stands of trees, however, would not always be managed for maximum growth or for maximum sustained timber production. The amount of acres managed for hardwoods would increase. The

acreage designated for low-elevation wildlife management would increase, some semi-primitive recreation areas would be added, and late-successional landscapes would be added. Several botanical areas would be created. Some riparian areas would be restored by raising the water table. In a few sample areas, stand-replacing fires would be simulated utilizing timber harvests followed by prescribed burns. This alternative would have the highest level of prescribed burning.

ALTERNATIVE G, **the basis for the preferred alternative**, is similar to the existing Plan, but it also provides for more diversity of plant and animal communities, and allows more of the Forest to function naturally. It updates standards and guidelines and projected outputs based on better science. This Alternative provides a high level of economic net value. It has many of the elements of Alternative D, including an increase in acres managed for hardwoods or meadows. It would emphasize diversity in tree stand density. Several botanical areas would be created. Late succession landscapes and sites would be managed. Some riparian areas would be restored by raising the water table. Where possible, it would increase prescribed burning. Timber harvest would remain as an important tool to manage the forest ecosystem, and this Alternative would provide a harvest level close to Alternatives A, D, and H.

ALTERNATIVE H is similar to Alternatives D and G, but incorporates emphasis for wildlife habitat, especially for game animals, as recommended by wildlife professionals working for the Forest and state game agencies. For example, Alternative H expands winter range areas, and emphasizes a management area to provide elk habitat outside of areas traditionally viewed as winter range, and expands late successional habitat. The elk habitat areas would have travel management restrictions. The timber harvest levels in Alternatives D, G and H are essentially the same, except for small differences in harvest volume from ecosystem restoration projects.

ALTERNATIVE I was submitted by a consortium of environmental groups and features a number of core areas of late successional interior habitat, connected by corridors. Only minimal management and no motorized activity would be allowed in core areas. Surrounding the core areas would be buffer zones with a gradation of multiple uses allowed in these zones. Outside the core areas and corridors, this alternative would essentially be the same as Alternative G.

ALTERNATIVE J is a modification of "The People and The Land Alternative" proposed by the Black Hills Regional Multiple Use Coalition. After analysis, it was determined that the submitted Alternative could not meet all the stated objectives simultaneously. By modifying data used in the DEIS, the coalition determined that a harvest level of 108 MMBF could be sustained. However, this level cannot be sustained while providing for the other objectives in the Alternative. Therefore, Alternative J was formulated as a departure from non-declining timber harvest. The harvest level drops by 29 percent after 10 years, and increases after that.

Several statements in the FEIS, both in substance and in tone, may have mischaracterized this Alternative and I apologize for any misunderstandings this may have caused. An errata to the FEIS has been prepared to provide a better portrayal of this Alternative. I have given the alternative originally submitted by

the Coalition the same careful consideration that I have given the other alternatives.

Reasons for the Decision

DESCRIPTION OF THE DECISION

It is my decision to revise the Forest Plan by selecting Alternative G in the FEIS with the modifications listed in the appendix of this ROD.

My decision is contained in the following chapters of the Revised Plan as modified. The fundamental components of this decision are highlighted.

Chapter One -- I am establishing Forestwide multiple-use goals and objectives in accordance with 36 CFR 219.11(b). Goals describe a desired end result and are normally expressed in general terms. The goal discussion listed under each of the nine goals further defines the desired outcome. Objectives describe measurable desired results intended to promote achievement of Forest Plan goals. The Forest Supervisor shall strive to achieve these objectives. However, since many variables affect achievement of objectives, the Forest Plan need not be amended if forest plan objectives are not achieved.

Goals and objectives tier to the Regional Goals in the Rocky Mountain Regional Guide (as amended May, 1992, technical correction, June, 1996).

Chapter Two -- I am establishing Forestwide standards and guidelines as required by 36 CFR 219.13 through 219.26; and 219.27. Standards are limitations on management activities, and deviation from a standard will require a plan amendment. Guidelines are preferred or advisable courses of action.

One of the standards which I am establishing is an **allowable sale quantity of timber** as required by 36 CFR 219.16. An ancillary decision I am making is the designation of an acre total of **lands not suitable for timber production**, as required by 36 CFR 219.14.

Another set of standards and guidelines pertain to oil and gas leasing. In accordance with 36 CFR 228.102(d), I will notify the Bureau of Land Management that certain lands are **administratively available for oil and gas leasing**. I consider these lands likely to be authorized for leasing under 36 CFR 228.102(e), subject to additional verification when an application for a particular lease is actually made.

Applicable laws, regulations, agreements, Forest Service Manual and Forest Service Handbook direction are not reprinted in the Forest Plan as standards or guidelines. These rules still apply, and I direct you to Appendices A, B and C of the Plan for a list of them.

Chapter Three -- I am establishing management area direction. Management areas are delineated in the Plan Revision data base and approximately shown on the map accompanying the Plan (with modifications as shown in the Appendix of this ROD). There are 19 management areas. Management area direction includes management area goals, objectives, standards and guidelines. Management area desired future conditions shall be

considered as goals. Management area direction is required by 36 CFR 219.11(c).

By making these management area delineations, I am also making related decisions for special designations. In accordance with 36 CFR 219.17, I am making a **recommendation to Congress that no additional Wilderness be designated** in the Black Hills. I am making a **recommendation to Congress that eligible streams are not suitable for inclusion in the Wild and Scenic River System** in the Black Hills. I am deciding that there be no additional Research Natural Areas in the Black Hills at this time.

Chapter Four -- I am establishing requirements for monitoring and evaluating the implementation and effectiveness of the Revised Plan and the validity of the assumptions used in its preparation. It is particularly important in the Black Hills ecosystem to monitor and appropriately alter management activities as we identify their consequences. Monitoring and evaluation direction is required by 36 CFR 219.11(d). The public will be invited to participate in monitoring.

This Chapter provides an overview for the monitoring and evaluation program. A more specific, tactical monitoring information strategy is available upon request.

This decision also amends the **Regional Guide timber utilization standard for the Black Hills National Forest.** The timber utilization standard in the Rocky Mountain Regional Guide (as amended May, 1992, technical correction, June, 1996) will be amended as shown in the Plan under Standard 2405. This Amendment does not apply to other forests in the Region.

The scope of future decisions and environmental analyses is limited by the Revised Plan. Future environmental analyses and documents will tier to the direction in the Revised Plan and FEIS. The Revised Plan and FEIS are treated as combined documents for purposes of NEPA disclosure and tiering.

OVERALL REASONS FOR MAKING MY DECISIONS

In making my decision, I am balancing the national significance of the Black Hills described earlier with regional and local economic and social values. I have developed a Plan that is uniquely tailored to this Forest and the people who live in, work in, or visit the forest. It is evident from the disclosures in the FEIS that Alternative G, as modified, will not create the least impact on the environment, nor can it generate as many market-valued commodities as other alternatives considered in the FEIS. However, I find that Alternative G, as modified, best maximizes net public benefits by striking a balance between the many divergent opinions which I have considered. Most importantly, I am confident that the management proposed in the Revised Plan is within the physical and biological capability of the land and can be accomplished without reducing that capability. I am also confident that adverse effects on socio-economic conditions in the area will not be widespread. This Plan will continue to provide a high level of economic benefits while managing for or maintaining a healthy ecosystem. The Forest has been well managed in the past and I want to continue that good work.

The best available science in the biological, physical, and social fields has been incorporated into the FEIS. However, science cannot dictate a decision which has ecological, social and economic consequences. Additional planning and analysis at this point will contribute nothing further to the decision I must make at this time.

In making my decision, I carefully considered all the comments of individuals, businesses, and organizations who live in or visit the Black Hills. I have summarized their concerns below and how I considered them.

I have considered both amenity values and commodity values in making my decision. Commodities are often represented as "maximums" while other features of the Plan are often represented as "minimums". In addition, words often used to describe increases or decreases to commodities differ from those often used to describe amenities. This may erroneously convey unequal consideration or importance in the planning process. Such wording is rooted in law and regulation, and it does not diminish the equitable consideration of all values.

I have attempted to balance a number of sometimes competing factors in this decision. Important factors I have considered throughout the analysis include:

Long-term Multiple-use Sustainability. - I have a legal and ethical obligation to maintain or restore the sustainability of forest ecosystems, which are essential in providing sustained yield of benefits for present and future generations.

Resource Protection. - I have considered my legal obligation to protect air, soil, water and other resources.

Effects on Local Communities. - As neighbors and members of Black Hills communities, Forest employees genuinely care about the needs and desires of people who live in or work in the National Forest. I have personally listened to the concerns and fears of many of those whose jobs are dependent upon this decision.

I have considered how well I can predict the outcomes likely to happen as a result of the Plan, to provide reliability to those dependent on this decision. This includes a consideration of current budget trends. I want this Plan to be consistent with the needs of local communities within the capabilities of the Forest, and I want to be able to deliver the goods and services as listed in the objectives.

The uniqueness of the Black Hills. - As discussed in the introduction, there is no other place on the Continent like the Black Hills. Comparisons with other National Forests help provide perspective, but this decision must be unique to this Forest.

Elements Of My Decision

By subject, this section (1) provides more detail about my decision; (2) highlights changes from the 1983 Plan; (3) summarizes public comment, including what was received since the FEIS; (4) provides a more detailed discussion on the reasons for my decision; and (5) describes how the alternatives were considered in regard to this subject. The subjects in this section are in two parts: (1) the major issues and concerns described in the FEIS and (2) other important aspects of my decision.

The major issues and concerns described in the FEIS are:

A. Biological consequences of ecosystem management;
B. Timber harvest, and the economic consequences of the timber supply;
C. Public access and the types of recreational opportunities;
D. Wilderness recommendations;
E. Changes in water flow due to vegetation manipulation;
F. Locatable, or hardrock, mineral development; and
G. Development of leasable oil and gas minerals.

Background on each of these issues and concerns is in the FEIS beginning on page I-5.

In this section, I also discuss other aspects of my decision:

H. Livestock grazing;
I. Wild and Scenic River System recommendations;
J. Research Natural Areas;
K. Basic protection of resources;
L. Portions of the Forest of particular public interest; and
M. The Regional Guide Amendment for the Timber Utilization Standard.

This section highlights only the major changes in this Revision. For instance, other changes in the Revised Plan were made to provide consistent direction among Forest Plans in the Rocky Mountain Region, including terminology, management area numbering conventions, and wording of standards and guidelines.

COMPARISON WITH PREVIOUS PLAN

Table ROD-1 compares selected features of the Revised Plan with the 1983 Plan as written and as implemented. It also displays two possible implementation scenarios for the Revised Plan. The full funding level represents implementation of all the objectives in the Plan. The current budget trend level (described as a reduced funding level in the FEIS) is an estimate of objectives at fiscal year 1995 funding less 20 percent.

Not all of the items in this table are part of my decision. Some of the items are estimates of likely outcomes of my decision or other factors such as annual budgets from Congress. Please refer to the following sections of this document for a detailed discussion of my decision.

Table ROD-1. Comparison of Previous Plan with Revised Plan.

	1983 Plan as Written	1983 Plan as Implemented (Ave for 84-96)	Revised Plan Full Funding Level	Revised Plan Funding at Current Trend
TIMBER HARVEST				
Sawtimber Allowable Sale Quantity (ASQ) (MMBF/Year)	118.4	Average Sold: 95.1 (Since 84) 75.6 (Last 5 Yrs)	83.8	67.0
Sawtimber Allowable Sale Quantity (ASQ) (MMCF/Year)	29.6	Not estimated	18.1	13.8
POL Allowable Sale Quantity (MMCF/Year)	4.6	0.8	2.1	2.1
Total Sale Program Quantity (TSPQ) (Includes Incidental Volume from Unsuitable Land) (MMBF/Year)	Not estimated	Not estimated	84.8	67.0
Acres Suitable and Available	1,034,002	872,100*	865,890	865,890
LIVESTOCK GRAZING				
Thousand Animal Unit Months	128	123	128	128
Acres Suitable and Capable	1,190,000	1,037,598	1,037,598	1,037,598
ROADS AND TRAVEL				
Road Construction or Reconstruction per Year	96.3	148.1	116.2	92.3
Percent of Forest Available for Off-Highway Vehicle Use (Seasonally or Year-Round)	Not determined	Not determined	81.9%	81.9%
Total Forest System Road Inventory	3,576	5,204	5,481	5,424
WILDERNESS (Acres)	9,831	9,831	9,831	9,831
RECREATION OPPORTUNITY SPECTRUM (Thousand Acres)				
Primitive	11	11	11	11
Semi-primitive Non-motorized	20	20	34	34
Semi-primitive Motorized	0	0	12	12
Roaded Natural Non-motorized	11	11	79	79
Roaded Natural	1,201	1,200	1,106	1,106
Rural	1	1	1	1

***** Suitable lands as calculated for Alternatives X and A.

A. BIOLOGICAL CONSEQUENCES OF ECOSYSTEM MANAGEMENT

My Decision

I am establishing the following direction to maintain, restore, or enhance the biological features of the Black Hills, including its vegetative and animal diversity and viability. I am providing a mix of habitats across the entire forest. Ponderosa Pine, covering 84 percent of the forest, dominates the Black Hills ecosystem, but other types of vegetation are also important. The current forest condition is often thought of as natural, but based on historic records, the forest once had more meadows, wetlands, hardwood/aspen trees, and had fewer pine trees. Historically, a more open forest canopy contributed to a lush, abundant grass and shrub understory. Other important elements of the ecosystem include late successional individual stands and landscapes, as well as scattered dead and down trees. The condition of riparian and wetland habitats is also important. Finally, fire has always played an important ecological role in the Black Hills, but over time, fire suppression has changed the forest.

The following table summarizes the direction.

Table ROD-2. Ecosystem management and restoration direction.

GOAL 2	Provide for a variety of life through management of biologically diverse ecosystems.
Objective 201	Restore hardwoods 10 percent over 1995 conditions.
Objective 202	Conserve and manage mountain mahogany.
Objective 203	Manage bur oak.
Objective 204	Conserve and manage white spruce, lodgepole pine, limber pine and Douglas-fir species.
Objective 205	Restore meadows and prairies 10 percent over 1995 conditions.
Objective 206	Manage 20 percent of forested areas to provide vertical diversity.
Objective 207	Manage at least 5 percent as late succession.
Objective 208	Also provide small late-successional patches.
Objective 209	Manage at least 5 percent of forested areas in a grass/forb stage.
Objective 210	Implement at least one fire simulation project.
Objective 211	Maintain an average of 1.08 hard snags per acre.
Objective 212	Provide down, dead woody material.
Objective 213	Maintain or enhance riparian area biodiversity.
Objective 214	Restore 500 acres of riparian shrub communities
Objective 215	Riparian rehabilitation on at least three stream reaches.
Objective 216	Enhance important botanical areas.
Objectives 217-222	Maintain or improve fish and wildlife habitats.
Objective 223	Prescribed fire on 8,000 acres per year.
Objectives 224, 226, 227	Fuel Treatment.
Objective 225	Manage wildfires using appropriate suppression response.
Objectives 228-230	Insect and Disease Management.
Objectives 231-232	Noxious Weed Management.
Standards/ Guidelines 2101-2108	Forested Landscape Management.
Standards/ Guidelines 2201-2208	Hardwoods and Shrubs.
Standards/ Guidelines	Snags and Down Woody Material.

2301-2308	
Standards/ Guidelines 3101-3115	Endangered, Threatened or Sensitive Species Protection and Management.
Guideline 3201	Habitat capability requirements.
Standards/ Guidelines 3202-3214	Other wildlife requirements.
Standards/ Guidelines 4101-4113	Fire and Fuels Direction, including Appropriate Suppression Responses.
Standards/ Guidelines 4201-4207	Insects and Disease Management.
Standards/ Guidelines 4301-4308	Noxious Weed Management.
Guidelines for each management area	Habitat effectiveness requirements.
Objectives for wildlife related management areas	20 percent of forested areas in grass/forb and/or low density mature conditions.
Objectives for wildlife related management areas	Up to 20 percent of the area with variable tree density.
Objectives for wildlife related management areas	20 percent of forested areas in thermal cover.

In addition to forestwide objectives, all of the management areas are recognized as contributors to overall ecosystem health. The following table provides a sample of some of the management areas containing important habitat components.

Table ROD-3. Sample of management areas containing important habitat components.

Number	Name	Acres
1.1A	Black Elk Wilderness (Including the Upper Pine Creek Research Natural Area)	9,831
3.2A	Inyan Kara Mountain	1,397
3.1	Botanical Areas	8,086
3.7	Late Successional Forest Landscapes	25,137
4.2A	Spearfish Canyon	10,703
4.2B and 5.4A	Norbeck Wildlife Preserve (non-Wilderness Portion)	17,563
5.4, 5.43 and 5.6	Wildlife Emphasis Areas	430,910

I have also selected management indicator species for monitoring purposes, in accordance with 36 CFR 219.19(a)(1). They are listed on pages II-41 and II-42 of the Plan. In addition to species, I am directing the forest to use several habitat components as indicators of ecosystem changes as shown on page II-42.

Changes from the 1983 Plan

The 1983 Plan considered the importance of ecosystem diversity by recognizing some of the unique plant communities. Most of this was done through

management areas specifically emphasizing certain vegetative types, such as aspen, mountain mahogany and riparian areas. This resulted in extremely small management areas and a highly complex, fractured management area map. The Revised Plan generally adopts larger, landscape level management areas with direction applied at both the landscape and stand level.

The 1983 Plan did not generally incorporate restoration objectives.

Other changes from the 1983 Plan include a recognition of landscape level late successional areas, establishment of botanical areas, variable density thinning, new habitat effectiveness guidelines, an increase in prescribed fire, appropriate fire suppression responses, sensitive species habitat requirements, and modifications to snag and down woody requirements.

Public Comments

I have read a variety of comments from the public describing how they view the desired condition of the Black Hills National Forest. Some people favor predominantly dense, older forests. Others favor the multistory conditions which have resulted over time from intensive timber harvest with frequent entries. Others are concerned about native species and would like the forest to be managed as closely as possible to pre-settlement conditions. Others have predominantly aesthetic concerns.

Many public comments have expressed reservations about restoring biological components to pre-settlement conditions. This has actually been a point of confusion. We have been using the historic pre-settlement condition as a baseline to compare with the current condition of the Forest. We have studied the structure, composition and processes in the Black Hills ecosystem prior to Euro-American settlement in the late 1800s. This baseline lets me know how the forest would respond to natural events (fire) and how often disturbance events could occur. These tendencies let me know where I need to invest dollars to maintain a desired condition that is outside the historical range of conditions.

Some public comments have questioned the scientific basis for the conclusions drawn in the FEIS. Some feel that the evidence indicates that this forest had large patches of dense, closed canopy ponderosa pine landscapes. Undoubtedly, our understanding of how forest ecosystems behave will continue to evolve, but I find the evidence presented in the FEIS adequate for making my decision. (See discussions of forest structure beginning on page III-135, late succession beginning on page III-140, and fragmentation beginning on page III-247.) The analysis of presettlement conditions in the DEIS was incorporated into a peer-reviewed technical publication and incorporated by reference in the FEIS.

Several comments pertained to the needs of wildlife. Some question the approach to address the requirement in 36 CFR 219.19 to manage habitat to maintain viable populations of existing native and desired non-native vertebrate species. In particular, some people thought that more wildlife surveys should have been conducted. The NFMA diversity requirements and the viability requirements of the regulations are adressed in detail in the "Overview of Forest Planning and Project Level Decisionmaking"' referenced earlier. A sound, reasoned and logical approach to determining viability was used that is fully consistent with our legal standards as interpreted by the courts.

Other comments questioned the particular requirements used to develop standards and guidelines to conserve habitat for sensitive species through their range. For the Revised Plan, these mitigation measures were developed after a comprehensive programmatic Biological Evaluation as described in Appendix H of the FEIS. Instead of this approach, some commentors thought that Conservation Strategies should have been developed as described in Forest Service Manual 2670. There are potential advantages and disadvantages to either approach. Development of Conservation Strategies is not a decision subject to NEPA and they are not a mandatory requirement while revising a Forest Plan. The general requirements to conserve habitat for sensitive species has been fulfilled through the Biological Evaluation and the associated standards and guidelines in the Plan.

Another comment questioned how the Forest was being managed for State listed Threatened and Endangered Species. In accordance with 36 CFR 219.19(a), species on State lists were considered in selecting management indicator species (MIS). Where species were not identified as indicators, other Plan direction will provide for their needs. For instance, the American dipper is a State listed species which is not an MIS because riparian areas and water quality will be monitored. The Forest Servide will be working with the State and private landowners to inventory breeding pairs and install nest boxes.

The amount of roads in the forest has also been identified as an issue related to habitat fragmentation. However, as discussed below, most Forest System roads will not pose a barrier to species movement.

Other comments have questioned the proposed increase in the use of fire. Some have safety concerns. Others are concerned about the possible loss of commercial timber. I believe these concerns are addressed in the Revised Plan as discussed below.

Reasons for My Decision

It is not my intent to return the entire Black Hills National Forest to pre-1874 conditions. However, by moving some elements of the Forest toward the pre-settlement range of conditions, the overall health of forest and grassland ecosystems will improve. I believe that naturally functioning ecosystems were diverse, resilient and sustainable in a broad ecological sense.

Therefore, I have taken reasonable steps for limited restoration of important components of the ecosystem. This is done in balance with the needs of the people who live in, work in, or visit the forest. Here are some of the specific changes I am implementing.

Habitat Types - As described in the FEIS beginning on page III-129, the Black Hills are a crossroad of habitat types: the ponderosa pine communities of the Rocky Mountains, the white spruce communities of Northern forests, the hardwood communities of Eastern forests, and the grasslands of the Great Plains. The Black Hills National Forest has been historically affected by fire and mountain pine beetle epidemics. These natural processes allowed diverse and abundant understory vegetation to thrive. It also rejuvenated species dependent upon fire, such as aspen, oak and mountain mahogany.

Over time, largely because of fire suppression, meadows and hardwood stands have converted to ponderosa pine. To reverse this, I intend to remove the ponderosa pine primarily through timber harvesting and prescribed fire. Objective 201 will restore hardwoods and Objective 205 will restore grassland (meadow and prairie) communities, so that in ten years we will have ten percent more of these community types.

As described in the FEIS beginning on page III-150, a combination of timber harvest and prescribed fire will improve wildlife habitat, increase forage, and improve conditions for associated native plant species. By using timber harvesting as a tool to achieve desired ecological condition, economic benefits will also be derived.

Vegetative Structure Between Open Areas and Forests - As described in the FEIS beginning on page III-146, the Black Hills previously contained more abundant and diverse herbaceous and shrub communities because of the low density of the Forest tree canopy in many areas. In addition to meadows, it is desirable to maintain temporary openings within the ponderosa pine landscape. This was recognized in the existing Plan by establishing guidance to maintain certain percentages of the forest in various structural stages (see FEIS page III-133).

Objective 209 will continue direction in the existing Plan for the grass/forb structural stage (Structural Stage 1). There is a minor change which applies the objective on a timber harvest project area instead of the larger diversity unit. These openings are distinguishable from meadows, either existing or those being restored, primarily by the soil type. Some of these openings will be created by patch clearcutting.

Objective 5.4-202 in the big game winter range management area will provide 20 percent of project areas in grass/forb and/or low density structural stages. Objective 5.4-203 (variable thinning) will create small-scale diversity to enhance understory shrubs or herbage. These objectives will improve biological diversity by maintaining or enhancing understory composition.

For meeting Objective 201, 209, 5.4-202, or 5.4A-203, I am allowing a maximum of 17,000 acres of created openings within the suitable timber base to not be regenerated within five years. However, if the project decision indicates they will not be regenerated within five years, the acres will be removed from the suitable timber base after the project is completed.

Late Successional Landscapes and Sites - Late succession refers to the final structural stage (stage 5) with large old trees. In parts of the forest where periodic, low-intensity fires have been part of the ecosystem, this stage consists of clumps or groups of trees with grasses in the openings between the clumps. In parts of the forest where periodic, low-intensity fires have not been part of the ecosystem, this stage consists of multiple canopy layers of various-aged trees. These stands are well stocked with trees and contain standing dead and down trees. These relative open-canopy conditions and relatively closed-canopy conditions represent two ends of a spectrum or continuum, governed naturally by different fire and insect frequency and intensity.

The historical extent of late succession is discussed in the FEIS beginning on page III-139. Native species which benefit from late succession are discussed on page III-353.

The existing Plan recognized the importance of late successional stands (structural stage 5) by establishing a requirement to manage at least five percent of the conifer forest in this condition (approximately 53,200 acres). This requirement was implemented by designating individual sites (some as small as 10 acres) as project plans were completed. Current data indicates that approximately 22,400 acres of the forest are actually in late-successional condition, so the existing Plan was managing for an eventual increase in acreage.

I have retained this requirement, but I have changed the method in which the acreage is designated. Objective 207 provides for both large landscapes as distinct management areas as well as individual sites throughout the forest. The large landscapes are designated as management area 3.7. There are approximately 25,100 acres in this management area, with approximately 22,300 acres covered with conifers. The small sites are identified in the Plan Revision data base and shown on a map included with the Forest Plan. There are approximately 27,400 acres identified. There is a provision to allow for exchange of small sites based on additional site specific information. I am allowing this exchange without an amendment to the Plan.

I am providing for both landscapes and sites because it is reasonable to assume that late succession should function at a variety of scales. Species associated with each scale will benefit from this approach. The small, scattered sites benefit species which use these areas for cover, but need adjacent forage. These small, scattered sites will also benefit species with small-sized territories. The large landscapes benefit species which are dependent upon larger patches as well as those with smaller area requirements. This strategy of variable scales also matches closely to historical patterns in the Black Hills, so it should benefit native species.

I have established a significant part of the Sand Creek roadless area as a Late Succession Landscape. As I will mention later, I do not recommend this area for Wilderness designation. I do not believe it serves the public's needs as a Wilderness area. However, it has excellent potential as one of the late successional landscapes.

The FEIS recognizes that other management areas will eventually result in late-successional conditions. This includes the Wilderness, some of the backcountry-recreation areas, botanical areas, and the Southern Hills. The total area which may contribute to late-successional conditions is 97,756 acres (FEIS page III-157).

Some commentors have said that dense, closed-canopy old growth should be connected by corridors in similar conditions. I do not agree that dedicated connections are required for species interactions, because the timber harvest methods to be applied across the Forest will retain a forest context of predominantly mature trees. A discussion on fragmentation is in the FEIS beginning on page III-247.

Standing Dead Tree (Snags) and Down Woody Material - The existing Plan recognized the importance of standing dead trees, or snags, as well as down woody material. I am continuing this direction with slight modifications.

Objective 211 will maintain an average of 1.08 hard snags per acre across each subdivision of the Forest (diversity unit, watershed, or landtype association.) This Objective does not state that a snag must be on each and every acre, or even every 10 acres like the existing Plan. The only requirement is that snags be well distributed across the analysis unit. This will provide needed flexibility at the project level and would approximate more natural conditions. Projects can be designed to maximize this habitat while providing other multiple uses.

I am also changing this requirement to apply to hard snags, rather than snags in all stages of development. This provides clearer direction, but does not substantially change the requirement. Soft snags (that do not pose a safety hazard) would be retained.

During project implementation, Standard 2308 provides at least 50 linear feet per acre of coarse woody debris at least 10 inches in diameter on conifer sites. In addition, at least once during a rotation, Objective 212 provides five to ten tons of down woody material at least 3 inches in diameter, including two to three logs per acre.

The benefits of this snag and down woody material direction are explained in the FEIS beginning on page III-277.

Riparian Area Habitat - Riparian and wetland habitats provide living conditions for a vast array of aquatic and terrestrial species. A large share of this habitat in the Black Hills occurs on private inholdings, much of which is devoted to other land uses. This increases the importance of managing these habitats on public land.

The existing Plan recognized the importance of riparian areas by establishing a riparian management area. However, not all riparian areas were included in this management area. I am removing this specific management area, but I am extending direction to apply to all riparian areas in the Forest. A discussion of riparian areas, as well as definitions is in the FEIS beginning on page III-293.

Objective 213 will maintain or enhance existing riparian areas, biodiversity, physical structure and size. In addition, objective 214 calls for restoration of 500 acres of riparian shrub lands during the plan period, and objective 215 directs rehabilitation of at least three low-gradient headwater streams to raise the water table and rejuvenate native vegetation.

Prescribed Fire - Beginning on page III-203, the FEIS discusses how the beneficial effects of fire within forested ecosystems have been widely acknowledged. Forests are processes, not just trees and plants, and these forests can't survive and remain healthy without processes such as fire.

Many public comments questioned the need to increase the role of fire in the Black Hills, especially when commercial logging can be used to thin stands. However, logging alone cannot replicate all of the beneficial effects to soil composition, biotic components, and plant regeneration. Logging must be supplemented with prescribed fire to recycle nutrients, release fire dependent plant species, and improve the overall productivity of the land.

People are also concerned about the costs and risks given the large amount of developed private land within the Forest. However, new Federal policy has been incorporated by reference in the Plan on page II-1. This policy acknowledges the role of prescribed natural and planned fire as essential to forested ecosystems. At the same time, the policy directs federal agencies to give proper consideration of the risks involved. The mosaic and volatility of the ponderosa pine fuel profile, in terms of fire behavior, makes implementing a natural fire regime which incorporates prescribed natural fire unacceptable in most areas of the Forest. The prudent use of management ignited prescribed fire is a suitable option when used within acceptable levels of risk.

Objective 223 expands prescribed fire to 8,000 acres per year. Although I am establishing this objective, I am also directing the Forest Supervisor to place firefighter and public safety as first priority in all fire management activities.

Objective 210 implements at least one fire-simulation treatment in the next 10 years. This harvest would be between 100 to 200 acres and would be a mosaic of open conditions with scattered live and dead trees, and islands of dense trees. This would simulate fire and could provide additional information about the technique through monitoring. Implementation of this treatment is dependent upon further site specific analysis and approval in accordance with the Rocky Mountain Regional Guide.

Using Timber Harvest as a Tool to Meet Ecosystem Objectives - Beginning on page II-34, the FEIS estimates that my decision will translate into approximately 25,500 acres of commercial timber harvest and 5,400 acres of precommercial thinning each year. This will provide commercial timber while meeting objectives described above. Timber harvest is necessary to reduce fire hazard, mountain pine beetle hazard, maintain desirable forest structure, maintain water yield, maintain forage, and maintain scenic variety.

On balance, most of the Forest will not be managed differently than the current Plan. Many people are concerned that the reduction of the allowable sale quantity means there is a reduction of the beneficial effects of timber harvest. However, as shown in the FEIS on page II-37, there is very little difference in acres harvested over the next 50 years between the existing Plan and the revised Plan. Over 50 years, the revised Plan actually has lower fire hazard and mountain pine beetle hazard than either the existing Plan or maximum commodity alternatives (pages III-213 and III-236.)

Concerns Regarding Fragmentation of Habitats - The classic fragmentation of habitats in the Eastern deciduous forests of this country and those in Europe is the result of development that has left remnants of forest surrounded by very different habitats, such as urban areas and treeless agricultural land. Even while the Black Hills National Forest will accommodate timber harvest, it will continue to have a landscape dominated by pine. Therefore, the adverse effects of classic fragmentation on wildlife species will be limited.

Roads have been identified by some as a fragmentation issue. As discussed in the FEIS on page III-257, the interdisciplinary team reviewed the available literature and found no evidence that the typical primitive system road poses a movement barrier to the sensitive vertebrates, nor the other wildlife analyzed in the FEIS. Photos of these types of roads are displayed in the FEIS. Two sensitive land snails are less mobile, but the Plan provides for conservation of a

core group of colonies (standard 3103). Noxious weed invasions can be associated with roads, so noxious weed control is an important management consideration that will be implemented (standards and guidelines 4301-4308).

Special Habitat Components - The needs of most plant and animal species in the Black Hills will be met by implementing the previously stated objectives. However, there are certain species that have been so severely impacted by human settlement patterns and activities that they require special care to ensure their continuance.

Some of these special needs are met by protecting areas which are especially unique. I am establishing a Botanical Management Area (Management Area 3.1) which protects the following eight sites: Bear/Beaver Gulches, Black Fox Valley, Dugout Gulch, Englewood Springs, Higgins Gulch, McIntosh Fen, North Fork Castle Creek, and Upper Sand Creek. In addition, I am providing standards and guidelines to protect botanical features in Spearfish Canyon and Cascade Springs. By establishing these areas, I am protecting sensitive plant species, allowing maintenance or restoration of key ecosystem components, and I am maintaining diversity of species dependent on these components. See the FEIS beginning on page III-307 for further information. I am permitting roads and timber harvest in these areas only if necessary to maintain or enhance the botanical features.

Finally, I am establishing special direction for sensitive species not covered by the above requirements. These are listed in the Plan on pages II-43, II-44 and II-90. It includes direction for bats, snails, species associated with moist sites, regal fritillary butterflies, and goshawks.

A biological evaluation for sensitive species is in Appendix H of the FEIS. It concludes that direction in the Revised Plan may adversely impact individuals, but is not likely to result in a loss of viability on the planning area, nor cause a trend to federal listing or a loss of species viability rangewide.

A biological assessment is also in Appendix H, which analyzed effects to threatened, endangered and proposed species. The U.S. Fish and Wildlife Service concurred with these determinations.

Consideration of Alternatives

A discussion of how the alternatives maintain or restore habitat conditions is contained in the FEIS beginning on page II-25. Alternatives X, A, B and J generally emphasize multistory ponderosa pine stands which result over time from intensive timber harvest with frequent entries. I do not prefer these alternatives because they do not improve the overall health of the ecosystem, as discussed above. Alternatives C and I emphasize mature, older vegetative conditions and seclusion. I do not prefer these alternatives because they emphasize these conditions at the expense of other ecosystem components and multiple uses. Alternatives D and H would go further than Alternative G in restoring historical conditions. I believe alternative G better provides a balance of the various important ecosystem components while addressing the needs of the people who live in, work in, or visit the forest.

B. TIMBER HARVEST

My Decision

I am establishing an allowable sale quantity (ASQ) for the period from fiscal years 1997 to 2006 as follows. For sawtimber, the decadal ASQ is 181 million cubic feet. For roundwood, or products other than logs (POL), the decadal ASQ is 21 million cubic feet. The total decadal ASQ is 202 million cubic feet.

This ASQ includes the following non-interchangeable component in the Norbeck Wildlife Preserve. For sawtimber in Norbeck, the decadal ASQ is 5.4 million cubic feet. For roundwood in Norbeck, the decadal ASQ is 1.0 million cubic feet.

ASQ is determined in cubic feet and not board feet. For information, Table ROD-4 gives an approximate comparison of the two measurements.

Table ROD-4. Average annual ASQ for 1997 to 2006 in Cubic Feet with approximate value in Board Feet.

	ASQ Annual Volume Million Cubic Feet	**Approximate Annual Volume Million Board Feet**
FOREST TOTAL		
Sawtimber	18.1	83.8
POL	2.1	Not comparable
TOTAL ASQ	20.2	83.8 (Sawtimber)
Norbeck Wildlife Preserve		
Sawtimber	.54	2.7
POL	.10	Not comparable
TOTAL	.64	2.7 (Sawtimber)

The ASQ is a maximum level of timber that may be sold during the first decade after plan approval. It is simply a ceiling on the level of timber that can be sold taking into account other multiple-use values and compliance with standards and guidelines which provide environmental protection. ASQ is not an absolute yield that must be achieved.

Since ASQ is for one decade and it may be longer before the Plan is again revised, I am establishing guideline 2402 which limits harvest in the decade beginning in fiscal year 2007 to less than 202 million cubic feet.

I am designating a total of 376,823 acres as not suitable for timber production. This is in accordance with 36 CFR 219.14(d). By designating this total, I am not making an acre-by-acre determination. The map which is included with the Plan is not part of my decision and this should not be considered as a land allocation. Rather, the map should be considered as a preliminary assessment of the distribution of these acres subject to further validation at the site-specific project level.

I have referred to 4,647 acres as "suitable-not scheduled"* within the Sand Creek Late Successional Forest Landscape (unit C of management area 3.7 - see locator map in the Plan on page III-40) and in the Upper Sand Creek Botanical

Area (unit A of management area 3.1 - see locator map in the Plan on page III-16). (*See footnote)

I am allowing commercial timber harvest on these "not suitable" acres for other multiple-use objectives consistent with the standards and guidelines, but this volume will not be credited toward the ASQ. This volume may be tracked as part of the Total Sale Program Quantity (TSPQ). An estimate of TSPQ is shown in table ROD-1 but TSPQ is not part of my decision.

The remaining 865,890 acres are suitable and available for timber production. All volume within utilization Standard 2405 from these acres is chargeable to the ASQ. I am designating up to 17,000 acres of these currently suitable acres as unsuitable after meadow restoration, hardwood restoration, or certain patch clearcuts for other multiple use objectives, is completed as directed by Objectives 201, 205, 209, 5-4-202 or 5.4A-203. The volume from these 17,000 acres is chargeable to the ASQ.

I am adopting Standard 2405 which establishes utilization, which is the minimum size and length of wood to be included in ASQ. This decision also amends the timber utilization standard in the Rocky Mountain Regional Guide (as amended May, 1992 with a technical correction in June, 1996), for the Black Hills National Forest only, as shown in Standard 2405.

I am also establishing the objectives, standards and guidelines pertaining to timber harvest shown in Table ROD-5.

*Use of this term "suitable-not scheduled" is not specifically contemplated by the planning regulations. I am using it because of public scrutiny of the Sand Creek Area and to emphasize that these acres are biologically and physically suitable for harvesting timber. Nevertheless, I am not altering the determination required in 36 CFR 219.14. These "suitable-not scheduled" acres are "not appropriate" for timber production under 36 CFR 219.14(c)(1). While the regulations distingush between lands that are not "appropriate" for timber production and those which are not physically suited for timber production, it then goes on to "lump" these distinct categories of lands together as "not suited for timber production." in 36 CFR 219.14(d). Use of the term "suitable-not scheduled" merely carries through to the Plan the regulatory distinction between lands that are not "suited" and those that are not "appropriate" for timber production. Technically, these lands are "not suited" under 36 CFR 219.14(d) and they are included in the 376,823 acres so desginated. These acres are not included in the ASQ calculation.

Table ROD-5. Other timber related direction.

Number	Topic
Objective 306	How Clearcutting is Used
Objective 307	Providing Christmas Trees and Fuelwood
Standards and Guidelines 2406 through 2415	Silvicultural Prescriptions
Standards and Guidelines 2416 through 2419	Reforestation

Changes from 1983 Plan

This decision reduces the ASQ and suitable land base from the 1983 Plan as shown in Table ROD-1. It is apparent that the 1983 Plan was based on overly optimistic assumptions on how much timber was available and what harvest level could be sustained. The adjustment in ASQ represents better accounting of the suitable timber base and the interactions of other goals and objectives.

Appendix G of the FEIS describes the four major reasons why the level of the 1983 Plan cannot be sustained. These are: (1) better data is available about the acreage of suitable timberland; (2) more precise models are available to simulate future growth and changes to stand condition; (3) better data is available on the effect of standards and guidelines on available timber; and (4) harvest during the 1980s has depleted inventory available during the 1990s.

This decision also increases the amount of land unsuitable because of other multiple use objectives, including late successional landscapes, riparian areas, backcountry recreation areas, and botanical areas. However, including these areas as unsuitable decreases the ASQ by less than 3 percent, using a comparison of Alternatives A and G.

The silvicultural standard and guidelines are very similar to the 1983 Plan. The notable exceptions are the changes to utilization standards, increased emphasis on landscape level silviculture, and more flexibility regarding specific silvicultural practices to be used.

Public Comment

Local and state governments have expressed concern about sawtimber harvest levels below 100 million board feet per year (approximately 22 million cubic feet per year). Many elected officials have formally endorsed the "People and the Land Alternative" proposed by the Black Hills Regional Multiple Use Coalition, which incorporated a high level of acres in the suitable land base and a sawtimber harvest level of 108 million board feet per year.

The majority of comments from timber and related industries have said that the level which I am setting is too low.

Other segments of the public have said that the level which I am setting is too high.

Some have said that the Plan requires trees to be cut before the culmination of mean annual increment, in violation 36 CFR 219.16(a)(2)(iii). However, these comments are based on an analysis which includes smaller aged cohorts of each stand classification that will not be harvested. Based on the analysis

documented in the FEIS on page B-21, the projected harvest level is consistent with this legal requirement.

Reasons for My Decision and Consideration of Alternatives

I am aware of the reasons why the 1983 Plan was overly optimistic. I am also aware of other alternatives which I could have chosen with higher harvest levels. However, these other alternatives do not include some of the ecosystem components important to my decision, such as late successional landscapes, wildlife thermal cover, sensitive plant considerations, and retention of the existing visual landscape.

I am also aware of other alternatives that depart from sustained yield, and which set harvest levels for the next decade at levels supported by the local timber industry and other public groups. I carefully considered proposals to set a harvest level of 108 million board feet per year ("The People and the Land Alternative"), or at least 100 million board feet (as recommended by many local government officials). I considered this level of harvest by examining the three alternatives in the FEIS, Alternatives B, J and X, which can accommodate this objective. The FEIS discloses on page II-36 that this level of harvest can only be accomplished through heavy regeneration cutting. Some public comments have equated this type of cutting to clearcutting. The FEIS also discloses that the level of harvest in Alternatives J and X could only be sustained for 10 years.

I am aware that the uncertainty of timber supply causes problems for all those employed by timber and related industries. I have read the public comment on the DEIS and I have spoken with many individuals whose livelihood may be affected. I cannot diminish the economic consequences that this decision may have on these people. At the same time, I do not support a timber harvest level that is out of balance with other multiple uses or that does not sustain the forest ecosystem. I do not support a departure which will allow higher harvest in this decade and simply delay and worsen the problem for those who follow us.

Average harvest for the Forest for the last five years (1992 through 1996) was 74.8 million board feet, well below the allowable sale quantity of the current Plan as well as the Revised Plan. Average sawtimber volume sold during this same period was 75.6 million board feet.

I have considered the effects of my decision on the economy of the Black Hills area. The area economy is well diversified, it is expanding, and I believe it can withstand this adjustment. Timber and related industries are responsible for five percent of the employment in the area, even after indirect and induced effects are considered. This percentage will be reduced by my decision, but certainly not eliminated or significantly changed. In addition, this reduction is tempered by the fact that the actual volume harvested from the Forest in recent years has been lower than the both the current Plan and the Revised Plan allowable sale quantity.

Many people have told me that the assumptions used in the FEIS to estimate timber related employment are incorrect. However, I find the assumptions on pages III-481 and III-482 to be reasonable.

Some have mentioned that Forest Service bidding procedures have forced timber purchasers onto private lands or into other states. They say that private

land and other sources of timber are being rapidly depleted. Thus, harvest on the Forest has been down, but long-term trends indicate greater reliance. These factors are analyzed in the FEIS. However, it is uncertain when these other sources will be depleted, and whether the timber industry will be restructured by the time this occurs. The continual change of the industry is documented in Appendix F. The discussion on pages I-10 and I-11 demonstrates that an increased supply of timber does not guarantee that mills won't close. In the 1980s, timber harvest from the Forest was the highest in history; however, half the sawmills closed or stopped purchasing during this time.

Many public comments say that reducing timber harvest will increase fire risk or mountain pine beetle problems. The FEIS does not show that this will occur. As discussed earlier, forest health is not as much dependent on how much timber is cut, as on how it is cut.

My decision sets objectives for a diverse forest, and overall health will improve through the use of timber harvest and prescribed fire. My decision does not replace timber harvest with prescribed fire. The FEIS shows that prescribed fire can be accomplished without significantly affecting the timber harvest level, and I have not reduced the allowable sale quantity in selecting additional prescribed fire.

Many public comments say that the Revised Plan harvest level is too high. Many believe that timber harvest is interfering with natural processes, or that more of the forest should be in late successional conditions. I disagree. The ecosystem objectives described earlier are economically viable only when timber harvest is used. At the same time, I need to consider local area concerns about employment and income. This is one of the reasons why I have not selected Alternative C or I. The timber industry itself must be sustained and is vital to management of the forest.

The FEIS explains that this level of timber harvest will not cause any sensitive species to be listed as Threatened or Endangered. Overall, native species habitat should improve. Also, this level of timber harvest will not impair watershed conditions. Although some timber harvest will be visually evident, overall scenic integrity will be retained. These and other environmental features will be retained or improved by this level of timber harvest.

C. PUBLIC ACCESS AND THE TYPES OF RECREATIONAL OPPORTUNITIES

My Decision

I am establishing management area standards and guidelines which provide for a diverse array of motorized and non-motorized areas. A recreation opportunity spectrum (ROS) is established by a series of guidelines for each management area. Other management area guidelines are based on scenic integrity objectives (SIO). The SIOs as described in these guidelines are displayed on a map accompanying the Plan. However, this map is not part of my decision and can be revised without amending the Plan.

Guidelines for each management area describe the appropriateness of travel restrictions. The map accompanying the Plan displays a combination of existing travel orders and the management area travel guidelines. However, the map is not part of my decision. By establishing this direction as guidelines, I am allowing flexibility in the implementation of formal travel restrictions. By designating management areas, I am not making any site-specific decisions to restrict travel.

I am establishing an upper limit for outfitter guide permits in Standard 5401. This is based on an analysis of existing use and percentage of total recreation use for each activity.

Changes from Current Plan

My decision largely retains the travel and recreational opportunities from the 1983 Plan. There are changes in some areas which are more restrictive, but most motorized opportunities will remain. The outfitter guide standard is a new standard, but the limits are well above existing use.

Public Comment

Vehicle use in the Forest is a major concern for many people. Some feel they should have the right to drive almost anywhere in the Forest, and technology now makes it possible to do just that. Others believe vehicles detract from their enjoyment of the Forest, and cause unacceptable damage to natural resources and adverse effects to wildlife. Others are concerned about the balance of motorized and non-motorized recreational opportunities.

Reasons for My Decision

Travel Management - In making my decision, I have considered the history of the Black Hills as a developed forest. This use pattern is well established. At the same time, the Black Hills is one of the top tourist destinations in the country. The blend of motorized and non-motorized opportunities is meeting the demand.

The adjustments I have made from the current Plan are either clarifications of existing direction or related to ecosystem objectives which I have discussed

earlier. Travel management was not well documented in the 1983 Plan and I have attempted to provide more consistent and clear direction.

Scenery Management - I have implemented the Forest Service's new Scenery Management System, and I have adopted the inventoried Scenic Integrity Objectives. This will retain the existing scenic integrity of the Black Hills. Beginning on page III-429, the FEIS explains that this will not affect timber or other outputs, and no reductions have been made for these other outputs.

Outfitter/Guide Capacity - Standard 5401 establishes outfitter guide limits based on an analysis of existing use and percentage of total recreation use for each activity. These numbers are well above existing outfitter/guide use. I am establishing these numbers to allow for an orderly expansion of use in the future and a balance between outfitted use and other use.

Consideration of Alternatives

A discussion on how the alternatives address public access and recreational opportunities is in the FEIS beginning on page II-57. Alternatives A, B, J and X generally have less motorized vehicle restrictions, although the Forest is generally unrestricted in all alternatives except C and I. Given the history of the Black Hills, Alternative G best meets the recreational demands while balancing other ecosystem objectives.

D. WILDERNESS RECOMMENDATIONS

My Decision

The entire Forest was evaluated for its roadless character, and three areas meet the criteria for inclusion in the National Wilderness System. These three areas are Sand Creek and Inyan Kara in Wyoming and Beaver Park in South Dakota. I am not recommending any of these areas to Congress for wilderness designation. Congress released the Wyoming roadless areas for other multiple uses in the Wyoming Wilderness Act until this revision process. I am continuing this status for these areas.

The three areas as displayed in the FEIS on pages C-22 through C-24 should hereafter be considered the official roadless area inventory for the Black Hills National Forest.

There is currently one designated Wilderness area in the Forest, the 9,831-acre Black Elk Wilderness surrounding Harney Peak.

Changes from 1983 Plan

No change.

Public Comment

Wilderness advocates favor backcountry non-motorized experiences, such as backpacking, hiking and cross-country skiing. They are concerned that the integrity of the ecosystem will be disrupted by motorized vehicle use. Those opposing additional Wilderness favor timber, mining, oil and agricultural interests, and motorized uses, like snowmobiling and off-road vehicle use. Some believe that there are no additional areas in the Black Hills that meet the criteria for designation.

Some commentors note that only 0.8 percent of the Forest is currently Wilderness and use will exceed supply. However, approximately 60 percent of existing use in the Black Elk Wilerness is on two trails to Harney Peak.

Reasons for My Decision and Consideration of Alternatives

I am not recommending any areas to Congress for Wilderness designation. There is little public support locally. Although the trails to Harney Peak in the Black Elk Wilderness are heavily used, the remainder of the Wilderness provides primitive recreational opportunities. Ecosystem objectives can be met by management designations other than Wilderness.

The three areas are recommended as Wilderness in Alternatives C and I. No areas were included in the remaining alternatives.

E. CHANGES IN WATER FLOW DUE TO VEGETATION MANIPULATION

My Decision

I am not establishing any management areas for the sole purpose of increasing water yield.

Changes from the 1983 Plan

I am removing the water yield management areas in the 1983 Plan and moving these areas into other management areas featuring timber production.

Public Comments

During the late 1980s, the Black Hills region experienced a severe drought, and water yield became an important public issue during the initial phases of the planning effort. The Black Hills National Forest is an important source for both surface water and ground water. The amount of water flowing from the forest is related to the amount of precipitation received and the amount used by the forest, but also relates to the amount which infiltrates into the groundwater system and is drawn for residential, agricultural or industrial uses. Because trees use water, changes in stand composition potentially could affect streamflows.

Reasons for My Decision and Consideration of Alternatives

In making my decision, I have not emphasized water yield over other multiple use objectives. I have balanced the need for more water by maintaining an active timber program.

Only Alternatives A, X and J contain a water yield management area. The other alternatives provide water yield in association with a sustained timber program. I did not select Alternatives A, X or J because water yield benefits are provided in other multi-purpose management areas.

F. LOCATABLE, OR HARDROCK, MINERAL DEVELOPMENT

My Decision

I am allowing locatable mineral exploration and development in accordance with legal requirements explained in the FEIS on page II-79.

A request to the Bureau of Land Management (BLM) may be made for withdrawal of the Spearfish Canyon Management Area 4.2A under Standard 4.2A-1502.

Changes from the Current Plan

My decision essentially retains the direction from the existing Plan.

Public Comments and Reasons for My Decision

Mining of locatable or "hard rock" minerals is a major activity in the Black Hills, with significant implications for the local economy. Some of the public is concerned about surface disturbance and other effects of mining, particularly the effects associated with large-scale heap-leach gold and silver mines. However, locatable mineral development is generally allowed in National Forests in accordance with the 1872 Mining Act.

The State of South Dakota and Homestake Mining Corporation are concerned about the potential withdrawal of Spearfish Canyon. A withdrawal seems contrary to the Act recently passed by the South Dakota Legislature which simply recommended "no surface occupancy". The Forest Service does not have authority to withdraw lands from mineral entry. The Forest Service only makes recommendations for withdrawal to the BLM. The BLM has the authority for withdrawal of lands for locatable minerals, but their authority does not provide for a category of "no surface occupancy" except for leasable minerals. To be consistent with the recent South Dakota Act, it will take Congressional action to change BLM's authority. We will petition BLM to pursue this approach, but it is doubtful that any changes to BLM's authority will occur in the near future. Therefore, to protect Spearfish Canyon, I am recommending to BLM withdrawal of Spearfish Canyon (rim-to-rim) with the understanding that if BLM is successful in obtaining authority for "no surface occupancy", the withdrawal will be changed to reflect this option.

Consideration of Alternatives

Except for Alternative I, there are only minor variations among the alternatives. If Alternative I was adopted, recommendations would be made to the BLM to restrict mineral development in the core habitat areas. By limiting this development, I do not believe that I would be allowing mineral extraction in accordance with the 1872 Act.

G. DEVELOPMENT OF LEASABLE OIL AND GAS MINERALS

My Decision

In accordance with 36 CFR 228.102(d), I will be notifying the Bureau of Land Management that the lands shown on the map accompanying the Plan are administratively available for oil and gas leasing with stipulations as shown on the map and in the Plan. I consider these lands likely to be authorized for leasing under 36 CFR 228.102(e), subject to additional verification when an application for a particular lease is actually made. This includes lands that have a split estate (non-federally owned surface) within the Black Hills National Forest. I am not making this decision on the areas with no potential as shown on the map.

By referencing the map, guideline 1512 specifies where the stipulations apply. Standard 1513 specifies stipulations for floodplains and wetlands. Standard 1514 directs the use of stipulations as included in Appendix N of the Plan.

Changes from the 1983 Plan

This is a new decision. Forest Service involvement in the decision making process changed under the Federal Onshore Oil and Gas Leasing Reform Act of 1987.

Public Comment and Reasons for My Decision

There is only limited potential for oil and gas development in the Forest, and the topic has not caused widespread public interest. I am making available and authorizing leasing of lands on the perimeter of the Black Hills for oil and gas leasing. A map is included with the Forest Plan. The analysis in the FEIS shows that this decision satisfied the new legal requirement and will not negatively affect the Black Hills environment.

Consideration of Alternatives

Except for alternative I, there are only small variations among the action alternatives. Alternative I would not allow development in core habitat areas. However, important habitats can be protected by providing stipulations such as controlled surface use.

H. LIVESTOCK GRAZING

My Decision

I am clarifying existing grazing direction. The level of grazing which is set in the Plan will be refined through the Allotment Management planning process. Additional flexibility is being provided to monitor utilization through either residual levels or percent utilization by weight.

Objective 301 provides estimates for approximate livestock use and wildlife use of available forage. By establishing this Objective, I am not making an absolute determination of use that must be achieved. This Objective is not a ceiling for livestock or wildlife use in the same sense that the allowable sale quantity is for timber. This Objective is also not a minimum.

Objective 302 provides direction to maintain rangelands in satisfactory condition.

Changes from the 1983 Plan

There are no major changes from the 1983 Plan. The forage objective for livestock of 127 million pounds of forage or approximately 128,000 animal unit months is the same as the 1983 Plan. The forage objective for deer and elk is 106 million pounds of forage which meet the requirements of the States of South Dakota and Wyoming in their management of the populations.

Public Comments

Many public comments question why the level of grazing was not featured as one of the primary areas of the 1983 Plan that needed to be changed. The reason is that most grazing concerns are more appropriately considered at the Allotment planning level.

Some public comments want stronger direction regarding the level of grazing that will occur. Some want a minimum level of livestock grazing to be specified.

Some think that grazing should be reduced. They question the effects on plant species, wildlife, and recreational uses. Some are concerned about livestock developments such as fences or water improvements. These concerns are addressed in the FEIS on pages III-91, III-436 and B-49. Water improvements are small and localized and only 200 miles of new fences are expected, less than a 2 percent increase. Ranching is part of the cultural heritage, and range structures have become accepted as necessary parts of the visual landscape.

Reasons for My Decision

In accordance with 36 CFR 219.20, I have determined that 1,073,598 acres are suitable for grazing and browsing. I have considered physical, biological, environmental and economic factors, as well as other mutually exclusive uses in this determination, and the FEIS shows that this level of grazing is compatible with other multiple uses.

The FEIS shows on page III-176 that approximately 79 percent of Forest lands is in satisfactory condition, while 4 percent is not meeting or moving toward

objectives, and 17 percent is undetermined. Lands which are not satisfactory will be addressed in Allotment Management Planning.

The reliance on the Allotment Planning process to resolve conflicts with water quality, plant species, wildlife habitat, or recreation is an appropriate use of the Forest Service's staged decision-making process. In accordance with the Rescission Act of 1995, a list of allotments to be analyzed over the next 15 years has been prepared.

Consideration of Alternatives

There were no major differences among the alternatives regarding livestock grazing.

Other Elements of My Decision

I. WILD AND SCENIC RIVER RECOMMENDATIONS

My Decision

All streams on the Forest were evaluated for inclusion in the National Wild and Scenic River System. Although 16 streams were found eligible, I have determined that none are suitable for recommendation to Congress for inclusion in the System.

Changes from the 1983 Plan

No change.

Public Comment

Comments on the DEIS indicate both support and opposition for inclusion of streams in the system. However, there is little state or local government support. On balance, there is little overall support for designating any wild and scenic rivers on the Forest.

Reasons for My Decision and Consideration of Alternatives

These 16 streams are not worthy additions to the National System because of the lack of public support and the 7 factors described in Chapter 6 of Appendix D of the FEIS. I am maintaining water quality, visuals and recreational opportunities for these streams through other standards and guidelines and management areas including Botanical Areas, Late Successional Areas, Spearfish Canyon, Norbeck Wildlife Preserve, and the Black Elk Wilderness. I am also recognizing the importance of some of these streams as municipal water supplies.

The 16 eligible streams were included in Alternatives C and I only.

Other Elements of My Decision

J. RESEARCH NATURAL AREAS

My Decision

I will not establish any new Research Natural Areas (RNAs) as part of this Revision process. However, 36 CFR 219.25 does not limit recommendations for RNA establishment to the forest planning or Revision process. As discussed in the FEIS on page II-23, the most important areas of scientific interest known within the Black Hills are identified as Botanical Areas. Botanical Area designation maintains the ecological integrity of these areas until an RNA assessment is conducted.

There is currently one Research Natural Area in the Forest - the 1,855-acre Upper Pine Creek Area within the Black Elk Wilderness.

Changes from the 1983 Plan.

No change.

Public Comment

There are a variety of opinions on designation of RNAs at this time, but the overall interest by the public is relatively low.

Reasons for My Decision and Consideration of Alternatives

The botanical areas will protect the ecological integrity of the most important areas of scientific interest. The Forest has recently entered into a cooperative agreement with the Midwest Region of the Nature Conservancy to conduct a 2-year Black Hills community inventory. Further information about the appropriateness of RNAs may be available at that time.

An alternative to designate Inyan Kara as an RNA was considered in the DEIS. No RNAs are included in any of the alternatives in the FEIS.

K. BASIC PROTECTION OF RESOURCES

My Decision

Basic protection of soil, air, water and cave resources is listed as the first goal in the plan with associated objectives 101 through 113.

Best Management Practices for South Dakota and Wyoming, and Best Mineral Management Practices are incorporated into the Plan by reference.

All land management activities will be conducted in a manner that will comply with all applicable federal, state or local laws and regulations.

Changes from the 1983 Plan

Basic protection of resources is essentially the same in the 1983 Plan. However, I am incorporating the latest recommendations from the Rocky Mountain Watershed Conservation Practices Handbook, finalized in December, 1996. This Handbook repeats 17 standards found in the Plan and provides further guidance and clarification.

The cave direction is new to provide guidance for caves determined significant under the Federal Cave Resource Protection Act of 1988, or for caves where significance has not been established.

Public Comments

There were a number of concerns about the adequacy of the analysis in this planning process, the effects of logging, grazing and mining on basic, resources, and the importance of monitoring. Others are concerned that the direction in the Plan is unduly strict.

Reasons for My Decision

The FEIS indicates that basic resources are being adequately protected under the 1983 Plan. To continue this protection, I have incorporated the latest technology and research in the Plan Revision. I find the analysis documented in the FEIS to be sufficient.

Consideration of Alternatives

Impacts on soil and water resources vary among the alternatives due to differences in uses of the forest. These variations include the amount of whole tree skidding, livestock grazing in riparian areas, riparian restoration objectives, water yield increases from timber harvest, road closures, and prescribed fire. I considered these variations of effects in balancing the overall factors described earlier for my decision. Regarding specific standards and guidelines to implement our legal obligations to protect basic resources, there are no major variations among the alternatives.

L. AREAS OF PUBLIC INTEREST

This section describes my decision in particular parts of the forest that are of public interest.

1. Norbeck Wildlife Preserve

The Norbeck Wildlife Preserve was established by Congress in 1920 for the "protection of game animals and birds and to be recognized as a breeding place therefor." Although it does not prohibit other uses, the law leaves little doubt: Norbeck is to be managed for the benefit of wildlife.

The direction from the existing 1983 Plan as amended in 1989 is essentially retained in the Plan Revision. There were no variations among the alternatives.

The majority of the non-Wilderness portion of Norbeck is in management area 5.4A. To clarify the area influenced by the Peter Norbeck Scenic Byway, a portion of Norbeck is in management area 4.2B.

Timber harvest is used as a tool to manage Norbeck in accordance with the law. However, because the legislative intent for Norbeck is different than the remainder of the Forest, a separate allowable sale quantity is established in the Revised Plan as a non-interchangeable component.

2. Sand Creek

The Sand Creek Area is approximately 14 miles east of Sundance, Wyoming. It is essentially unroaded and because of topography, the area is considerably isolated from the sights and sounds of humans. It is part of a larger area which was inventoried as roadless and released from Wilderness consideration in the 1984 Wyoming Wilderness Act. Approximately 9,900 of the original 12,400 acres remain undeveloped and essentially unroaded.

In the Revised Plan, a portion of the area is available for scheduled timber harvest. The balance is managed in a largely unroaded condition for late successional forest or botanical conditions. The area is one of the few intact late successional landscapes in the Black Hills. Relatively denser tree canopy conditions in this part of the Forest were documented as early as 1898. In addition, the portion to be managed as a Botanical Area has one of the largest concentrations of rare plants in the northern Black Hills.

Table ROD-6 shows the applicable management areas.

Table ROD-6. Management areas for Sand Creek.

Management Area	Acres
3.7 - Late Successional Forest Landscape	4,864
4.1 - Limited Motorized Use and Forest Product Emphasis	3,163
3.1 - Botanical Area	1,043
5.1 - Resource Production Emphasis	878

I have made the following two changes regarding this area since release of the FEIS.

First, I am directing that no additional System roads be constructed in the Sand Creek Late Successional Forest Landscape (unit C of management area 3.7 - see locator map in the Plan on page III-40) and in the Upper Sand Creek Botanical Area (unit A of management area 3.1 - see locator map in the Plan on page III-16). Existing System roads in these areas may be used and maintained.

Secondly, I have referred to the following lands within the Sand Creek Area in management areas 3.1 and 3.7 as "suitable-not scheduled" for timber production. (See discussion on page ROD-36) Within the Sand Creek Area, there are 4,038 acres in management area 3.7 and 609 acres in management area 3.1 (a total of 4,647 acres) which are biologically and physically capable to be managed for timber. However, in order to manage these lands for late succession or botanical features during the planning period, I do not anticipate the need to harvest timber on a scheduled basis. I am allowing commercial timber harvest on these acres if necessary to manage the late succession or botanical features. Any volume from these lands would not contribute to the allowable sale quantity.

The differences in how this area is managed in each alternative are shown in the FEIS on page II-74. I did not recommend it for Wilderness for the reasons discussed earlier. I did not put it all in resource production emphasis because of the area's biological significance. I did not put the entire area in late succession because timber harvest can be allowed in the edges of the area with limited motorized use while protecting plant and wildlife habitats.

3. Beaver Park

The Beaver Park Area is approximately 5 miles south of Sturgis, South Dakota in the northeast corner of the forest. It contains five different gulches and is relatively inaccessible. The approximately 5,100 acres were considered as a roadless area in the 1978 Roadless Area Review and Evaluation (RARE II). The 1983 Plan's ROD contained direction to delay activities in the area until legislative action or further NEPA evaluation, neither which occurred.

In the Revised Plan, roughly half the area is managed for backcountry, non-motorized recreation and the remainder is available for scheduled timber harvest. Table ROD-7 shows the applicable management areas.

Table ROD-7. Management areas for Beaver Park.

Management Area	Acres
3.32 - Backcountry Non-motorized Recreation	2,637
4.1 - Limited Motorized Use and Forest Products Emphasis	1,795
5.4 - Big Game Winter Range Emphasis	571
5.3B - Sturgis Experimental Watershed	106

The differences in how this area is managed in each alternative are shown in the FEIS on page II-73. I did not recommend the area for Wilderness for the reasons described earlier. I did not recommend that the entire area be allocated to resource production emphasis because of the opportunities to provide unique recreational opportunities. I did not allocate the entire area to big game emphasis because this emphasis is provided elsewhere. I did not recommend the entire area to backcountry recreation because managing a portion of the area for timber production will provide a number of benefits.

4. Inyan Kara

This dome-like upheaval is entirely surrounded by a grass-covered prairie and is separated to the west from the main body of the Forest. It is approximately 1,400 acres but met the RARE II criteria as a roadless area because of its isolation. In the 1983 Plan, the area was managed in an essentially unroaded condition as a Special Interest Area, because of its cultural and botanical features. This direction is retained.

The differences in how this area is managed in each alternative is shown in the FEIS on page II-74. I did not recommend the area for Wilderness for the reasons described earlier. I did not recommend a resource production emphasis because the costs of harvesting timber in this area would be prohibitive. Alternatives which place the area into the late successional landscape management area would not recognize the additional special features of Inyan Kara.

5. Spearfish Canyon

A new management area is established for Spearfish Canyon, extending from rim to rim. A scenic byway in the Canyon was established in 1989. This management area provides direction to manage for the scenic features of the canyon, along with botanical features. Sites within the canyon are included in the late successional vegetation objective. The Canyon may be withdrawn from locatable mineral entry as discussed earlier.

All of the action alternatives included this new management area, which expanded management to the Canyon rim. This "rim-to-rim" concept was generally endorsed by the public in their comments.

6. Pilger Mountain

The Pilger Mountain Area is approximately 9,000 acres south and west of Pilger Mountain in the southwestern portion of the forest. It is approximately 15 miles north of Edgemont, South Dakota and is relatively isolated. The area is typical of the dry forest and prairie ecotypes typical of the Southern Hills. A map of the area is on page C-27 of the FEIS.

In the Revised Plan, this roaded area is entirely within management area 5.1A, Southern Hills Forest and Grassland Areas. It is not in the suitable timber base.

Some public comments noted the area's relative solitude and recommended the area for Wilderness consideration. However, because of roads and other developments, it was not included in the roadless area inventory developed for the Revised Plan.

To address some of the public's concerns, I am directing that no additional System roads be constructed in the Pilger Mountain Area. Existing System roads in this area may be used and maintained. This is a change since release of the FEIS.

Except for alternative I, there are no major differences in how this area is managed among the alternatives. Alternative I included it as a core habitat area, which I am not recommending for the reasons discussed earlier.

Other Elements of My Decision

M. REGIONAL GUIDE AMENDMENT TO THE TIMBER UTILIZATION STANDARD

My Decision

I am amending Regional Guide Silviculture Standard 9 by changing the utilization standards for conifers in the Black Hills to the following. For sawtimber, the minimum diameter at breast height (DBH) can be set at or between 8 to 9 inches, the minimum top diameter can be set at or between 6 to 7 inches, and the length at or between 8 to 10 feet. For POL, the minimum DBH can be set at or between 5 to 6 inches, the minimum top diameter is 4 inches, and the length can be set at or between 6.5 to 8.3 feet. These appear as Standard 2405 in the Revised Plan.

Reasons for My Decision

The rationale for these changes is explained in Appendix B of the FEIS. They improve the utilization of trees for sawtimber and POL.

Summary of Alternative Comparison

A discussion of how the alternatives were considered has been included in each of the previous sections. Following are general conclusions regarding the comparison of alternatives.

ALTERNATIVES WITH HIGHER PRESENT NET VALUE

The selected alternative is only slightly below (less than one percent) Alternative A as the highest economic present net value alternative. Alternative A, the no action alternative, was not selected because it has fewer measures to restore ecosystem components. Alternative A also is projected to have the highest level of patch clearcuts in the future, which was not generally supported by the public.

ENVIRONMENTALLY PREFERRED ALTERNATIVE

I consider either Alternative D or H to be the environmentally preferred alternative. The environmentally preferred alternative is considered to be the one that best meets the goals of Section 101 of the National Environmental Policy Act (NEPA). These goals include fulfilling the responsibility of our generation for succeeding generations; assuring a safe, healthful, productive, and aesthetically and culturally pleasing surrounding; attaining the widest range of beneficial uses without degradation; and achieving a balance between population and resource use which permits high standards of living and a wide sharing of life's amenities. Clearly, by this definition, the environmentally preferred alternative is not the alternative with the least amount of human activity.

Alternatives D and H are considered to be environmentally preferred because they maintain or restore important habitats for plants and animals, they maintain or restore streams and riparian areas, and they increases structural and vegetative diversity. I have not selected either of these alternatives for implementation because Alternative G also contains some of these activities while balancing other uses. As discussed earlier, Alternative G contains many of the same objectives to maintain or restore habitats. At the same time, it has fewer travel restrictions. It also has fewer acres taken out of the suitable timber base for meadow or hardwood restoration. Alternative G also has a lower cost than Alternative D.

ALTERNATIVES SUBMITED BY THE PUBLIC

"Ecosystem Management Alternative" from Biodiversity Associates/Friends of the Bow

The alternatives submitted from Biodiversity Associates/Friends of the Bow (Alternative I) was not selected because it has less consideration for the social and economic values of traditional uses. As discussed earlier, the core area/corridor concept is not necessary to protect wildlife and ecological values.

"The People and The Land Alternative" from the Black Hills Regional Multiple Use Coalition

As discussed earlier, "The People and The Land Alternative" was used to develop Alternative J. Alternative J was not selected for the following reasons.

1. Since this alternative received a great deal of support from state and local elected officials, it is worth noting that much of the alternative has been incorporated into the selected alternative. Table ROD-8 describes some of these items.

Table ROD-8. Points of agreement with or changes adopted from the "People and the Land Alternative"

Forest Access	In response to comments from the Coalition, travel management restrictions were changed from a "blanket" policy of "restrictions unless specified" in the draft to specific policies for each management area in the final.
Forest Land Acquisition	In response to comments from the Coalition, an objective was added to the preferred alternative that actively seeks local government input and support for land exchanges that substantially change the balance of federal and private lands.
Alternative X	In response to comments from the Coalition, Alternative X was added in the FEIS to display the differences between the 1983 Plan and other alternatives.
Spearfish Canyon Management Area	In response to comments from the Coalition, the boundary of the Spearfish Canyon Management Area was changed to its "rim to rim" in the preferred alternative.
Late Successional Landscapes	In response to comments from the Coalition, two changes were made in the FEIS: (1) late successional areas were specifically designated and mapped and (2) a five percent goal was applied forestwide, rather than in sixth order watersheds. We agree that unsuitable areas throughout the Forest should be included where appropriate.
Botanical Areas	There is agreement that Botanical Areas should be designated. The preferred alternative includes 8 areas comprising 8,086 acres. This is a reduction from 9 areas comprising 10,765 acres in the DEIS in response to timber industry concerns.
Sand Creek	In response to comments from the Coalition, the size of the Sand Creek late successional management area was reduced from 7,069 to 4,864 acres.
Budget	In response to comments from the Coalition, all costs were reviewed between draft and final. Some costs, such as upgrading recreational facilities, were dropped.
Use of Timber Harvest to maintain Forest Health	There is agreement that timber harvest should be used to maintain thinned stands on the majority of the Forest.
Created Openings	There is agreement with the need to patch clearcut or provide other openings for wildlife.

Snags	There is essential agreement on the average number of snags per acre (1.00 snag/acre vs. 1.08 snags/acre), not necessarily on every acre.
Livestock Grazing	There is agreement on the objective of 128,000 AUMs per year.
Riparian Areas	There is agreement on rehabilitation of stream riparian areas.
Wild and Scenic Rivers	There is agreement that there be no additional streams added to the Wild and Scenic River System. There are 16 streams in the Black Hills that have been identified as being eligible.
Wilderness	There is agreement that there be no additional Wilderness in the Black Hills.
Norbeck Wildlife Preserve	There is agreement on the use of timber harvest to create wildlife habitat within the Norbeck Wildlife Preserve.

2. The allowable sale quantity of 108 million board feet cannot be sustained while meeting the other objectives of the alternative. Harvest levels near 100 million board feet can only be done with regeneration cutting such as clearcutting or seed tree cutting, which would alter the character of the forest.

3. Maintaining 80 percent or more of the forest for year-round off-road vehicle use would severely impact wildlife and soil and water resources.

4. Limiting areas managed for late succession to five percent, including Wilderness and other management areas, would not provide adequate distribution across the forest, and would not provide enough variety in sizes among landscapes and stands. Allowing scheduled commercial timber harvesting in these areas is not necessary to manage the desired conditions. The selected alternative allows unscheduled harvest when it will improve the quality of the landscape. The effects on the allowable sale quantity from removing late succession and other special areas from the suitable base is less than three percent.

Findings Required By Other Laws

I have considered the multitude of statutes governing management of the Black Hills National Forest, and I find that this decision represents the best possible approach to harmonizing and reconciling the current statutory duties of the Forest Service.

CLEAN AIR STANDARDS

As discussed in the FEIS beginning on page III-15, the activities in the Forest Plan are not expected to violate National Ambient Air Quality Standards. Conformance with air quality statutes is directed in the Plan on page II-1 and in Appendix C.

CLEAN WATER ACT

The Forest Plan is programmatic and does not authorize dredge and fill activities. Permits are obtained as required for project level activities that implement Forest Plan direction. As discussed in the FEIS beginning on page III-71, the activities in the Forest Plan are not expected to violate the Clean Water Act. Protection measures are described beginning on page III-85. Conformance with the Clean Water Act is directed in the Plan on page II-1 and in Appendix C. Best Management Practices are incorporated by reference in the Plan on page II-1 and in Appendix D. The Rocky Mountain Region Watershed Conservation Practices Handbook was released on December 26, 1996, which provides additional direction for protection of soil, aquatic and riparian systems. Implementation of the Forest Plan is expected to contribute to protecting or restoring the physical, chemical and biological integrity of the waters of the United States in accordance with the Act.

NATIONAL HISTORIC PRESERVATION ACT

In accordance with a Memorandum of Understanding with the Advisory Council on Historic Preservation, Forest Plans are not undertakings under the National Historic Preservation Act, so consultation pursuant to Section 106 of the Act is not required at the Forest Plan level. As discussed in the FEIS beginning on page III-115, the activities in the Forest Plan are not expected to violate the Act. Conformance with the Act is directed in the Plan on page II-1 and in Appendix C. Additional direction is provided in Forest Service Manual 2360, as referenced in Appendix B.

ENDANGERED SPECIES ACT

In a letter to the Forest Supervisor dated January 14, 1997, the U.S. Fish and Wildlife Service has concurred with the biological assessment contained in Appendix H of the FEIS, that the proposed Plan revision may affect but is not likely to adversely affect the bald eagle, peregrine falcon, and American burying

beetle. Furthermore, the Plan revision will not affect the black-footed ferret and gray wolf.

Standards protecting Endangered and Threatened Species are contained in the Plan on page II-43.

MITIGATION AND MONITORING

Mitigation measures are an essential part of this Plan. They are described in detail on the following pages of the FEIS. I am strongly committed to the adoption and enforcement of these mitigation measures and I am directing the Forest Supervisor to give them high priority. Some objectives in the Plan which rehabilitate or restore conditions are dependent upon available funding.

Table ROD-9. Discussion on mitigation measures in the FEIS.

TOPIC	FEIS Reference
Air Quality	III-15
Soils	III-23
Water Flow	III-43
Flooding	III-65
Water Quality	III-85
Caves	III-98
Paleontology	III-106
Heritage Resources	III-116
Forested Ecosystems	III-150
Rangeland Conditions	III-176 and III-190
Snags	III-284
Riparian Areas and Wetlands	III-295
Unique Habitats	III-311
Wildlife	III-323 and Appendix H
Fisheries	III-391
Sensitive Plants	Appendix H
Scenic Integrity	III-433

The Forest Service uses the data from the monitoring program described in Chapter Four of the Plan to update its inventory data, to improve future mitigation measures, and to assess the need for amending or revising the plan. A tactical monitoring implementation strategy has been prepared which provides specific information on each item.

Implementation

IMPLEMENTATION DATE

The implementation date for the Revised Plan is April 13, 1997.

TRANSITION

The NFMA generally requires that "permits, contracts, and other instruments for use and occupancy" of National Forest System lands be "consistent" with the Plan. (16 U.S.C. 1604(i)) However, this requirement is not absolute. In the Plan Revision context, NFMA specifically conditions the requirement in three ways: (1) these documents must be revised only "when necessary"; (2) these documents must be revised only "as soon as practicable"; and (3) any revisions are "subject to valid existing rights". This language leaves a great deal of discretion to the decision maker.

In developing this Revised Plan, the Forest considered the effects of implementing pre-existing decisions (which are implemented under such documents) as part of the environmental baseline. Going forward with decisions made under the 1983 Plan would be "consistent" with the Revised Plan, because the Revised Plan was developed with the assumption that those decsions would not be changed.

Exercising my discretion under NFMA, I have determined that it is not "necessary" to apply the Revised Plan's standards and guidelines retroactively. I find that NFMA does not require revision of these pre-existing occupancy and use authorizations. The law generally disfavors retroactive application of new rules. Nevertheless, I have also determined that I have the discretion, on a case by case basis, to modify pre-existing authorizations to bring them up to newly established standards. This would include the standards and guidelines of the Revised Plan. While I take the position that NFMA does not require these revisions, I find that the statutory criteria of "as soon as practicable" and excepting "valid existing rights" are useful in exercising my discretion.

I note that timber sale decisions are generally implemented through contracts with a term of three years. It is the Forest Service's position that, while a timber sale contract is a "valid existing right", such contracts are subject to modification by their terms. Therefore, modification of a timber contract under its terms would not violate the "valid existing right" provision. Having clarfied this point, I have nevertheless determined not to modify any existing timber sale contracts. As I stated earlier, the environmental baseline assumed that these contracts would be performed by their terms. Finally, existing timber contracts will generally have been performed within three years and I find that it is reaonable to allow pre-existing standards to remain in effect for a period less than one third of the Revised Plan. Having said this, I leave it to the Forest Supervisor to determine whether to modify decisions authorizing timber sales which have not yet been put under contract. For instance, I understand that some units of existing planned sales may be dropped to facilitate late successional landscapes or botanical areas established in the Revised Plan.

I note that other "use and occupancy" agreements are for a substantially longer term than timber contracts. For example, grazing permits are generally issued for a ten year term. Thus, my discretionary decision is to require grazing permits to comply with the Revised Plan's standards and guidelines. The case law is clear that grazing permits are "privileges" rather than rights and they are subject to modification by their terms and under the grazing regulations. I note that the Forest is presently under a separate statutory mandate to schedule and complete NEPA analysis at the grazing allotment management stage. (Rescission Act - Public Law 104-19; July 27, 1995). Pursuant to section 504 of this Act, the Forest has scheduled allotment level NEPA analysis. I find that imposing the Revised Plan's standards and guidelines through this process will be "as soon as practicable."

Other classes of "use and occupancy" agreements will be reviewed to determine whether and when the Forest Supervisor should exercise his discretion to bring them into compliance with the Revised Plan.

AMENDMENT OR FUTURE REVISION

An important purpose of a Forest Plan is to communicate the long-term desires of Forest management and thereby provide some sense of stability to local and national interests. At the same time, new information and changing conditions will occur through time and require that updates to the Forest Plan be made; these will be accomplished with public involvement through the amendment or revision process described in 36 CFR 219.10.

ADMINISTRATIVE REVIEW OR APPEAL OPPORTUNITIES

This decision is subject to administrative review pursuant to 36 CFR 217. Any appeal of this decision must be fully consistent with 36 CFR 217.9, and be filed in duplicate with the Chief, USDA - Forest Service, P.O. Box 96090, NFS, 3NW, Appeals Office, Washington, DC 20090-6090. The appeal must be filed within 90 days from the date this decision is published in the legal notice section of the Denver Post, Denver, Colorado.

Any notice of appeal must include at a minimum:

1. A statement that the document is a Notice of Appeal filed pursuant to 36 CFR Part 217.
2. The name, address and telephone number of the appellant.
3. Identification of the decision to which the objection is being made.
4. Identification of the document in which the decision is contained, by title and subject, date of the decision, and name and title of the Deciding Officer.
5. Identification of the specific portion of the decision to which objection is made.
6. The reasons for objection, including issues of fact, law, regulation, or policy; and, if applicable, specifically how the decision violates law, regulation, or policy.
7. Identification of the specific change(s) in the decision that the appellant seeks.

I encourage anyone concerned about the Forest Plan Revision to contact the Forest Supervisor at the address below before submitting an appeal. It may be possible to resolve your concern in a less formal way.

For questions concerning the Appeal process, contact:

USDA Forest Service, Attn: Ecosystem Management Staff (Steve Segovia) P.O. Box 96090 Washington, D.C. 20090-6090 (202) 205-1066

For questions concerning the Forest Plan, contact:

John C. Twiss, Forest Supervisor, Black Hills National Forest RR 2 Box 200 Custer, SD 57730 (605) 673-2251

Conclusion

I am pleased to announce this decision and thus bring this phase of the Forest Plan Revision process to completion. What remains now is the challenge to work together that is before all of us: the public, the Forest Service, the ranchers, the environmentalists, the timber industry, recreation interests, and all of the others who have an interest in management of this Forest. Together, we need to overcome the challenges, to realize the opportunities, and achieve the Goals and Objectives of this Forest Plan.

I am committed to the philosophy of adaptive management as we work together to implement this Plan. The concept of adaptive management means that we will monitor implementation and if necessary, amend or again revise the Plan. The Forest Supervisor and I will carefully monitor the activities, the condition of the land as projects are completed, the products produced, and the effectiveness of the resource protection measures included in the Plan. The public is invited to participate in this process.

Most importantly, this Plan is my commitment to the future to ensure a healthy forest for the next generations.

/ s / Elizabeth Estill — March 13, 1997

ELIZABETH ESTILL — Date

Regional Forester