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Chapter 2 Description and Comparison of the Alternatives

Changes from Draft to Final

Changes from the Draft EIS include a more complete description of the alternatives considered in detail and an expanded discussion of the alternatives considered but eliminated from detailed study.

Introduction

This chapter contains the following information:

- An explanation of how the alternatives were developed.
- A description of the alternatives considered in detail, including the "no-action" alternative, which, if chosen, would continue current management direction.
- A description of alternatives considered but eliminated from detailed study.
- A comparison of the alternatives and their major features, including a review of how they respond to the major revision topics. The review compares the alternatives at two budget levels: full funding and historical funding.

Development of Alternatives

After identifying the seven major revision topics described in Chapter 1, the interdisciplinary team (ID Team) analyzed how well the three current management plans associated with this revision process (the 1987 Custer National Forest Management Plan, the 1985 Medicine Bow National Forest Management Plan, and the 1984 Nebraska National Forest Management Plan) responded to the major revision topics. The ID Team then began to consider potential changes to those plans based on the revision topics.

Appropriate analytic tools, land-based inventories, and dialogue with the public, other agencies, local, state, tribal and federal governments were used to clarify the development of alternatives. After reviewing more than 3,100 comment documents received in response to public outreach and scoping, forest and district personnel fully developed the five alternatives presented in the Draft Environmental Impact Statement (DEIS) and the three proposed Revised Management Plans that accompany it.

Each of the alternatives has identical or similar features to the others, and certain portions of the three Revised Management Plans are the same for all alternatives. In many other respects, the alternatives are distinctly different from each other, especially in how they address the revision topics. Each alternative is, in effect, a stand-alone management plan, which, if chosen, would guide management of the lands under review for the next 10 to 15 years.

The major components of the Revised Management Plans are goals, objectives, standards and guidelines, geographic areas, management areas, monitoring and evaluation strategies, suitable lands for grazing, management indicator species, oil and gas availability determinations, recommendations for Wilderness and Wild and Scenic Rivers.

It was the intent to make all of the alternatives meet the purpose and need of this revision effort and to be fully implementable and achievable, subject to budgetary allocations. All of the alternatives represent the principles of multiple use and sustained yield, maintain or improve ecosystem health, and attempt to comply with environmental laws, although they may do so in slightly different ways. While all the alternatives provide a wide range of multiple uses, goods and services, some alternatives give more or less emphasis to particular ones. After analyzing the effects of the alternatives on imperiled species, it appears some alternatives may not be fully implementable until some adjustments are made in mitigation measures and allocations. Although information was available on the conservation of some of the imperiled species in the development of alternatives, effects on other imperiled species were not known until after the alternatives were fully developed, mapped, and analyzed. Needed adjustments were made between the draft EIS and final EIS.

Important Points Concerning All the Alternatives

All alternatives represent the philosophies of multiple use and ecosystem management. The alternatives provide basic protection for the grassland and forest resources and comply fully with environmental laws. The alternatives are implementable and fully achievable. As directed by federal law, Forest Service policy and regulations, and guidance described in the Regional Guides for Regions 1 and 2, all the alternatives will:

- Maintain basic soil, air, water and land resources.
- Provide a variety of life through management of biologically diverse ecosystems, though they may differ in how they emphasize native plant and animal management.
- Provide recreation opportunities and maintain scenic quality in response to the needs of national forest and national grassland users and local communities. Protect heritage resources in accordance with applicable laws and regulations, while also providing recreational and educational opportunities. Protect fossils and antiquity resources.
- Sustain multiple uses, products and services in an environmentally acceptable manner. This includes timber harvest, livestock grazing, locatable and leasable minerals extraction and recreation uses.
- Through cooperation with other landowners, place emphasis on improved landownership and access patterns that benefit both private landowners and the public.

- Improve financial efficiency for most programs and projects by minimizing expenses, recognizing, however, that not all programs and projects produce revenue.
- Emphasize cooperation with individuals, organizations, Indian Tribes and other agencies to coordinate the planning and implementation of projects.
- Promote rural development opportunities to enrich rural cultural life, to enhance the environment, to provide employment and to improve rural living conditions.

All alternatives use a consistent numbering and naming scheme, which differs from the schemes shown in the three current Management Plans.

Budgets prepared for each alternative at two funding levels project actual outcomes and practical results. Historically, the Forest Service has not received the funds necessary to fully implement its management plans. The budgets were allocated between programs based on the theme of each alternative, the expected goods and services provided, and the necessary actions and expenditures required to deliver those goods and services. The first budget level for each alternative is based on the funds necessary to most fully implement the three revised forest / grassland management plans. The second is a reduced budget based on the typical level of funding received to implement the three current forest / grassland plans.

Collaborative Group Results Used in Alternatives

Introduction

Recognizing the value of citizen participation in the planning process, Forest Service managers organized five "collaborative groups" across the Northern Great Plains to assist in developing alternatives.

The five collaborative groups were organized on the following units: Bessey Ranger District and Fall River Ranger District (Buffalo Gap National Grassland) of the Nebraska National Forest, Grand River National Grassland, Little Missouri National Grassland, and Sheyenne National Grassland of the Dakota Prairie Grasslands. Each group chose topics most suited to issues facing their respective unit. Over a series of meetings, the groups produced options or alternatives to be considered in the analysis process.

A summary of each group's contribution is described below.

Dakota Prairie Grasslands

Grand River Collaborative Group

A group of mostly local people, representing a wide range of interests including ranching, wildlife, recreation and the environment, met to discuss prairie dog management on the Grand River National Grassland. Their ideas are represented in the range of alternatives for prairie dog management.

Little Missouri Collaborative Group

A group of about a dozen mostly local people, with interests and residences in Slope County, western North Dakota, met to discuss numerous issues pertaining to the Little Missouri National Grassland, particularly with respect to Slope County. The group included members of the Little Missouri Grazing Association, as well as representatives from the Theodore Roosevelt National Park, the North Dakota State Game and Fish Department, the North Dakota Parks and Recreation Department, and the Roosevelt-Custer Regional Development Council.

Sheyenne Collaborative Group

A group of eight people representing interests in southeastern North Dakota met to discuss what the desired future conditions for the Sheyenne National Grassland ought to be and how best to achieve those desired conditions. Representatives from government agencies, private conservation, and livestock interests formed the group. The group provided input on vegetative structure, composition and seral stage, which helped assist Forest Service managers in developing vegetative matrices for the grassland alternatives.

Nebraska National Forest Units

Bessey Collaborative Group

A 14-member group met to discuss issues related to forest plantation management for the Bessey Ranger District of the Nebraska National Forest. The two Sandhills units (Bessey Ranger District and the McKelvie National Forest) contain about 20,000 acres of hand-planted forests on a native grassland landscape. Primary tree species include ponderosa pine, Eastern red cedar, and jack pine. The group devised four alternatives, ranging from actively converting the forest plantations to native prairie to maintaining the 20,000 acres of forest plantations, that have been incorporated into the alternatives.

Fall River Collaborative Group

About 25 to 30 individuals, representing specific uses and environmental elements, such as ranching, wildlife, motorized and nonmotorized recreation, met to develop a draft alternative to be considered for the Fall River Ranger District (western half of the Buffalo Gap National Grassland). Their proposal is being examined as Alternative 3a in this environmental impact statement.

Elements Common to All Action Alternatives

Management direction contained in the Revised Management Plans applies to all action alternatives unless otherwise noted in Appendix D - Differences Among the Alternatives. Standards and guidelines for basic resource protection for air, soil, water, geology, minerals, fish, wildlife, rare plants, fire, insects and diseases, livestock grazing, noxious and undesirable plants, scenery management, landownership, heritage, infrastructure, special uses, plant collecting apply to all action alternatives.

Direction that varies among alternatives includes:

- Management area allocations.
- Objectives for noxious weeds and undesirable plant reductions.
- Objectives for recreation developments and trail construction.
- Objectives for desired vegetation composition and structure, rest, prescribed fire, pasture size, water developments, and areas dedicated to bison-only grazing.
- Standards and guidelines for paleontological resources.
- Standards and guidelines for prairie dog management.

Description of the Alternatives Considered in Detail

Each alternative is essentially a separate and distinct set of Management Area allocations and a distinct Management Plan. Management Area allocations define management emphases. Major components of Management Plans include goals and objectives, standards and guidelines, management area direction, geographic area direction, monitoring and evaluation strategies, oil and gas leasing decisions, recommendations for new Wilderness, and recommendations of inclusion into the Wild and Scenic Rivers System. Most of the direction in the accompanying proposed Revised Management Plans (which were part of the DEIS) applies to action alternatives 2, 4, and 5, except for differences which were noted in Appendix D of the FEIS.

The alternatives in the DEIS were developed without preconceived notions of a preferred alternative. The preferred alternative (Alternative 3) in the DEIS has been changed in the Final EIS in response to public comments.

While all alternatives provide a wide range of multiple uses, goods, and services, some alternatives give slightly more emphasis to particular uses in order to respond to public comment and to explore management options, opportunities, and trade-offs.

The themes of alternatives considered in detail, and modified based on public comment received on the DEIS, are described below:

Alternative 1 - (No Action)

The no action alternative is required by regulation. Current Land and Resource Management Plan (Management Plan) direction and emphases would continue with this alternative. Since current plans were developed, management area titles and the management area numbering system have changed. Therefore, Management Area titles and numbers have been changed to make this alternative more easily comparable to other alternatives; however, management direction remains the same as in current Management Plans. See map of Alternative 1 for an understanding of current Management Area allocations and acres within each Management Area.

For the Dakota Prairie Grasslands, this alternative had the most acres (1,176,600 ac) of MA 6.1 Rangeland with Broad Resource Emphasis and the least acres of special management area designations (MA 1.2, 1.31, 1.5, 2.1, 2.2, 3.4, 3.51, and Category 4). For the Nebraska National Forest, this alternative had the most acres of MA 6.1 Rangeland with Broad Resource Emphasis (977,180 ac) and the least acres of special management area designations. For the Thunder Basin National Grassland, this alternative had the most acres of MA 6.1 Rangeland with Broad Resource Emphasis (514,470 ac) and the least acres of special management area designations.

For Nebraska National Forest tree plantations, this alternative would provide for partial reversion of pine and cedar plantations on the Bessey Ranger District to native prairie. Firewood cutting, post and pole cutting, and other forms of wood product removal would be encouraged. Prescribed fire would be used to reduce cedar encroachment on native grasslands.

There were no changes to this alternative from Draft EIS to the Final EIS.

Alternative 2

This multiple-use alternative would emphasize production of commodities such as livestock, minerals, oil, gas, and timber. Plant and animal habitats would be managed to meet viable populations. Recreation opportunities, and special area designations would be provided where they would not foreclose commodity production. See map of Alternative 2 for an understanding of Management Area allocations and acres within each Management Area.

For the Dakota Prairie Grasslands, this alternative had the most acres of MA 3.51 Bighorn Sheep Habitat (118,490 ac) and the least acres of MA 2.2 Research Natural Areas and other special management area designations. It had the second highest acreage (1,128,770 ac) of MA 6.1 Rangeland with Broad Resource Emphasis. For the Nebraska National Forest, this alternative had the most acres of MA 5.13 Forest Products, and it had 891,380 acres of MA 6.1 Rangeland with Broad Resource Emphasis. It had no recommended wilderness, wild and scenic rivers, or bighorn sheep habitat management areas. For the Thunder Basin National Grassland, Alternative 2 had the most acres of MA 5.12 General Forest and Rangelands, Range Vegetation Emphasis (253,550 ac) and MA 8.4 Mineral Production and Development (49,350 ac).

For Nebraska National Forest tree plantations, this alternative would provide for partial reversion of pine and cedar plantations on the Bessey Ranger District to native prairie. Firewood cutting, post and pole cutting, and other forms of wood product removal would be encouraged. Prescribed fire would be used to reduce cedar encroachment on native grasslands.

There were no changes to this alternative from Draft EIS to the Final EIS.

Alternative 3 FEIS (Preferred Alternative)

This multiple-use alternative would modify current Management Plan direction by adopting additional special area designations, such as Research Natural Areas, Special Interest Areas, and Recommended Wilderness Areas. It would also place added emphasis on native plants and animals and recreation opportunities. Refer to the map of Alternative 3 FEIS for an understanding of Management Area allocations and acres within each management area as well as Geographic Area Management Direction in the Final Management Plan.

Changes in Alternative 3 from the Draft EIS include the following: changes in goals, objectives, standards and guidelines, and monitoring requirements, proposed Management Area allocations, Geographic Area direction, oil and gas stipulations (See Final Land and Resource Management Plans). "Bison-friendly" grazing policies were also included.

This alternative would facilitate bison grazing on the lands administered by the Dakota Prairie Grasslands, the Nebraska National Forest, and the Thunder Basin National Grassland. In this alternative, bison will be treated as a type of livestock, not as free-roaming wildlife herds, and permittee requests to graze bison would be fully considered. The following factors will be considered when evaluating the suitability of allotments for bison grazing:

- Public safety.
- Livestock health.
- Livestock structures; including but not limited to fences and handling facilities.
- Economic viability of the permittee.
- Desired recreational experiences of National Grassland visitors.
- Desired spiritual experiences for American Indian tribes.

For Nebraska National Forest tree plantations, this alternative would entail managing and maintaining about 20,000 acres of pine plantations on the Bessey Ranger District through a combination of thinning, prescribed burning, planting, and insect and disease control. Cedar plantations would be harvested for forest products and cedar stands would be converted to either pine plantings or native grasslands. Within the next ten to fifteen years, approximately 20% of the pine plantations with cedar understories or cedar encroachment would be treated to remove the cedar. Firewood cutting, post and pole cutting, and other forms of wood product removal would be encouraged where needed to meet stand objectives. Prescribed fire would be actively used to reduce cedar encroachment on native grasslands. Active reforestation of ponderosa pine through tree planting would occur on plantations burned in the 1960's.

The following three tables summarize, by unit, the major changes in management area allocations from Draft to Final EIS for this alternative.

Table 2-1. Dakota Prairie Grasslands

MA	MA Title	DEIS Acres	FEIS Acres
1.2	Recommended for Wilderness	22,190	0
1.2a	Suitable Wilderness	0	41,500
1.31	Backcountry Nonmotorized	121,950	69,400
2.1	Special Interest Area	6,390	6,400
2.2	Research Natural Area	20,030	19,700
2.4	American Indian Traditional Use	6,280	6,300
3.51	Bighorn Sheep	67,210	19,300
3.51a	Bighorn Sheep-Non Federal Minerals	0	35,800
3.63	Black Footed Ferret Reintroduction	0	29,200
3.64	Special Plant and Wildlife Habitat	1,010	2,300
3.65	Rangelands with Naturally-Appearing	329,300	383,100
3.66	Ecosystem Restoration: Tall Grass	53,050	63,800
4.22	Scenic Area, Vistas, Travel Corridors	22,450	23,600
4.32	Dispersed Recreation: High Use	9,550	8,000
5.12	General Forest and Rangelands	10,640	0
6.1	Rangeland with Broad Resource Emphasis	587,080	549,700

Table 2-2. Nebraska National Forest Units

MA	MA Title	DEIS Acres	FEIS Acres
1.1	Wilderness: Soldier Creek	7,810	7,800
1.2	Recommended for Wilderness	15,970	40,500
1.31	Backcountry Nonmotorized	14,000	13,900
1.31a	Pine Ridge National Recreation Area	6,500	6,500
2.1	Special Interest Area	54,490	26,900
2.2	Research Natural Area	6,740	6,800
3.51	Bighorn Sheep	6,590	5,600
3.63	Black Footed Ferret Reintroduction	109,140	105,000
3.64	Special Plant and Wildlife Habitat	107,290	105,000
4.32	Dispersed Recreation: High Use	6,350	6,500
5.12	General Forest and Rangelands	27,000	27,900
6.1	Rangeland with Broad Resource Emphasis	691,300	702,800

Table 2-3. Thunder Basin National Grassland

MA	MA Title	DEIS Acres	FEIS Acres
1.2	Recommended for Wilderness	14,850	0
1.31	Backcountry Nonmotorized	6,540	6,500
2.1	Special Interest Area	12,570	26,700
2.2	Research Natural Area	1,210	1,200
3.63	Black Footed Ferret Reintroduction	45,470	47,900
3.65	Rangelands with Naturally-Appearing	116,560	83,400
3.68	Big Game Range	33,890	33,900
4.32	Dispersed Recreation: High Use	25,780	25,800
5.12	General Forest and Rangelands	129,480	160,900
6.1	Rangeland with Broad Resource Emphasis	118,130	118,100
8.4	Mineral Production & Development	47,990	48,000

Alternative 3 DEIS

This alternative is carried forward in its entirety from the DEIS to the FEIS; there were no changes. A public working group convened for the Fall River Ranger District of the Buffalo Gap National Grassland (west half) proposed a modification to this alternative. The working group recommended this modification of Alternative 3 in the DEIS. See map of Alternative 3a for an understanding of management area allocations and acres within each Management Area.

For the Dakota Prairie Grasslands, Alternative 3 had the most acres of MA 1.31 Backcountry Recreation Nonmotorized (121,950 ac), MA 2.1 Special Interest Area (6,390 ac), MA 2.2 Research Natural Area (21,030 ac), MA 3.65 Rangelands with Diverse, Natural-appearing Landscapes (329,300 ac), and MA 4.22 Scenic Area, Vistas or Travel Corridors (22,450 ac). For the Nebraska National Forest, this alternative would provide the most acres of MA 2.1 Special Interest Areas (103,030 ac), MA 3.51 Bighorn Sheep Habitat (6,590 ac), and MA 3.64 Special Plant and Wildlife Habitat (107,290 ac). For the Thunder Basin National Grassland, this alternative would have the most acres of MA 2.1 Special Interest Area (12,570 ac), MA 3.65 Rangeland with Diverse, Natural-appearing Landscapes (116,560 ac), MA3.68 Big Game Range (33,890 ac), and MA 4.32 Dispersed Recreation: High Use (25,780 ac).

For the Nebraska National Forest, this alternative would entail managing and maintaining about 20,000 acres of pine plantations on the Bessey Ranger District through a combination of thinning, prescribed burning, planting, and insect and disease control. Cedar plantations would be harvested for forest products and cedar stands would be converted to either pine plantings or native grasslands. Within the next ten to fifteen years, approximately 20% of the pine plantations with cedar understories or cedar encroachment would be treated to remove the cedar. Prescribed fire would be actively used to reduce cedar encroachment on native grasslands. Active reforestation of ponderosa pine through tree planting would occur on plantations burned in the 1960s.

Alternative 4

This multiple-use alternative would feature natural processes and restoration of impaired native ecosystems. It would demonstrate the role that national grasslands and forests have in sustaining rare animal and plant communities within the Northern Great Plains. This alternative would allow for "bison-only" grazing on a minimum of 5% of the lands administered by each of the Dakota Prairie Grasslands, the Nebraska National Forest, and the Thunder Basin National Grassland. In this alternative, bison will be treated as a type of livestock, not as free-roaming wildlife herds. The following factors will be considered when evaluating the suitability of allotments for bison grazing:

- Public safety.
- Livestock health.
- Livestock structures; including but not limited to fences and handling facilities.
- Economic viability of the permittee.
- Desired recreational experiences of National Grassland visitors.
- Desired spiritual experiences for American Indian tribes.

With this alternative, permittees requests to graze bison would be fully considered as well as the opportunities to convert to "bison-only" grazing on vacant and newly acquired allotments determined to be desirable and suitable for bison grazing.

For the Dakota Prairie Grasslands, this alternative has the largest acreages of MA 1.2 Recommended Wilderness (85,940 acres), MA 3.63 Black-footed Ferret Reintroduction Habitat (74,670 acres), and MA 3.66 Ecosystem Restoration: Tall Grass Prairie (55,150 acres). For the Nebraska National Forest, it has the largest acreages of MA 1.2 Recommended Wilderness (174,970 acres), MA 3.4 Scenic Rivers Recommended (1,790 acres), Black-footed Ferret Reintroduction Habitat (109,930 acres), and MA 3.66 Ecosystem Restoration (22,410 acres). For the Thunder Basin National Grassland, it has the largest acreages of MA 1.2 Recommended Wilderness (59,280 acres), MA 2.2 Research Natural Areas (3.520 acres), and MA 3.63 Black Footed Ferret Reintroduction Habitat (112,510 acres). See map of Alternative 4 for an understanding of management area allocations and acres within each management area as well as Management Area Direction in Chapter 2 of the Management Plan.

For Nebraska National Forest tree plantations, this alternative would include actively converting non-native pine and cedar plantations on the Bessey Ranger District to native prairie through tree cutting and burning over the next 20 years. Firewood cutting, post and pole cutting, and other forms of wood product removal would be encouraged. Prescribed fire would be actively used to reduce cedar encroachment on native grasslands. No active reforestation through tree planting would occur.

There were no changes in this alternative from Draft to Final EIS.

Alternative 5

This multiple-use alternative would accentuate recreation opportunities and non-commodity services and also provide commodity outputs that complement or fit within recreation objectives. See map of Alternative 5 for an understanding of management area allocations and acres within each management area as well as Management Area Direction found in Chapter 2 of the Management Plan. For the Dakota Prairie Grasslands, this alternative would result in the 72,670 acres of MA 1.2 Recommended Wilderness and the most acres in MA 3.4 National River System: Scenic Rivers Recommended (18,280 ac), MA 3.64 Special Plant and Wildlife Habitat (16,400 ac), and MA 4.32 Dispersed Recreation: High Use (13,880 ac). For the Nebraska National Forest, this alternative would provide the most acres of MA 1.31 Backcountry Recreation Nonmotorized (126,660 ac), MA 2.1 Special Interest Area (55,190 ac), MA 4.32 Dispersed Recreation: High Use (11,550 ac), and MA 4.4 National River System: Recreation Rivers Recommended (1,790 ac). For the Thunder Basin National Grassland, this alternative had the most acres of MA 1.31 Backcountry Recreation Nonmotorized (22,710 ac), MA 4.22 Scenic Area, Vistas or Travel Corridors (6,030 ac), and MA 8.4 Mineral Production and Development (49,350 ac).

For Nebraska National Forest tree plantations, this alternative would entail managing and maintaining about 15,000 acres of pine plantations on the Bessey Ranger District through a combination of thinning, prescribed burning, planting, and insect and disease control and allowing for gradual reversion of remaining pine and cedar plantations on the Bessey Ranger District to native prairie. Cedar plantations would be harvested for forest products and cedar stands would be converted to either pine plantings or native grasslands. Within the next ten to fifteen years, approximately 5% of the pine plantations with cedar understories or cedar encroachment would be treated to remove the cedar. Firewood cutting, post and pole cutting, and other forms of wood product removal would be encouraged where needed to accomplish thinning objectives and cedar removal. Prescribed fire would be actively used to reduce cedar encroachment on native grasslands. Active reforestation of ponderosa pine through tree planting would occur on plantations burned in the 1960s.

There were no changes in this alternative from Draft to Final EIS.

Forest Service Preferred Alternative

The Forest Service has identified Alternative 3 FEIS as our preferred alternative.

National Park Service Preferred Alternative

The National Park Service has identified Alternative 3 FEIS as their preferred alternative for management of their portion of the Little Missouri River.

Bureau of Land Management Preferred Alternative

The Montana State Office of the Bureau of Land Management, with responsibility for the federal mineral estate in the states of North Dakota and South Dakota, has identified Alternative FEIS 3 as their preferred alternative for leasing of federal minerals. This affects the federal mineral estate with non-federal surface within the boundaries of the Little Missouri, Cedar River and Buffalo Gap National Grasslands.

The Wyoming State Office of the Bureau of Land Management has responsibility for the federal mineral estate in the states of Wyoming and Nebraska, including the Thunder Basin, and Oglala National Grasslands. The Wyoming BLM's preference is to utilize existing land use decisions contained in the Platte River, Buffalo, and Newcastle Resource Management Plans that deal with federal mineral / private surface lands. The BLM Powder River Basin Oil and Gas EIS will address the proposed activities associated with coal bed methane and traditional oil and gas development in the western portion of the Thunder Basin National Grassland area that lies within Campbell and Converse Counties. The BLM will conduct Section 7 consultation with the US Fish and Wildlife Service on the preferred alternative for the Powder River Basin EIS. Consistency of surface protection stipulations will also be evaluated.

Conformance with the Forest and Rangeland Renewable Resources Planning Act (RPA)

The NFMA regulations at 36 CFR 219.12 (f)(6) require at least one alternative be developed that responds to and incorporates the Resources Planning Act (RPA) Program's tentative resource objectives for each national forest / grassland as displayed in regional guides for Regions 1 and 2. However, the 1990 RPA Program establishes national guidance for the national forests and national grasslands by providing program emphasis and trend rather than specific, quantified output targets for individual Forest Service programs. As a result, no resource objectives were quantified for each region to display in regional guides, which would then be passed on to individual forests and grasslands.

The RPA Program is updated every five years and has three components: (1) roles in natural resource management for Forest Service management, (2) Forest Service program responses to contemporary issues, and (3) long-term strategies to guide the program development and budgetary process. It emphasizes four high priority themes: (1) recreation, wildlife and fisheries resource enhancement, (2) environmentally acceptable commodity production, (3) improved scientific knowledge about natural resources, and (4) response to global resource issues. This guidance was used in developing the action alternatives for this FEIS.

Alternatives Considered But Eliminated from Detailed Study

Several alternatives were considered and eliminated from detailed study during the planning process. Following is a discussion of these alternatives and the reasons why they were eliminated.

Passive Management Alternative

Early in the scoping process, an alternative was suggested that would restore biological communities and health through passive management. This alternative would not reasonably meet the Purpose and Need identified in Chapter 1 of this EIS for plan revision; therefore, it was considered but eliminated from detailed study. This alternative would not address the revision topics identified through scoping with the public and other agencies. Issues related to community and lifestyle relationships, livestock grazing, oil and gas leasing, plant and animal damage control, rangeland and forest health, recreation and travel management, and special area designations would not be addressed with this alternative.

This alternative would also not address legal requirements of the planning process. Legal requirements provided by the National Forest Management Act, Endangered Species Act, Federal Land Management Policy Act, and other laws and regulations would not be adequately addressed with this alternative, leaving the Forest Service legally vulnerable to challenges. New direction needed to protect listed threatened and endangered species, species at risk, and rare vegetation communities; to address noxious and invasive plant infestations; to protect watersheds and landscapes from physical degradation; etc, would not be considered with this alternative. Regarding roadless areas and wild and scenic rivers, the Forest Service is required to evaluate all roadless areas and eligible rivers for potential Wilderness or Wild and Scenic River designations. Actual wilderness and wild and scenic river designation is a Congressional responsibility; the Forest Service and other federal agencies can only make recommendations.

Specifically, this alternative was not considered in detail because passive management would not achieve restoration or ecosystem objectives, particularly for recovery of threatened or endangered plant and animal species or the assurance of maintaining viability of all species. Ecosystems in need of restoration must be actively managed using some combination of grazing, prescribed fire, species reintroductions, integrated pest management treatments, revegetation with native species, and other management practices. Noxious weeds and invasive plant species also require active management for control and conversion to native plants.

There were no comments to the Draft EIS in support of this alternative.

Bison-Restoration/Free-Roaming Bison Alternative

This alternative was proposed in early scoping and also in comments to the Draft EIS. Several tribes, intertribal organizations, individual tribal members, and others requested the Forest Service explore opportunities in the EIS to remove domestic cattle and restore bison grazing (wild, free-roaming herds) to the National Grasslands.

Free-roaming bison would require that states manage the animals because free-roaming bison are considered wildlife. Discussions have indicated the states are not interested in accepting this responsibility. Free roaming bison as wildlife is outside the scope of this planning effort.

Bison are not listed by the USFWS as a threatened or endangered species; therefore, there is no requirement under the Endangered Species Act for formal bison restoration.

The Forest Service generally does not specify what kind of livestock are run under a grazing permit unless it is to meet resource objectives such as: sheep or goat grazing for leafy spurge control, preventing conflicts between domestic sheep and bighorn sheep, etc. This allows the producer maximum flexibility to determine what kind of livestock is best suited to his/her needs and what kind of livestock provides him/her with the highest economic returns.

Additionally, the need for bison grazing over cattle grazing was not identified in the Purpose and Need for plan revision identified in Chapter 1 of the EIS. Cattle grazing can adequately achieve the desired future vegetation conditions. This is supported in the scientific literature: "We conclude that conserving the soil, water, and biological resources of the mixed-grass prairie will be accomplished with sound grazing management, rather than determined solely by the choice between bison and cattle. Whether managing mixed prairie with bison or with cattle, the stocking rate and grazing management will determine the long-term health of both the prairie and grazing animal" (Steuter and Hidinger 1999).

Conservation Reserve Alternative

An alternative that includes principles of conservation biology, establishes core reserve areas on the grasslands and forests, and links with other core areas by biological corridors was not considered in detail within this EIS. These planning units are highly fragmented at both broad- and landscape scales. Establishing and managing biological corridors between these units would require decisions on private, state, tribal, and other federal lands. Making management decisions for these lands is outside the scope of this planning effort. However, principles of conservation biology were used in developing goals, objectives, standards, guidelines, Management Area direction, Geographic Area direction, and monitoring protocols for several of the alternatives. Principles of conservation biology were also discussed in the effects analyses within this EIS. These principles considered habitat fragmentation and connectivity. Principles of conservation biology were addressed in the Broadscale Viability Assessment and in the Biological Assessment and Biological Evaluation of all species at risk. Principles of conservation biology were also addressed with respect to rare plant communities and how these communities can be protected in the future. No comments on the Draft EIS were received requesting further consideration of this alternative.

Decisions on Designation of Site-Specific Motorized Routes

Managers agree that site-specific management direction is needed to determine specific routes and areas for motorized and nonmotorized use. The process to site specifically designate motorized routes could not be completed within the timeframe of this planning process because of the lack of complete road inventories and the need for extensive public involvement. Managers agree that future site-specific travel management analyses should take place on each grassland and forest to designate which roads, trails, and areas will be available for motorized use. Site-specific decisions for designated motorized roads, trails, and areas will be better handled at the local planning level tiered to the plan revision analysis and decisions. Proposed direction within the action alternatives gives managers additional time to work with interested parties to make site-specific decisions on designated motorized routes. This will allow enough time to get site-specific road and trail inventories, complete necessary roads analyses, and work with interested publics to determine travel and access needs and desires.

The preferred alternative in this EIS for the Dakota Prairie and Thunder Basin grasslands would restrict motorized use to existing roads and trails only and off-road motorized use will not be allowed. The preferred alternative for the Nebraska National Forest and grassland units will defer decisions on motorized use until site-specific analyses and public involvement is completed (except for motorized use restrictions to meet Management Area direction or for existing Forest Supervisor special orders on travel management needed to protect resources and provide for public safety).

No Grazing Alternative

An alternative with no livestock grazing was considered but eliminated from detailed study because it does not reasonably meet the Purpose and Need for management plan revision described in Chapter 1 of this EIS. The Great Plains evolved with several natural ecological disturbance processes, including herbivory (grazing). Grazing is an important process in achieving desired vegetation and habitat conditions to address rangeland and forest health and other issues. Also, many rural communities have a co-dependent relationship with national grasslands and forests because of the intermingled landownership pattern and the dependency of these public lands to supply forage for livestock grazing. Eliminating livestock grazing would also be a hardship on many individuals and ranch families.

Current Situation Alternative

Some Draft EIS respondents asked that an alternative maintaining current conditions on the national grasslands and forests be fully considered in the Final EIS. This is not the same as the No Action Alternative 1 that provides continued direction and emphases based on the current land and resource management plans.

A current situation alternative was considered but eliminated from detailed study because it does not reasonably meet the Purpose and Need described in Chapter 1 of this EIS. Maintaining the current situation and resource conditions on these grasslands and forests would not address all the revision topics identified through scoping with the public and other agencies. All the issues related to community and lifestyle relationships, livestock grazing, oil and gas leasing, plant and animal damage control, rangeland and forest health, recreation and travel management, and special area designations would not be addressed with this alternative.

Maintaining the current situation and resource conditions would also not address legal requirements of the planning process. Legal requirements provided by the National Forest Management Act, Endangered Species Act, Federal Land Management Policy Act, and other laws and regulations would not be adequately addressed with a current situation alternative, leaving the Forest Service legally vulnerable to challenges. New direction needed to protect listed threatened and endangered species, species at risk, and rare vegetation communities; to address noxious and invasive plant infestations; to protect watersheds and landscapes from physical degradation; etc, would not be considered with this alternative. Refer to a description of these issues in the Purpose and Need section of Chapter 1 of this EIS. Regarding roadless areas and wild and scenic rivers, the Forest Service is required to evaluate all roadless areas and eligible rivers for potential Wilderness or Wild and Scenic River designations. Actual wilderness and wild and scenic river designation is a Congressional responsibility; the Forest Service and other federal agencies can only make recommendations.

While we did not develop an additional alternative in this Final EIS to display the current situation, we did work to make changes in the EIS from draft to final to display the current situation and current conditions on these eight national grasslands and two national forests. The Final EIS was also rewritten to do a better job of comparing the action alternatives to the current situation and conditions.

Return the Buffalo Gap, Fort Pierre, and Grand River/Cedar River National Grasslands to the Indians or Provide for Co-Management of these Grasslands by the Oglala Sioux, Lower Brule Sioux, and Standing Rock Sioux tribes, respectively.

This alternative was not studied in detail as there is no authority for either the return of the grasslands to the Sioux tribes or for co-management of the grasslands by individual Indian tribes. Return of the grasslands to the Sioux tribes will likely take legal and / or congressional legislative action, so it is outside the scope of the decision to be made on how to manage these public lands. While there is no authority for providing for co-management of the grasslands by tribes, there is federal policy that requires we consult with tribes on the management of these lands on a regular basis. Chapter 1 of the Management Plans and also federal policy and regulations provide direction for continued consultation with tribal governments on a government-to-government basis and also with Tribal Historic Preservation Offices on matters of cultural resource protection, protection of traditional cultural properties, and on repatriation issues. While we are not considering an alternative for co-management of the grasslands with Sioux tribes, we are interested in continued communication, consultation and cooperation through continued dialogue, and partnerships.

The Major Revision Topics and the Alternatives Considered in Detail

The following section summarizes and compares how the alternatives would respond to the major revision topics introduced in Chapter 1. Select indicators of differences between alternatives are highlighted. Chapter 3 should be reviewed for a complete discussion of the effects expected from implementing the alternatives.

Topic: Community and Lifestyle Relationships

Under existing conditions, the National Forests and Grasslands of the Northern Great Plains are responsible for an estimated 5,400 jobs and $123,333,000 in earned income (direct, indirect, and induced) from domestic livestock grazing, recreation, timber production, and oil and gas production, which represent 2.6% of the jobs and 1.7% of the income in the Northern Great Plains economic impact area. Excluded from these job and income estimates and the discussion below are an additional 1,900 jobs and $93,000,000 in income (direct, indirect, and induced) related to coal production from the federal mineral estate within the boundary of the Thunder Basin National Grassland. Current and future coal production related jobs and income are unaffected by the alternatives and have been excluded from the job and income discussion.

Alternative 1 would rank second of the alternatives in producing 17 additional direct, indirect, and induced jobs and $.4 million more in direct, indirect, and induced income, a increase of .01%in the Northern Great Plains Economic Impact Areas. Range-fed livestock grazing jobs attributed to the national grassland and forest pastures would increase an estimated 1%. Jobs attributed to the federal mineral estate would not change. Alternative 1 would produce the least jobs and income linked to timber management. It would be second best (behind Alternative 2) in achieving the principal management goals for the agriculture, oil, gas, minerals users/interest segments. It would be worst in achieving the principal management goals of the wood products user/interest segment. It would be most likely to continue current direction, emphases and levels of natural resource opportunities, causing the least disruption to economic and social institutions and associated lifestyles.

Alternative 2 would rank first of the alternatives in producing 66 additional direct, indirect, and induced jobs and $1.2 million more in direct, indirect, and induced income, a increase of .02% in jobs and .03%in income in the Northern Great Plains Economic Impact Areas. Range-fed livestock grazing jobs attributed to the national grassland and forest pastures would increase an estimated 3%. Jobs and income attributed to the federal mineral estate would increase slightly by an estimated 2 jobs and $40,000 in income. Alternative 2 would produce the most jobs and income linked to timber management. It would be best in achieving the principal management goals of the agriculture, oil, gas, minerals, and wood products user/interest segments. It would be worst in achieving the principal management goals of the recreation, wildlife, conservation, American Indian user/interest segments.

DEIS Alternative 3 would rank third of the alternatives in producing 216 fewer direct, indirect, and induced jobs and $3.6 million less in direct, indirect, and induced income, a decrease of .10%in jobs and .05%in income in the Northern Great Plains Economic Impact Areas. Range-fed livestock grazing jobs attributed to the national grassland and forest pastures would decrease an estimated 9%. Jobs and income attributed to the federal mineral estate would decrease by an estimated 55 jobs and $1,810,000 in income. DEIS Alternative 3 would produce an increase of 5 jobs and $131,000 in income linked to timber management. This alternative would place more emphasis on diverse landscapes, plants, and animals, and recreation opportunities; however, it would not clearly favor any user / interest segment.

FEIS Alternative 3 would rank fourth of the alternatives in producing 221 fewer direct, indirect, and induced jobs and $3.9 million less in direct, indirect, and induced income, a decrease of .11% in jobs and .06%in income in the Northern Great Plains Economic Impact Areas. . Range-fed livestock grazing jobs attributed to the national grassland and forest pastures would decrease an estimated 9%. Jobs and income attributed to the federal mineral estate would decrease by an estimated 55 jobs and $1,810,000 in income. FEIS Alternative 3 would produce an increase of 5 jobs and $131,000 in income linked to timber management. This alternative would place more emphasis on diverse landscapes, plants and animals, and recreation opportunities; however, it would not clearly favor any user / interest segment.

Alternative 4 would rank last of the alternatives in producing 656 fewer direct, indirect, and induced jobs and $11.0 million less in direct, indirect, and induced income, a decrease of .31% in jobs and .15%in income in the Northern Great Plains Economic Impact Areas. . Range-fed livestock grazing jobs attributed to the national grassland and forest pastures would decrease an estimated 30%. Jobs and income attributed to the federal mineral estate would decrease by an estimated 116 jobs and $3,760,000 in income. Alternative 4 would produce an increase of 7 jobs and $178,000 in income linked to timber management. It would be best in achieving the principal management goals of the conservation, wildlife, and American Indian user / interest segments. It would be worst in achieving the principal management goals of the agriculture, and oil, gas, minerals user / interest segments. Because of the active restoration emphasis, it would be second best in achieving the principal management goals of the wood products segment.

Alternative 5 would rank fifth of the alternatives in producing 418 fewer direct, indirect, and induced jobs and $6.4 million less in direct, indirect, and induced income, a decrease of .20%in jobs and .09% in income in the Northern Great Plains Economic Impact Areas. Range-fed livestock grazing jobs attributed to the national grassland and forest pastures would decrease an estimated 20%. Jobs and income attributed to the federal mineral estate would decrease by an estimated 55 jobs and $1,810,000 in income. Alternative 5 would produce an increase of 5 jobs and $136,000 in income linked to timber management. It would be best in achieving the principal management goals of the recreation user / interest segments; however, Alternatives DEIS 3, FEIS 3, and 4 would offer different mixes of motorized and nonmotorized recreation opportunities and favor particular recreation activities.

The impacts on income and employment could vary, possibly up to 20 percent, depending on grazing systems and intensities that may be used to meet desired conditions and market conditions for cattle, oil, gas, and coal.

Estimated total jobs linked to livestock grazing and oil and gas production are shown in the following figures.

Figure 2-1: Total jobs attributable to livestock grazing on NFS lands and pastures.

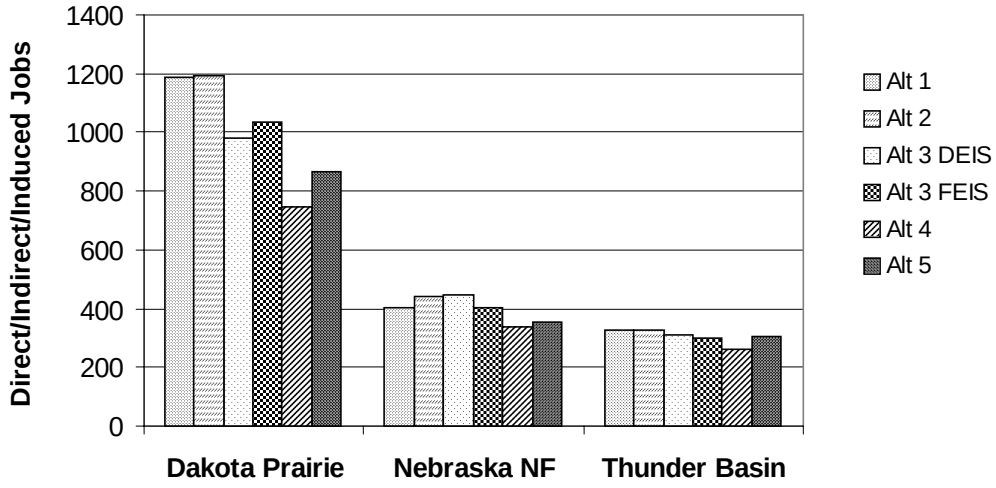
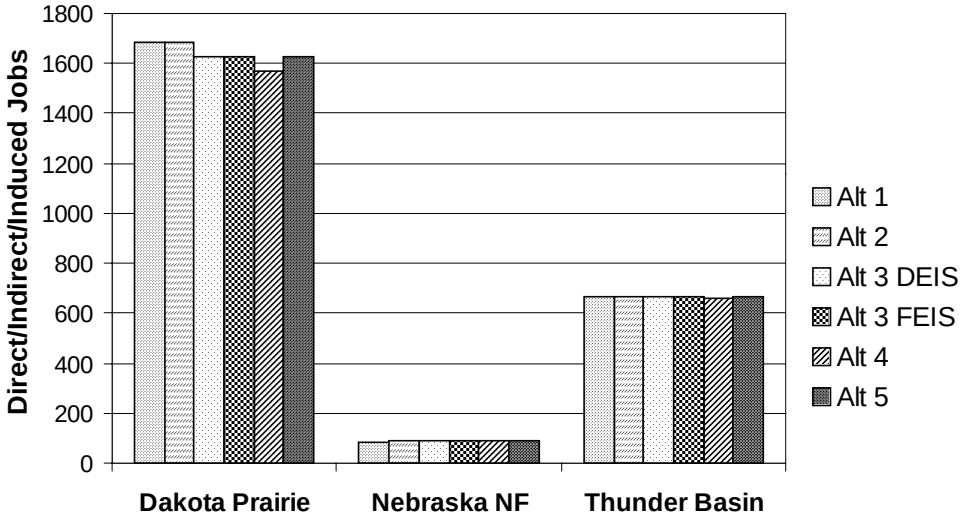


Figure 2-2: Total jobs attributable to oil/gas production on NFS lands.



Topic: Livestock Grazing

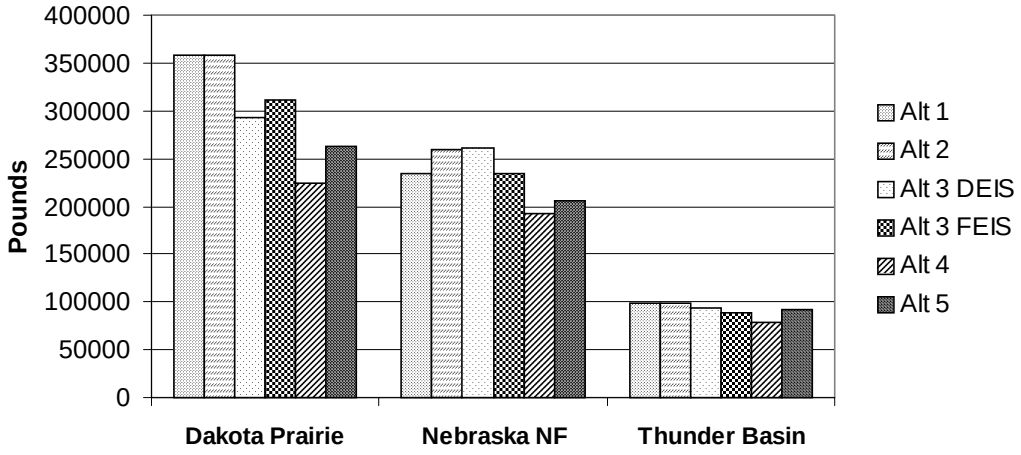
An analysis was completed on all planning units to determine what lands are physically and biologically capable of supporting livestock grazing. For example, areas containing slopes greater than 40 percent or not producing sufficient forage are not considered physically capable. A summary of the percent of each unit found capable of supporting livestock grazing is shown in the following table:

Table 2-4. Capable Rangeland for Livestock Grazing.

Unit	Total Acres	Capable Rangeland Acres and Percent of Total Acres
Dakota Prairie Grasslands	1,258,260	1,113,500 (88%)
Nebraska National Forest Units	1,056,400	973,200 (92%)
Thunder Basin National Grassland	552,490	532,100 (96%)

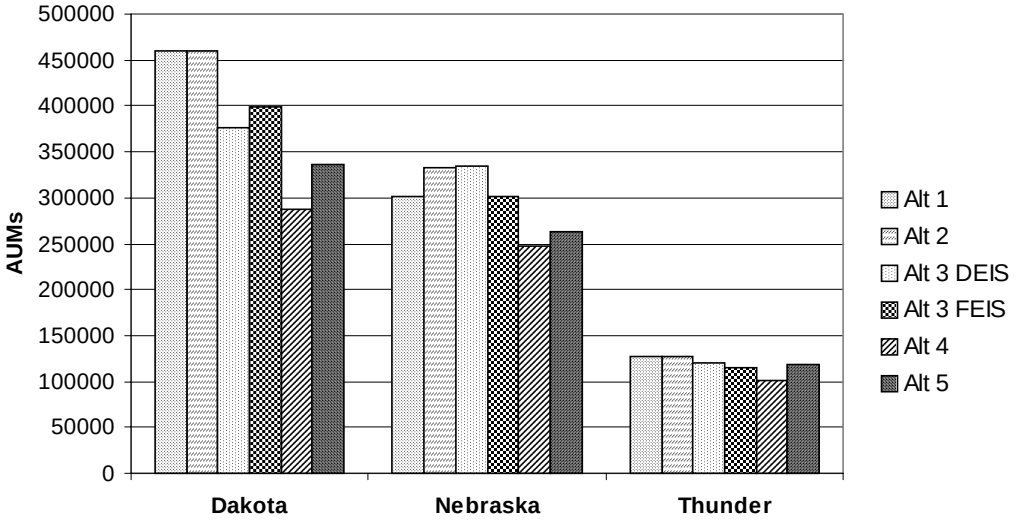
Next, a suitability analysis was conducted to determine the areas where grazing is appropriate, which included such factors as environmental, social and economic consequences and trade-offs. Regardless of the alternative, most areas found capable of supporting livestock grazing were also considered suitable. The alternatives do differ in the amount of estimated forage produced on the suitable acres that would be available to livestock. Because of its commodity emphasis, Alternative 2 would make the most estimated forage available to livestock, followed by Alternatives 1, DEIS 3, FEIS 3, 5, and 4, respectively. Alternative DEIS 3, FEIS 3, 4, and 5 vary in the amount of estimated forage available to livestock because fo other resource objectives such as wildlife, recreation, and ecological restoration. The following figure displays the differences in the alternatives.

Figure 2-3: Estimated forage available to livestock.



Animal units months (AUMs) of livestock grazing that may be expected with the alternatives are shown in the following figure. These are estimates and are used only for an effects analysis and would not be used to set stocking levels. Estimated AUMS for Alternative 1 may differ from actual use based on the implementation of the current Management Plans. It is expected that Alternative 2 would produce the most animal units months of grazing, followed by Alternatives 1, DEIS 3, 5, FEIS 3, and 4.

Figure 2-4: Estimated animal unit months of livestock grazing.



Other factors that could affect livestock grazing include limits on grazing developments. Alternatives 1 and 2 would have no limits on water developments and would allow the highest density of water developments to support livestock grazing. Alternative FEIS 3 for the Dakota Prairie Grasslands would also have no limits on water developments. Alternative 3 DEIS for the Dakota Prairie Grasslands would allow the next highest density of water developments, followed by Alternatives 4 and 5. For the Nebraska National Forest units, Alternative DEIS 3, FEIS 3, and 5 would allow for the next highest density, followed by Alternative 4. For Thunder Basin National Grassland, Alternative 5 would allow slightly higher densities than Alternatives DEIS 3 and 5. In Alternative FEIS 3, water development density would vary by Management Area.

The ability to manipulate pasture size would not be limited in Alternative 1 or 2. Alternatives DEIS 3, FEIS 3, 4, and 5 would maintain or increase pasture size. Alternative 4 would require that 5 percent of suitable rangeland acres be available for bison grazing only.

Topic: Oil and Gas Leasing

A decision regarding oil and gas leasing is actually two decisions; first, what lands should be made available for leasing; and second, authorization of specific lands for leasing with appropriate stipulations applied. Previous decisions concerning leasing must be considered and incorporated in the management plan revision process. Existing leasing decisions have been reviewed for new information and changed circumstances. Where appropriate, decisions for the Revised Management Plans may change existing availability and leasing decisions. The decisions to be made based on this analysis are limited to areas with previous leasing decisions.

The DEIS alternatives vary in the acres of land allocated to management areas, which can affect acres available for oil and gas leasing to some degree. In total, Alternative 2 would make the most acres available for oil and gas leasing. The acres considered for leasing decisions include the entire federal mineral estate, whether or not the federal government owns the surface.

For the Dakota Prairie Grasslands, Alternatives 1, 2, DEIS 3, 4, and 5 would make about 955,000 acres available for leasing; while, Alternative FEIS 3 would make about 934,000 acres available. The specific lands leasing acreage varies by alternative and is detailed in the Table 2-8 at the end of this chapter. For the Dakota Prairie grasslands, it is important to note that Alternative FEIS 3 defers the specific lands decision on 26,200 acres of big horn sheep habitat until there is development on adjacent spacing units.

For the Nebraska National Forest units and Thunder Basin National Grassland, all alternatives contain the same number of acres available for leasing. The Nebraska National Forest units contain about 247,000 acres that are available for leasing. Thunder Basin National Grassland contains about 1.16 million acres that are available for leasing. The specific lands leasing acreage varies by alternative and is detailed in the Table 2-10, for the Nebraska National Forest and Table 2-12 for the Thunder Basin National Grassland. For the Thunder Basin National Grassland it is important to note that Alternative FEIS 3 defers the specific lands decision on 247,000 acres with coal bed methane potential until after completion of the Powder River Basin Oil and Gas EIS, that will evaluate the effects of coal bed methane development. The Bureau of Land Management is the lead agency for the Powder River Basin Oil and Gas EIS, and the Forest Service is a cooperating agency. The Powder River Basin Oil and Gas EIS is scheduled for completion in April 2002.

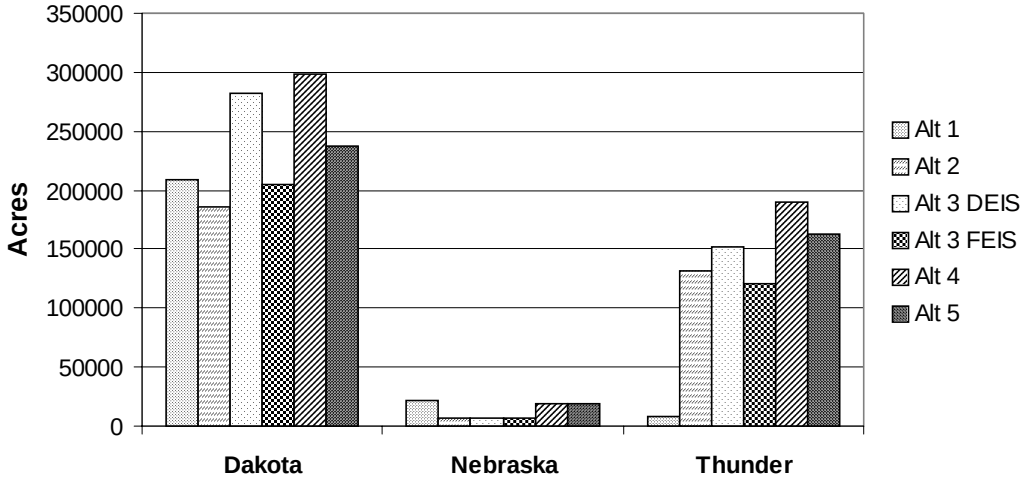
All leases are subject to Standard Lease Terms. Standard lease terms require compliance with laws and regulations. Generally, Standard Lease Terms allow year-round occupancy of the leased lands, with some limited exceptions for timing of drilling operations and locating well sites.

Certain resource concerns and conditions may put limits on exploration and development beyond the limitations allowed in the Standard Lease Terms. These additional limits are defined in special leasing stipulations, which change standard lease terms and include timing provisions for operations (Timing Limitation stipulations), spatial provisions for operations (Controlled Surface Use stipulations), and prohibitions on occupancy (No Surface Occupancy stipulations).

Each of the three standard categories of lease stipulations is designed for specific types of limitations on activities that could occur on a lease. Timing Limitation stipulations are temporal in nature and are most commonly used to reduce effects of drilling or development activities on wildlife during certain times of the year. Controlled Surface Use stipulations are spatial in nature and are used generally to avoid potential adverse effects to surface resources such as scenery, sensitive soils, steep slopes, water, fossils, and wildlife habitat. The most restrictive stipulation is No Surface Occupancy, which prohibits occupation of the surface for exploration or development of oil and gas resources. Subsurface minerals may be developed on leases with No Surface Occupancy stipulations by the use of directional or horizontal drilling, if such drilling is technologically and economically feasible. When they can be used, they generally increase both drilling and production costs.

The following figure displays the acres with No Surface Occupancy stipulations by alternative. The acreage in Table 2-5 represents the alternative applied uniformly across the grassland.

Figure 2-5: No surface occupancy for oil/gas development



Because valid existing rights will be honored in all alternatives, existing lease rights must be considered when looking at No Surface Occupancy areas.

No Surface Occupancy stipulations were applied to maintain landscape and habitat conditions, such as backcountry recreation areas and big horn sheep habitat. Alternative 4 would contain the most available leasing acres with No Surface Occupancy stipulations. For the Dakota Prairie Grasslands, Alternatives DEIS 3 and 5 would follow closely behind Alternative 4. Alternative 2 would have fewest acres with No Surface Occupancy stipulations.

For Nebraska National Forest units, Alternative 4 would contain the most available leasing acres with No Surface Occupancy stipulations followed by Alternatives 5 and 1. Alternatives 2, DEIS 3 and FEIS 3 have approximately the same acres with No Surface Occupancy stipulations.

For Thunder Basin National Grassland, Alternative 4 would contain the most available leasing acres with No Surface Occupancy stipulations followed by Alternatives 5 and DEIS 3. Alternative 1 would have the least area with No Surface Occupancy stipulations.

Topic: Plant and Animal Damage Control

Noxious Weed Control

Alternatives 2 and 4 would be expected to do the most in treating noxious and undesirable plant species by reducing affected acres by 15 percent within 15 years. Alternatives 1 and 2 would pose more risk of spreading noxious and undesirable plant species because of higher livestock grazing levels and more motorized access than the other alternatives. Alternative 4 would pose the least risk of spread. Alternatives 1, 3, and 5 would contain current acres of noxious weeds and undesirable plants or limit their rate of spread.

Prairie Dog Damage Control

Current poisoning levels to control prairie dog damage would be expected to continue under Alternative 1. Poisoning to control prairie dog damage under Alternative 2 would be similar to or more than levels under Alternative 1. Poisoning levels under Alternatives DEIS 3, FEIS 3 and 4 would be less than expected under Alternatives 1 and 2 over the next 10 years; however, poisoning levels beyond 10 years could exceed levels expected under Alternatives 1 and 2 as more prairie dog colonies on National Grasslands and Forests expand towards adjacent landownership. No poisoning would occur under Alternative 4. Non-chemical control methods would be used under Alternatives DEIS 3, FEIS 3, 4, and 5 to slow prairie dog colony expansion as needed.

Predator Damage Control

Under a Memorandum of Understanding, the Agricultural Plant Health Inspection Service (APHIS) has primary responsibility for predator damage control on most National Forest System lands. This includes responsibilities for ensuring compliance with the National Environmental Policy Act and the Endangered Species Act. To date, APHIS has completed and issued a Record of Decision and Final Environmental Impact Statement for their national animal damage control program and have also issued several statewide Decision Notices and Environmental Assessments for predator damage control. Forest Service responsibilities in predator damage control on National Forest System lands are primarily limited to ensuring that APHIS programs comply with direction in Land and Resource Management Plans for visitor and user safety, mitigation for sensitive wildlife species, and pesticide use. Because the APHIS documents evaluate a range of alternatives for predator damage control, direction for predator damage control in this planning effort does not vary by alternative.

Grasshopper Damage Control

A 1987 Memorandum of Understanding between the Forest Service and APHIS identifies each agency's responsibilities regarding grasshopper damage control. APHIS is the lead agency for completion of the programmatic environmental analyses in accordance with the National Environmental Policy Act and is also responsible for consultation with the U.S. Fish and Wildlife Service on the effects of insecticides on plant and animal species that are protected under the Endangered Species Act. Forest Service officials are responsible for approval of pesticides for use on National Forest System lands and for ensuring compliance and compatibility with direction in Land and Resource Management Plans. This includes considering the effects of insecticides on plant and animal species identified as sensitive by the Forest Service. Resource protection alternatives are evaluated and described in environmental

analyses and decision documents issued by APHIS. Therefore, management direction for grasshopper damage does not vary by alternative.

Topic: Rangeland and Forest Health

Rangeland and forest health is defined as the degree to which the integrity of the soil and ecological processes of rangeland and forest ecosystems are sustained. The diversity and abundance of native plants and animals are also addressed in this topic.

Plants

Vegetation on the planning units has been classified by whether the major species on a site are grass, shrubs or trees. Vegetation composition and structure on the planning units will continue to be influenced by natural succession and disturbance processes that determined them. However, the alternatives differ in the levels of human-caused disturbances, such as logging and grazing.

Desired conditions for the structure and composition of vegetation have been identified by alternative, based on the theme of the alternative. Structure is described in terms of low, moderate and high for suitable livestock grazing acres. The desired vegetation structure is considered the grass and shrubs left after the grazing and growing season. The following figures display the midpoints of acceptable ranges in the percentage of low, moderate, and high structure desired for each alternative.

Figure 2-6: Desired grass/shrub structure - Dakota Prairie Grasslands.

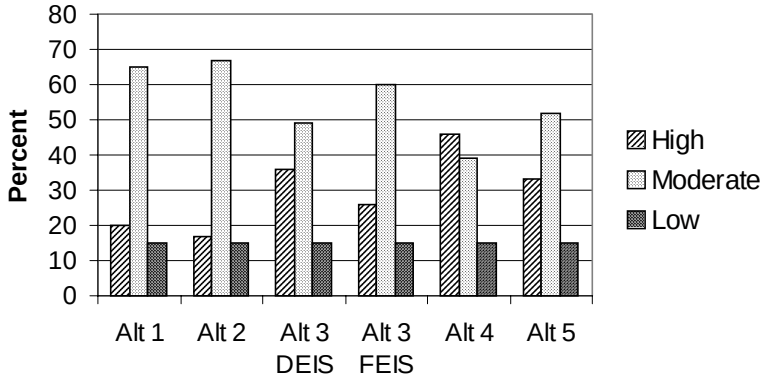


Figure 2-7: Desired grass/shrub structure - Nebraska National Forest.

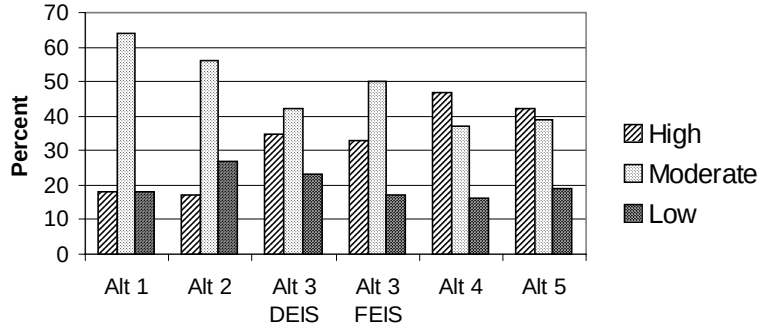
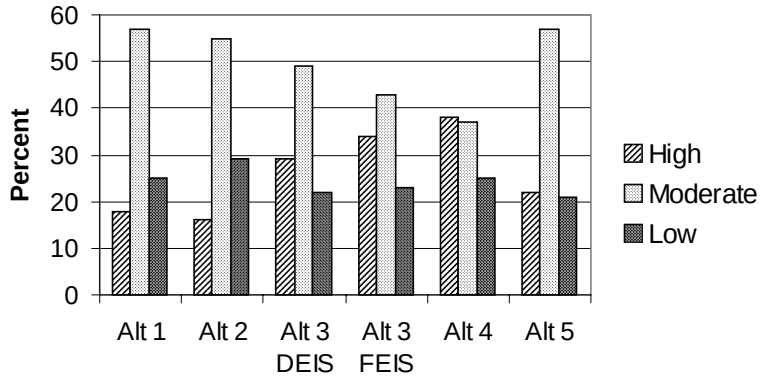


Figure 2-8: Desired grass/shrub structure -Thunder Basin National Grassland.



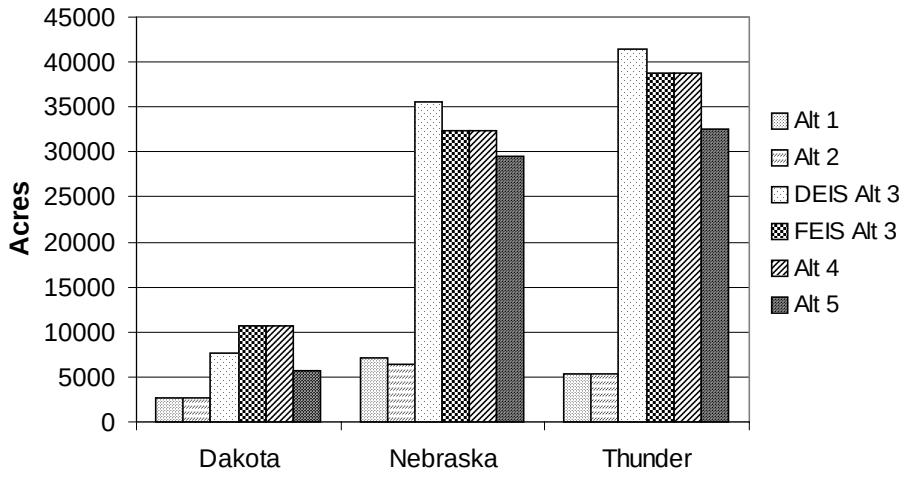
Alternative 4 would provide the most acres of high grassland structure in all units. On the Dakota Prairie Grasslands, Alternative DEIS 3 would provide the second most high grassland structure, followed by Alternatives 5 and FEIS 3. On the Nebraska National Forest units, Alternative 5 would be second in providing high grassland structure over Alternatives DEIS 3, and FEIS 3. On the Thunder Basin National Grassland Alternative FEIS 3 would provide the second most high grassland structure followed by Alternatives DEIS 3 and 5. Shifts in structure can change plant composition and seral stages of plant communities.

The effects of each alternative on plant species that are at risk of range-wide, regional or more local imperilment were also evaluated. Alternatives 2 through 5 provide for restoration efforts for blowout penstemon and western prairie fringed orchid, both species listed and protected under the Endangered Species Act. These two species are imperiled range-wide. Concerns over the viability of numerous other plant species at the individual National Grassland and Forest level has also been identified. The Forest Service identifies many of these species as sensitive. Additional conservation measures that have been recently identified for these plant species will be considered for inclusion in the final management plans.

Animals

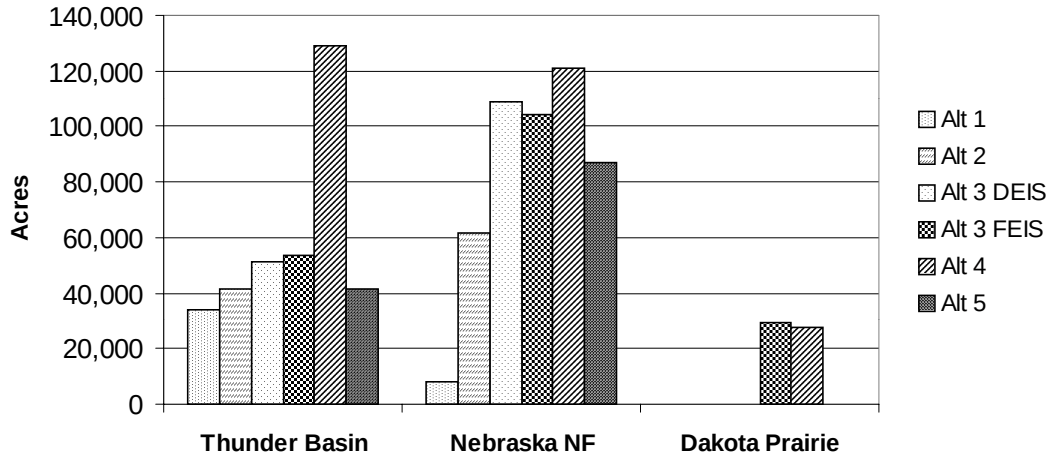
The effects of each alternative on species that are at risk of range-wide, regional or more local imperilment have been evaluated. In many cases, conservation measures have been incorporated into Alternatives 2 through 5 to reduce possible negative effects to individual species and to enhance the probability of maintaining viable populations of these species. Additional conservation measures for several other species were recently identified and will be considered for inclusion in the final management plans.

Figure 2-9: Estimated acres of active prairie dog colonies predicted in 10 years.



Considerable public interest has been expressed in the management of black-tailed prairie dogs and several wildlife species that are commonly found on prairie dog colonies. Black-tailed prairie dogs and several associated species including the black-footed ferret and burrowing owl are considered imperiled species. Prairie dogs were once one of the primary herbivores in this region and added considerably to the diversity of plant and animal life that occurred on grasslands. Although much reduced today, prairie dog populations still occur on several of the National Grasslands and Forests. Proposed direction for the management of these prairie dog populations varies by alternative, with the largest increase in prairie dog populations occurring under Alternative DEIS 3 followed by Alternatives FEIS 3, 5, and then 4. The smallest prairie dog colony acreages would occur under Alternatives 1 and 2.

Figure 2-10: Potential black-footed ferret reintroduction habitat.



The black-footed ferret, one of the most endangered mammals in North America, is directly dependent on black-tailed prairie dogs. Reintroduction of this endangered species is already underway on the Northern Great Plains planning units, with a successful program on the Wall Ranger District of the Buffalo Gap National Grassland. A suitability analysis for additional black-footed ferret reintroduction sites on the National Grasslands was conducted as part of the revision process. The figure above shows the number of areas and acres identified as potential reintroduction habitat by alternative.

Alternative 4 would provide the most potential black-footed ferret reintroduction areas and acres. By administrative unit, Dakota Prairie Grasslands would offer one reintroduction site in Alternatives FEIS 3, and 4. Nebraska National Forest would offer one reintroduction site in Alternatives 1 and 2, and two reintroduction sites in Alternatives DEIS 3, FEIS 3, 4, and 5. Thunder Basin National Grassland would provide one reintroduction in all alternatives; however, the acres of that site vary between alternatives, with Alternative 4 providing the most acres, followed by Alternatives FEIS 3, DEIS 3, 5, 2 and 1.

Substantial conservation efforts to help restore secure populations of other imperiled species on the National Grasslands and Forests are also proposed under Alternatives DEIS 3, FEIS 3, 4 and 5. Some of the species that these conservation measures will benefit include bighorn sheep, greater prairie chicken, mountain plover, sage grouse, Dakota skipper and the regal fritillary butterfly. Extending the same or similar direction for some of these species to Alternative 2 will be considered for inclusion in the final management plans.

Management indicator species were also selected for some of the major biological communities in the planning area. These species are selected because changes in their populations are believed to indicate the effects of management activities on the biological communities that they represent. Black-tailed prairie dogs were selected to represent the biological community associated with prairie dog colonies and low structure grasslands. Plains sharp-tailed grouse and greater prairie chickens were selected for high structure grasslands. Sage grouse were

identified as the management indicator species for high structure sagebrush with diverse herbaceous understories. Estimates of habitat capability and current suitability for each indicator species are provided in Chapter 3.

Topic: Recreation and Travel Management

Alternative 5 would show the largest increase in the capacity to accommodate developed recreation activities because it would provide the most developed recreation facilities (campgrounds, information/interpretive materials, trails, etc.) Alternatives DEIS 3, and FEIS 3 would provide the second highest capacity. Alternatives 2 and 4 would have the same developed recreation capacities as Alternative 1.

As part of the planning process, Scenic Integrity Levels were identified for the planning units by alternative. Alternative 5 would have the most acres with moderate or high Scenic Integrity Levels, followed by Alternatives DEIS 3, 4, FEIS 3, 1, and 2, respectively.

Alternatives DEIS 3, FEIS 3, 4, and 5 would result in more diverse landscapes than Alternatives 1 and 2. Alternative 4 would provide the most variety of recreation settings because of its ecosystem restoration emphasis and many acres of special area designations, followed by Alternatives FEIS 3, DEIS 3, 5, 2 and 1. All alternatives require installation of easier-opening fence gates and more fence openings, resulting in easier recreation access. For most planning units, Alternatives DEIS 3, FEIS 3, 4, and 5 would increase the size of fenced pastures, which could reduce the number of fences encountered. Limits on facilities to support livestock grazing included under Alternatives DEIS 3, FEIS 3, 4 and 5 could promote a sense of vastness and provide a more natural-appearing landscape.

Alternatives DEIS 3, FEIS 3, 4, 5 are similar in the number of acres offering semi-primitive recreation opportunities, with Alternative 4 offering the most, followed by Alternatives 5 DEIS 3, and FEIS 3, respectively. However, the alternatives do differ between units in the amount of semi-primitive nonmotorized recreation settings. On the Dakota Prairie National Grassland, Alternative 4 offers the most semi-primitive nonmotorized recreation settings, followed by Alternatives 5, DEIS 3, FEIS 3, 1 and 2. On the Nebraska National Forest Units, Alternative 4 offers the most semi-primitive settings, followed by Alternatives 5, FEIS 3, DEIS 3, 2 and 1. On the Thunder Basin National Grassland, Alternative 4 offers the most semi-primitive nonmotorized settings, followed by Alternatives 5, DEIS 3, FEIS 3, 2 and 1.

Alternative 5 would provide more fishing opportunities than the other alternatives because of the construction and renovation of more ponds. Alternatives 2, DEIS 3, FEIS 3, 4 and 5 would improve deer habitat over existing conditions (Alternative 1). Alternatives DEIS 3, FEIS 3, 4, and 5 would improve upland bird habitat over Alternatives 1 and 2, with Alternative 4 improving upland bird habitat the most of the alternatives. Alternatives FEIS 3 and 4 would have the most acres of active prairie dog colonies in 10 years, followed by Alternatives 5 and DEIS 3. However, Alternatives DEIS 3, FEIS 3 and 4 could reduce opportunities for prairie dog recreational shooting because of possible seasonal and yearlong restrictions.

The following figures show the recreational opportunity spectrum (ROS) by alternative for the three units.

Figure 2-11: Dakota Prairie ROS by alternative.

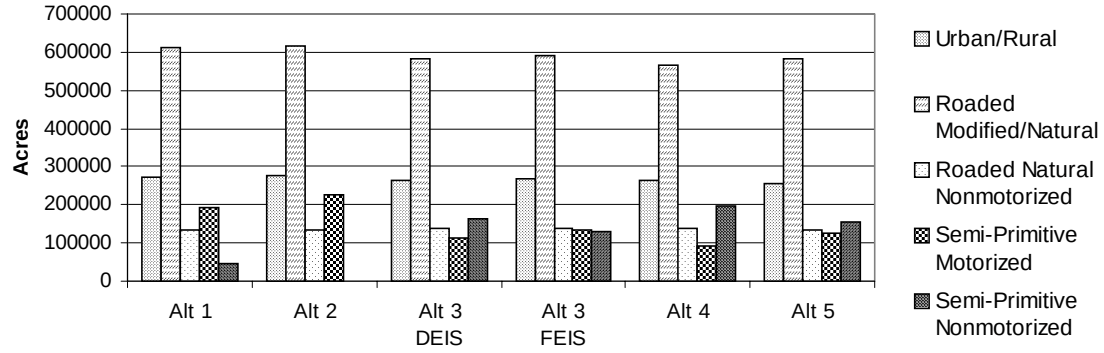


Figure 2-12: Nebraska National Forest ROS by alternative.

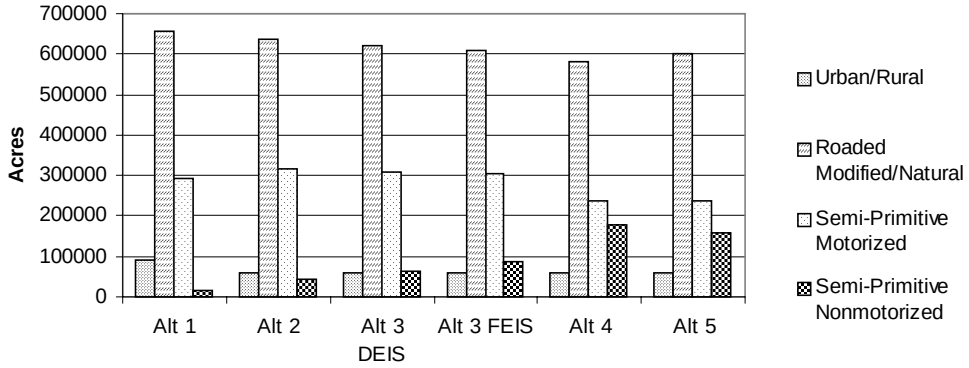
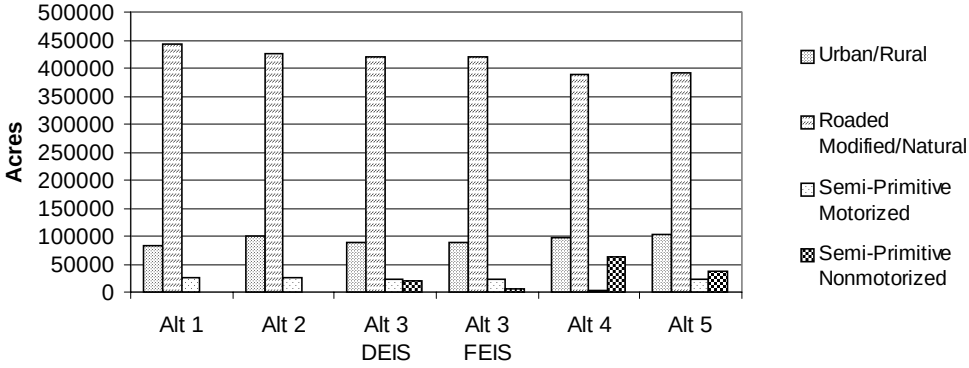


Figure 2-13: Thunder Basin ROS by alternative.



Alternatives 1 and 2 would continue current travel management direction, which allows motorized travel in most areas on the planning units (see following figures). Alternatives DEIS 3, FEIS 3, 4, and 5 would restrict motorized travel to designated routes, which could reduce access for some recreation-related activities, such as driving for pleasure, rock collecting, game retrieval. (The units would have up to five years after implementation of the land and resource management plan to complete travel management plans (including public involvement) to designate motorized travelways).

A few areas under Alternatives DEIS 3, FEIS 3, 4, and 5 would allow off-road travel opportunities. Overall, Alternative 5 would have the most miles of designated motorized travelways, followed closely by Alternative FEIS 3, and DEIS 3. Alternative 4 would have the most acres where no motorized use is allowed, which would benefit recreation users seeking solitude and more primitive experiences.

Figure 2-14: Travel management by alternative - Dakota Prairie Grassland

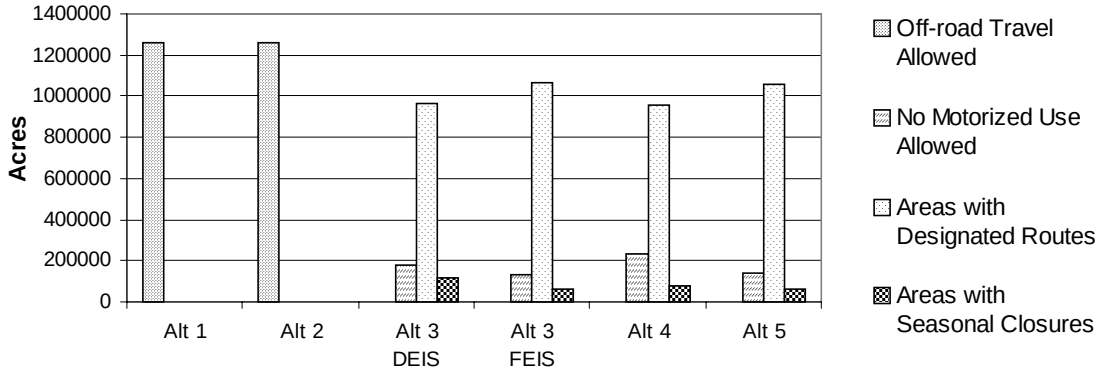


Figure 2-15: Travel management by alternative - Nebraska National Forest.

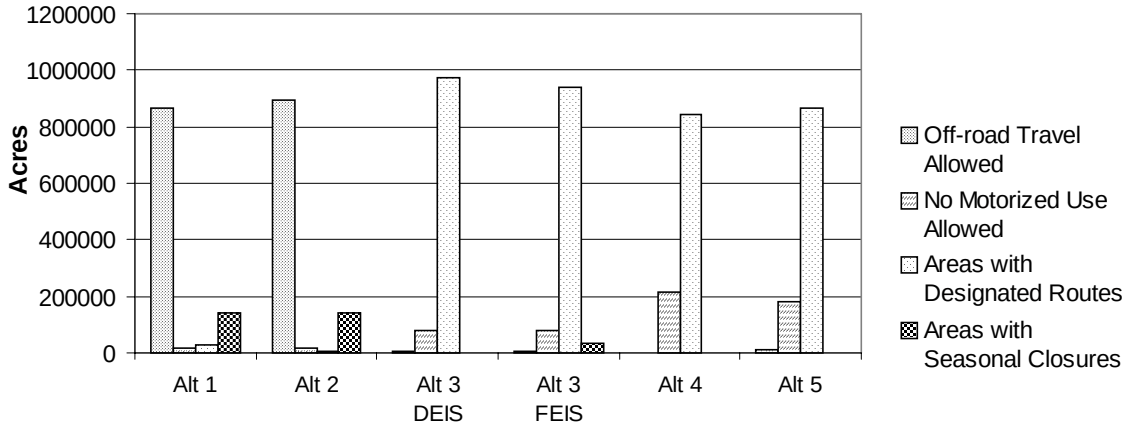
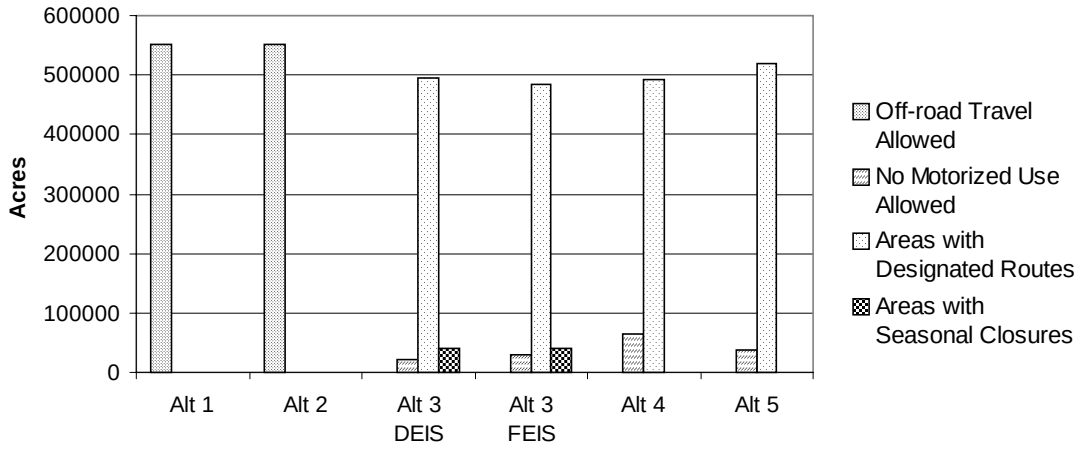


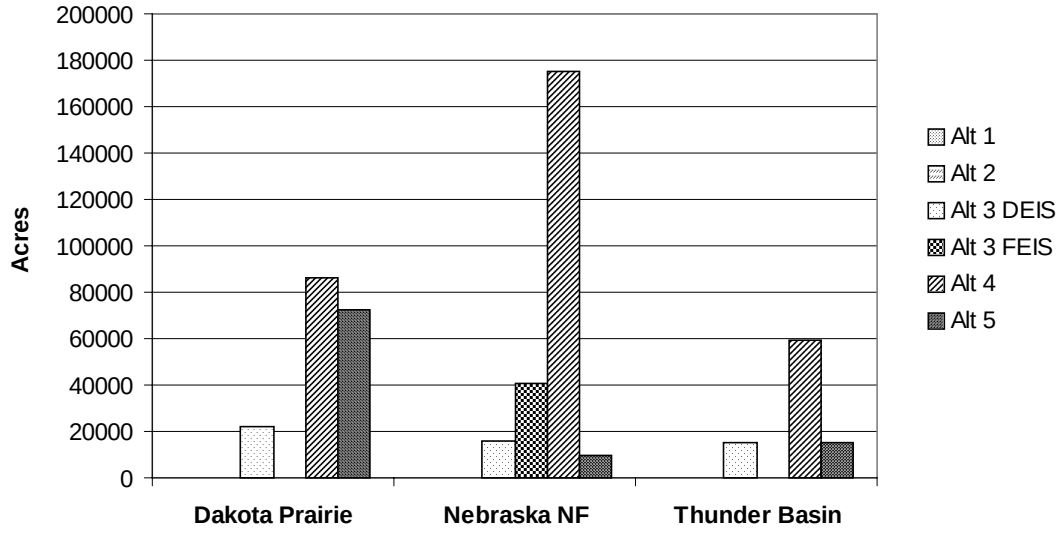
Figure 2-16: Travel management by alternative - Thunder Basin National Grassland.



Topic: Special Area Designations

Alternative 4 would allocate more acres to Research Natural Areas, Special Interest Areas, and recommended Wilderness than the other alternatives (about 371,600 acres compared to 170,100 acres in Alternative 5, 156,400 acres in Alternative DEIS 3, 129,030 acres in Alternative FEIS 3, 13,300 acres in Alternative 2, and 1,490 Acres in alternative 1).

Figure 2-17: Acres recommneded for Wilderness.



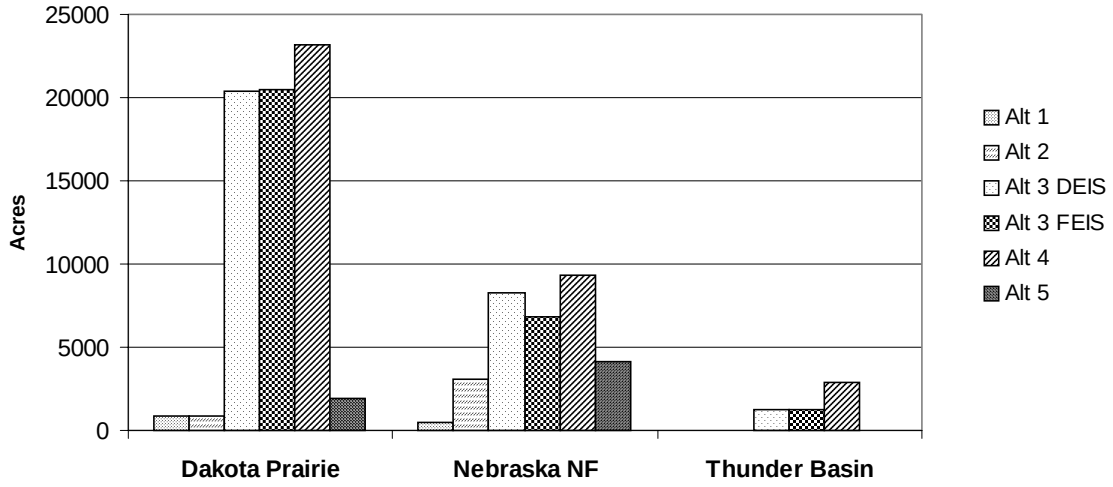
Alternative 4 would recommend the most acres for Wilderness, with 25 areas containing about 320,200 acres. Alternative 5 would recommend the second most acres for Wilderness, with 11 areas containing about 97,600 acres. Alternative DEIS 3 would recommend 5 areas for Wilderness containing about 53,000 acres. Alternative FEIS 3 would recommend 2 areas for Wilderness containing about 40,400 acres, and designate 41,500 acres as suitable for wilderness. Alternatives 1 and 2 would not recommend any additional areas or acres for Wilderness.

Alternative 5 would recommend slightly more river miles (about 126 miles) on National Forest System lands as additions to the Wild and Scenic River system than Alternative 4 (about 117 miles). Alternatives 1, 2, and DEIS 3, and FEIS 3 would not recommend any river miles for federal designation on National Forest System lands.

For the National Park Service portion of the Little Missouri River, Alternative 4 would recommend the most miles (about 27 miles) for federal designation, followed by Alternatives DEIS 3 and 5 (about 22 miles) and Alternative FEIS 3 (about 21 miles). Alternatives 1 and 2 would not propose any river miles for federal designation. Alternatives DEIS 3, FEIS 3 and 4 would propose that nearly 15 miles be designated as "wild," the most restrictive designation. Alternative 5 would propose that all 22 miles be designated as "scenic," a less restrictive designation than "wild."

Alternative 4 would establish the most Research Natural Areas, with 26 additional Research Natural Areas (about 35,040 acres). Alternative DEIS 3 would establish the second most, with 20 additional Research Natural Areas (about 29,920 acres). Alternative FEIS 3 would establish the next most, with 19 additional Research Natural Areas (about 28,510 acres). Alternative 5 would establish 11 additional Research Natural Areas (about 6,020 acres). Alternative 2 would establish 6 additional Research Natural Areas (about 3,930 acres). Alternative 1 would establish 4 additional Research Natural Areas (about 1,420 acres).

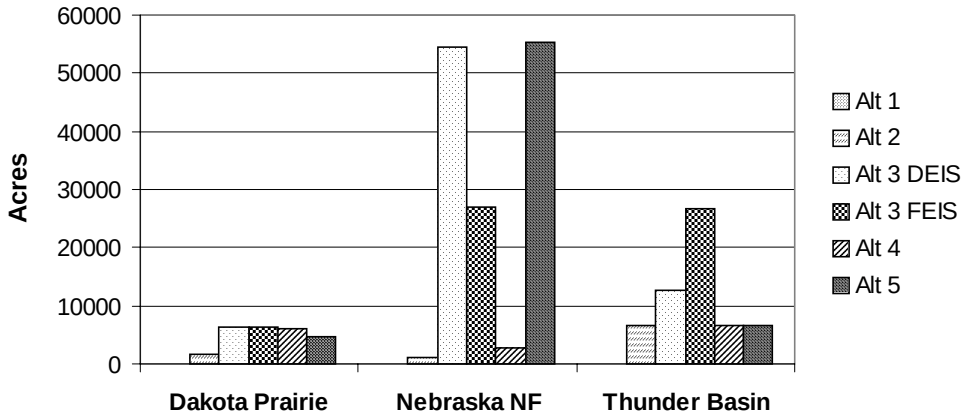
Figure 2-18: Research Natural Areas.



Alternative FEIS 3 would include the most Special Interest Areas, with 38 Special Interest Areas (about 73,400 acres). Alternative 5 would include the second most, with 34 Special Interest Areas (about 66,400 acres). Alternative 4 would include 29 Special Interest Areas (about 15,300 acres). Alternative DEIS 3 would include the next most, with 38 Special Interest Areas (about

73,400 acres). Alternative 2 would include 14 Special Interest Areas (about 9,400 acres). Alternative 1 would establish 2 Special Interest Areas (about 70 acres).

Figure 2-19: Special Interest Areas.



Management Area Allocations by Alternative

Management areas are defined as parts of the grassland or forest that are managed for a particular emphasis. Each management area has a prescription that consists of a theme, desired conditions, and standards and guidelines that apply to it. Management areas describe where different kinds of resource opportunities are available and where different kinds of management activities occur. The management area prescriptions are grouped into eight major categories, based on a continuum from least evidence of human disturbance to most:

Table 2-5. Management Area Prescription Categories.

Category	Description	Example
1	Natural processes dominate with little human influence.	Wilderness.
2	Conservation of representative ecological settings, components, unique features.	Research Natural Areas, Special Interest Areas.
3	Balance of ecological values and human occupancy.	Special wildlife habitats; ecosystem restoration.
4	Recreation areas.	Scenery, dispersed recreation.
5	Forested ecosystems providing timber and range products.	General forest and rangelands.
6	Rangeland management emphasized.	
7	Residential/forest intermix.	
8	Utility corridors and mineral developments.	

The following management areas are used in the alternatives. The alternative maps show the distribution of these management areas across the planning units.

Table 2-6. Management Area Prescriptions Used in the Alternatives.

Management Area	Title
1.1	Wilderness: Soldier Creek
1.2	Recommended for Wilderness
1.2a	Suitable for Wilderness
1.31	Backcountry Recreation Nonmotorized
1.5	National River System: Wild Rivers Recommended
2.1	Special Interest Areas
2.2	Research Natural Areas
2.4	American Indian Traditional Use Areas
3.4	National River System: Scenic Rivers Recommended
3.51	Bighorn Sheep
3.51a	Bighorn Sheep with Non-Federal Mineral Ownership
3.63	Black-footed Ferret Reintroduction Habitat
3.64	Special Plant and Wildlife Habitat
3.65	Rangelands with Diverse Natural-Appearing Landscapes
3.66	Ecosystem Restoration
3.68	Big Game Range
4.22	Scenic Areas, Vistas, Travel Corridors
4.32	Dispersed Recreation: High Use
4.4	National River System: Recreation Rivers Recommended
5.12	General Forest and Rangelands: Range Vegetation Emphasis
5.13	Forest Products
5.31	Experimental Forests
6.1	Rangeland with Broad Resource Emphasis
7.1	Residential/Forest Emphasis
8.3	Designated Utility Corridors: Existing and Proposed
8.4	Mineral Production and Development
8.5	Nursery
8.6	Administrative Sites

Each alternative would allocate the national grassland and forest units under review to management areas. Appendix D describes the emphasis of each management area and lists the applicable standards and guidelines. Although allocations may change from current direction, most commodity uses, such as grazing, and oil and gas development, would continue in balance with desired conditions. The percent of acres allocated to management areas by alternative are shown for each of the administrative units in the following figures. (0nly those management area categories used in that alternative appear in the graph legend.) The figures are followed by tables that display the acres assigned to management areas by alternative:

Dakota Prairie Grasslands Management Area Allocations

Figure 2-20: Alternative 1 management area allocations, Dakota Prairie Grasslands.

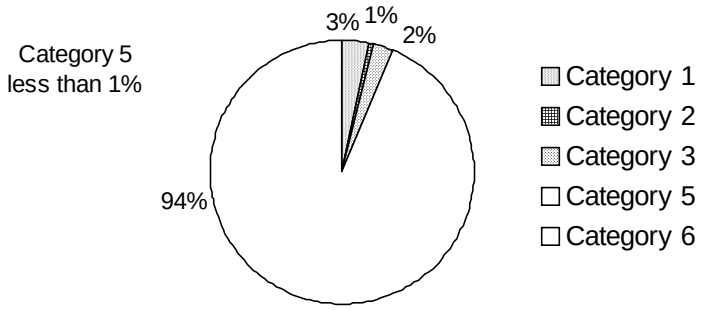


Figure 2-21. Alternative 2 management area allocations, Dakota Prairie Grasslands.

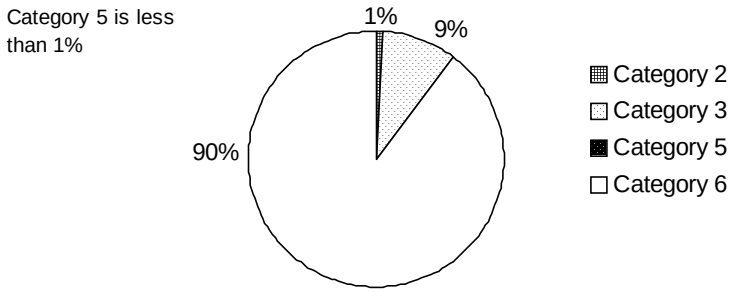


Figure 2-22. Alternative 3 DEIS management area allocations, Dakota Prairie Grasslands.

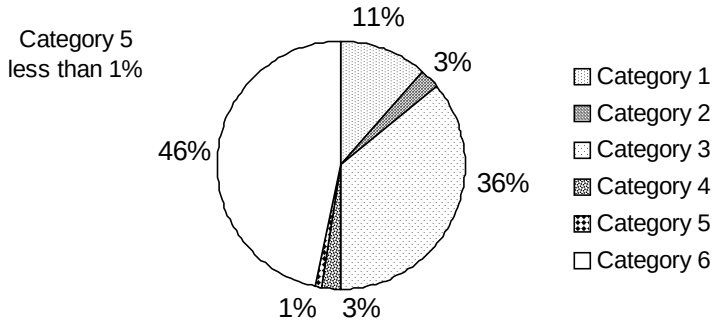


Figure 2-23. Alternative 3 FEIS management area allocations, Dakota Prairie Grasslands.

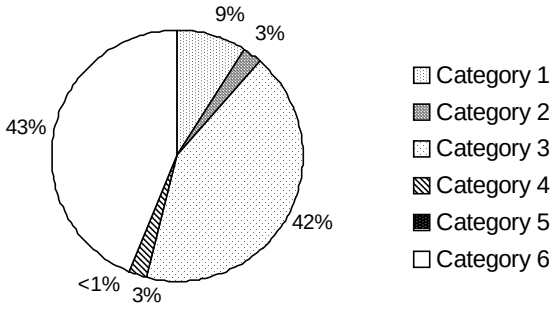


Figure 2-24. Alternative 4 management area allocations, Dakota Prairie Grasslands.

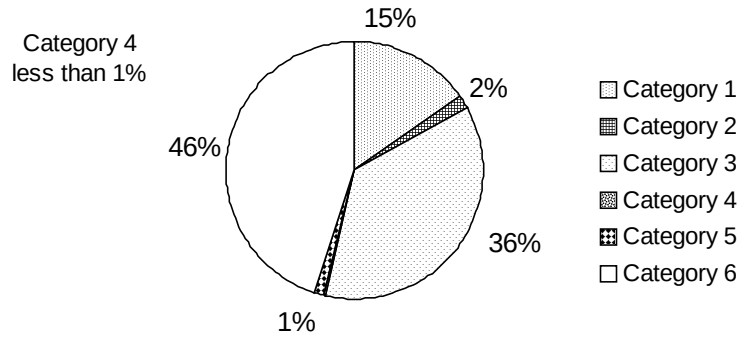
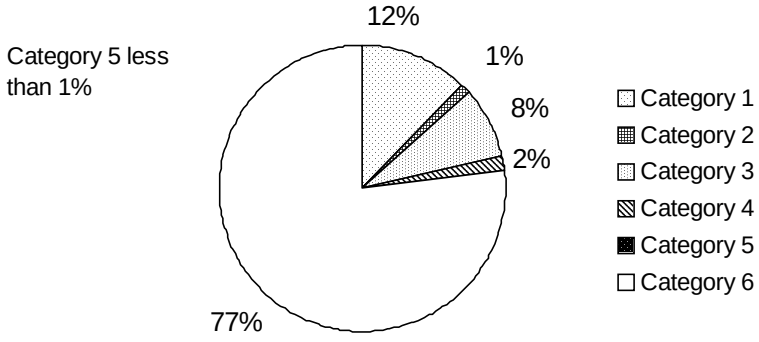


Figure 2-25. Alternative 5 management area allocations, Dakota Prairie Grasslands.



Nebraska National Forest Units Management Area Allocations

Figure 2-26. Alternative 1 management area allocations, Nebraska National Forest.

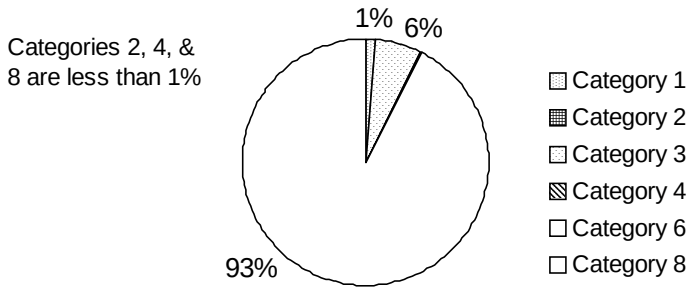


Figure 2-27. Alternative 2 management area allocations, Nebraska National Forest.

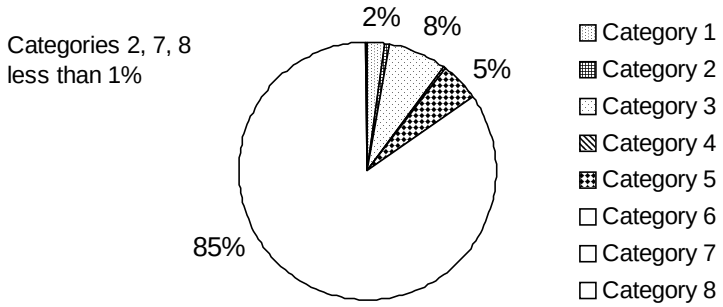


Figure 2-28. Alternative 3 DEIS management area allocations, Nebraska National Forest.

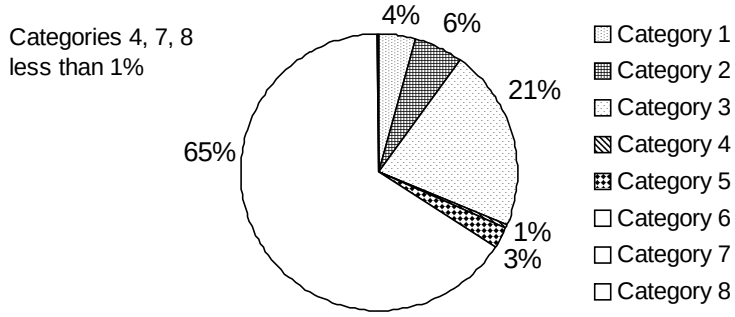


Figure 2-29. Alternative 3 FEIS management area allocations, Nebraska National Forest.

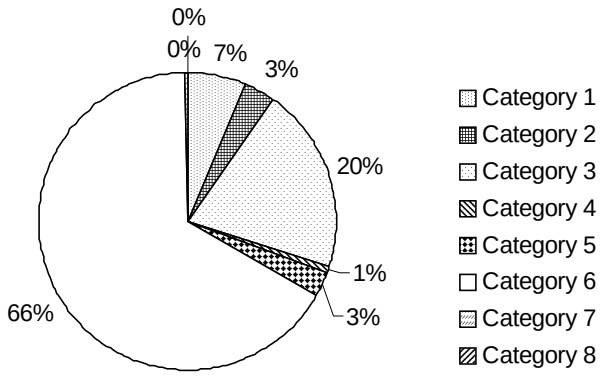


Figure 2-30. Alternative 4 management area allocations, Nebraska National Forest.

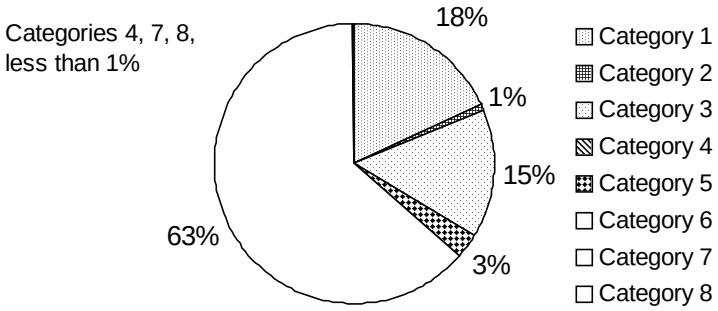
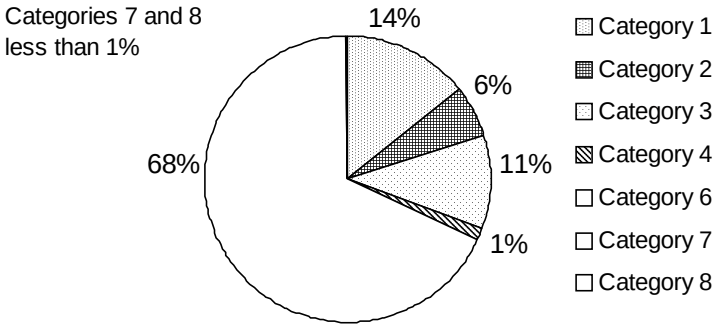


Figure 2-31. Alternative 5 management area allocations, Nebraska National Forest.



Thunder Basin National Grassland Management Area Allocations

Figure 2-32. Alternative 1 management area allocations, Thunder Basin National Grassland.

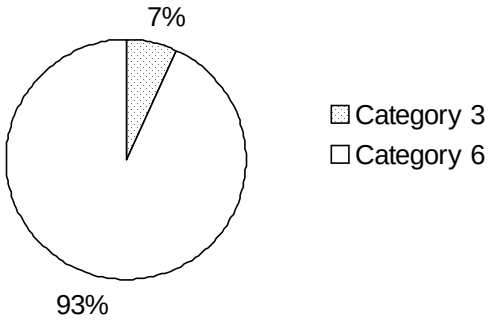


Figure 2-33. Alternative 2 management area allocations, Thunder Basin National Grassland.

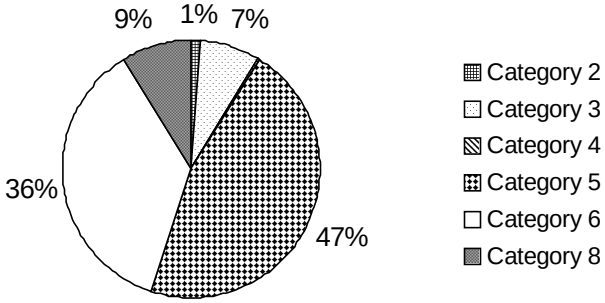


Figure 2-34. Alternative 3 DEIS management area allocations, Thunder Basin National Grassland.

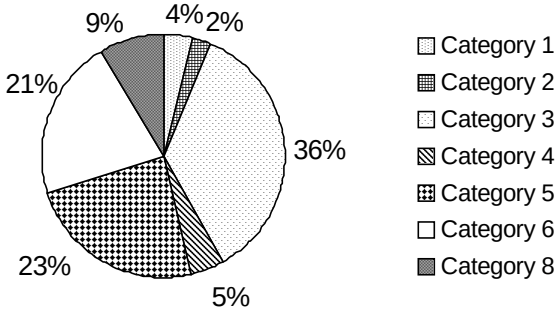


Figure 2-35. Alternative 3 FEIS management area allocations, Thunder Basin National Grassland.

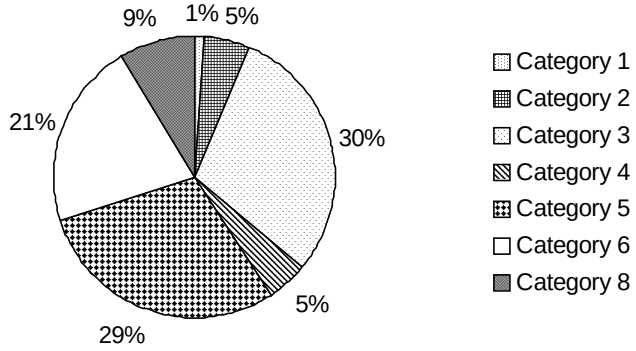


Figure 2-36. Alternative 5 management area allocations, Thunder Basin National Grassland.

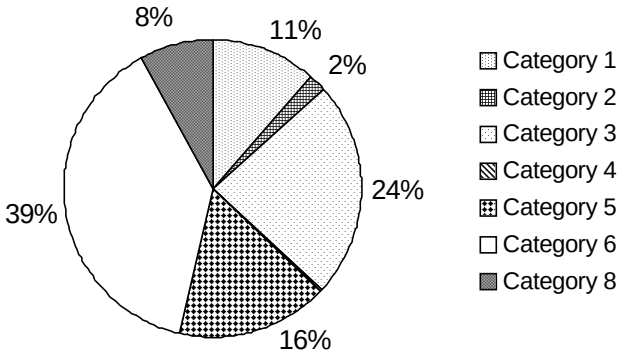
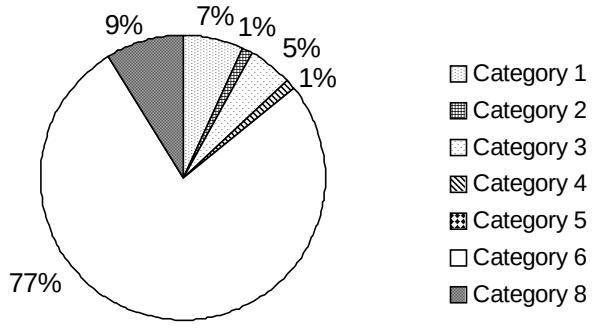


Figure 2-37. Alternative 6 management area allocations, Thunder Basin National Grassland.



Comparison Tables of Differences in Alternatives

The following tables show the differences among the alternatives by management area acres and by major revision topic using the key indicators identified in Chapter 1. The tables are not replacements for the full effects disclosure provided in Chapter 3 of the Draft Environmental Impact Statement. Chapter 3 should also be reviewed for more detailed and technical discussions about this summarized information. Acreages in the tables have been rounded to the nearest 10.

Dakota Prairie Grasslands

In the following table, acres are rounded to the nearest 10. Acres in parentheses are concurrent management area acres, meaning they overlap other management areas.

Table 2-7. Management Area Acres by Alternative for Dakota Prairie Grasslands

Management Area	Alt 1	Alt 2	DEIS Alt 3	FEIS Alt 3	Alt 4	Alt 5
Category 1						
1.2 Recommended for Wilderness	0	0	22,190	0	85,940	72,670
1.2a Suitable for Wilderness	0	0	0	41,520		
1.31 Backcountry Recreation Nonmotorized	42,990	0	121,950	69,050	103,840	81,490
1.5 National River System: Wild Rivers Recommended	0	0	0	0	840	0
TOTALS	**42,990**	**0**	**144,140**	**110,570**	**193,620**	**154,160**
Category 2						
2.1 Special Interest Areas	0	1,770	6,390	6,420	5,930	4,640
2.2 Research Natural Areas	840	840	20,030 (380)	20,120 (380)	9,040 (14,150)	1,070 (830)
2.4 American Indian Traditional Use Areas	6,250	6,280	6,280	6,280	6,280	6,280
TOTALS	**7,170**	**8,890**	**32,710**	**32,820**	**21,250**	**11,990**
Category 3						
3.4 National River System: Scenic Rivers Recommended	0	0	0	0	17,260 (520)	18,280 (350)
3.51 Bighorn Sheep	27,940	118,490 (350)	67,210 (51,510)	19,320 (51,130)	74,670 (49,600)	68,710 (50,090)
3.51a Bighorn Sheep – Non Federal Minerals	0	0	0	35,800		
3.63 Black-footed Ferret Reintroduction Habitat	0	0	0	29,180	16,220 (11,690)	0
3.64 Special Plant and Wildlife Habitat	2,730	1,010	1,010	2,270	1,010	16,400
3.65 Rangelands with Diverse, Natural- appearing Landscapes	0	0	329,300	383,120	295,350	0
3.66 Ecosystem Restoration: Tall Grass Prairie	0	0	53,050	63,760	55,150	0
TOTALS	**30,670**	**119,500**	**450,570**	**533,480**	**460,070**	**103,390**
Category 4						
4.22 Scenic Area, Vistas or Travel Corridors	0	0	22,450	23,570	0	2,960

Management Area	Alt 1	Alt 2	DEIS Alt 3	FEIS Alt 3	Alt 4	Alt 5
4.32 Dispersed Recreation: High use	0	0	9,550	7,990	1,710	13,880
4.4 National River System: Recreation Rivers Recommended	0	0	0	0	2,470 (60)	3,070
TOTALS	**0**	**0**	**32,000**	**31,560**	**4,180**	**19,910**
Category 5						
5.12 General Forest and Rangelands: Range Vegetation Emphasis	0	0	10,640	0	12,680	0
5.31a Experimental Forests (Denbigh)	800	800	800	800	800	800
5.31b Experimental Forests (Souris)	160	160	160	160	160	160
TOTALS	**960**	**960**	**11,600**	**960**	**13,640**	**960**
Category 6						
6.1 Rangeland with Broad Resource Emphasis	1,176,600	1,128,770	587,080	549,720	568,760	967,710
TOTALS	**1,176,600**	**1,128,770**	**587,080**	**549,720**	**568,760**	**967,710**

Table 2-8. Comparison of Alternatives by Major Revision Topic for Dakota Prairie Grasslands

Revision Topic/Key Indicators	Existing Condition	Alt 1	Alt 2	DEIS Alt 3	FEIS Alt 3	Alt 4	Alt 5
Community/Lifestyle Relationships							
Range-fed livestock grazing on NFS & Intermingled lands (Change From Existing Condition)		5%	5%	-13%	-9%	-34%	-24%
direct and indirect jobs (number)	1132	1190	1191	983	1033	747	865
direct and indirect income (millions of 1997 $)	$14.2	$15.0	$15.0	$12.5	$13.0	$9.4	$10.9
Oil / gas activities on NFS lands (Change From Existing Condition)	0%	0%	0%	-3%	-3%	-7%	-3%
direct and indirect jobs (number)	1,686	1,686	1,686	1,629	1,629	1,572	1,629
direct and indirect income (millions of 1997 $)	36.9	36.9	36.9	35.6	35.6	34.3	35.6
Effects on major use / interest segments	See Social Effects section in Chapter 3.						
Livestock Grazing							
Acres suitable rangeland	1,073,516	1,113,070	1,113,000	1,051,800	1,112,970	1,051,970	1,053,580
Estimated AUMs of livestock grazing	434,451	459,410	459,530	376,300	398,160	287,650	336,050
Thousands lbs. forage available to livestock	339,675	358,350	358,430	293,510	310,560	224,380	262,160
Acres average pasture size	425 – 1,150	NA	430 - 1,150	430 - 1,300	variable	430 - 1,500	540 - 1,300

Revision Topic/Key Indicators	Existing Condition	Alt 1	Alt 2	DEIS Alt 3	FEIS Alt 3	Alt 4	Alt 5
Livestock Grazing, cont.							
Average # water developments / sq. mile	2.5 – 3.5	NA	NA	2.2 - 3.4	NA	1.8 - 3.5	2.0 - 3.2
Oil and Gas							
Access with existing leasing decisions	992,870	992,870	992,870	992,870	992,870	992,870	992,870
Not currently authorized for leasing	16,230	16,230	0	0	26,200	0	0
Acres available for leasing	967,930	967,930	967,930	967,930	946,280	967,930	967,930
No Surface Occupancy (NSO)	209,520	209,520	185,600	281,860	204,380	298,610	237,960
Controlled Surface Use (CSU)	77,920	77,920	45,230	129,110	159,230	220,650	317,490
Paleontology CSU	742,180	742,180	782,330	686,070	715,700	669,320	729,970
Timing Limitation (TL)	133,630	133,630	185,650	170,720	202,990	176,040	176,610
Standard Lease Terms Only	589,840	589,840	569,800	412,590	407,430	389,050	306,320
Plant and Animal Control							
Acres prairie dog poisoning	Variable	No change	Increase	Decrease	Minimal poisoning	No poisoning	Decrease
Reduction in noxious weeds and invasive plants	No change	No change	Reduce by 15%	Contain or reduce	Contain or reduce	Reduce by 15%	Contain or reduce
Rangeland and Forest Health							
Predicted habitat suitability for management indicator species							
western prairie fringed orchid	Not estimated	Not estimated	Not estimated	Not estimated	Not estimated	Not estimated	Not estimated
plains sharp-tailed grouse	1-10%	15-30%	10-30%	0-60%	20-40%	35-65%	25-55%
greater prairie chicken	1-10%	20-30%	20-30%	50-60%	30-40%	60-70%	45-55%
sage grouse	Unknown	15-25%	10-20%	Maintain or increase	20-30%	45-55%	25-35%
black-tailed prairie dog (predicted total colony acreage)	2,600	2,600	$\leq$ 2,600	4,400 to 11,000	7,900 to 13,400	7,900 to 13,400	4,400 to 6,900
Endangered Species Act species, candidate species, other species at risk	See Biological Assessment and Evaluation						
Black-footed ferret areas (number and acres)	0 0	0 0	0 0	0 0	1 29,180	1 27,920	0 0
Desired grass / shrub structure (midpoint)							
percent area low	Unknown	15	15	15	15	15	15
percent area moderate	Unknown	65	67	49	60	39	52
percent area high	Unknown	20	17	36	26	46	33
Desired grass / shrub composition							
percent area early seral stage	48	10-15	20	10-15	12	10	10-15
percent area mid seral stage	42	NA	NA	NA	69	NA	NA
percent area late seral stage	10	NA	NA	NA	19	NA	NA
percent area mid / late seral stage	NA	85-90	80	85-90	NA	90	85-90

Revision Topic/Key Indicators	Existing Condition	Alt 1	Alt 2	DEIS Alt 3	FEIS Alt 3	Alt 4	Alt 5
Percent of riparian / woody draw areas regenerating	55	55	80	80	80	80	80
Percent of the suitable rangeland rested	0	0	0	5	5	20	14
Percent suitable rangelands bison-only grazing	0	0	0	0	0	5	0
Acres prescribed burning	2,000	3,600	2,900	8,500	6,500	21,000	17,000
Recreation and Travel Management							
Scenic Integrity Levels							
low acres	1,190,620	1,190,620	1,203,800	827,140	908,220	836,490	656,640
moderate acres	16,400	16,390	44,480	260,400	237,930	208,820	434,400
high acres	50,170	50,170	8,890	170,570	111,980	211,870	166,150
Recreation Opportunity Spectrum Classes							
urban acres	760	760	760	440	450	760	440
rural acres	276450	269730	276440	264380	266830	264920	254490
roaded modified acres	116720	116620	116620	112900	112920	114080	114350
roaded natural acres	501790	496730	500770	468090	477730	450710	470000
roaded natural nonmotorized acres	134090	135010	135220	137100	137460	137140	135170
semi-primitive motorized acres	226610	194580	226610	112060	133410	91720	127800
semi-primitive nonmotorized acres	1710	44710	1710	163170	129320	198810	155870
Capacity of developed sites / clusters of dispersed sites (persons at one time)	185	185	185	330 to 350	330 to 350	185	480 to 650
Trails miles	170	170	170	210	210	170	170
Dispersed Recreation							
change in fishing opportunity	No change	No change	No change	Add 1 pond	Add 1 pond	No change	Add 2-3 ponds
change in quality deer habitat	No change	No change	+	+	+	+	+
change in quality upland bird habitat	No change	No change	No change or reduction	++	++	+++	+-
acres prairie dog colonies closed to shooting yearlong	0	0	0	0	All ferret habitat on Little Missouri	All NFS lands	0
Acres allowing off-road motorized travel	1,257,470	1,257,360	1,257,360	0	0	0	2,800
Acres where no motorized use is allowed (except administrative use)	660	660	660	175,770	131,670	230,460	136,430
Acres with seasonal motorized travel restrictions (except administrative use)	0	0	0	118,010	61,290	74,340	59,770

Revision Topic/Key Indicators	Existing Condition	Alt 1	Alt 2	DEIS Alt 3	FEIS Alt 3	Alt 4	Alt 5
Recreation and Travel Management, cont.							
Acres with designated routes for motorized travel	0	0	0	964,270	1,064,900	953,260	1,058,960
Miles expected designated routes (does not restrict snowmobile use)	NA	NA	NA	1,830 to 2,810	1,830 to 2,810	1,670 to 2,345	2,185 to 3,110
Expected designated routes per sq. mile)	NA	NA	NA	1.0 to 2.5	1.0 to 2.5	1.0 to 2.0	1.0 to 4.25
Special Area Designations							
Recommended for Wilderness (number of areas and acres)	0	0	0	3 22,140	0 0	9 85,940	9 72,630
Recommended Wild / Scenic rivers							
Little Missouri River (Forest Service)							
miles wild classification	0	0	0	0	0	3.3	0
miles scenic classification	0	0	0	0	0	88.9	92.2
miles recreation classification	0	0	0	0	0	13.7	13.7
Little Missouri River (National Park)							
miles wild classification	0	0	0	14.9	14.9	14.9	0
miles scenic classification	0	0	0	6.8	5.8	10.8	21.7
miles recreation classification	0	0	0	0	0	1.5	0
Sheyenne River							
miles wild classification	0	0	0	0	0	0	0
miles scenic classification	0	0	0	0	0	0	0
miles recreation classification	0	0	0	0	0	0	10.2
Special Interest Areas (number and acres)	0	0	9 1,770	16 6,390	17 6,420	14 5,930	13 4,640
Research Natural Areas (number and acres)	3 840	3 840	3 840	12 20,410	11 20.500	13 23,190	7 1,900

Nebraska National Forest Units

For the following table, acres are rounded to nearest 10. Acres for Alternative 3a are the same as Alternative DEIS 3 unless shown otherwise a shown in italic (these are not additive). Acres in parentheses are concurrent management area acres, meaning they overlap other management area acres.

Table 2-9. Management Area Acres by Alternative for Nebraska National Forest Units.

Management Area	Alt 1	Alt 2	DEIS Alt 3 *Alt 3a*	FEIS Alt 3	Alt 4	Alt 5
Category 1						
1.1 Wilderness: Soldier Creek	7,810	7,810	7,810	7,810	7,810	7,810
1.2 Recommended for Wilderness	0	0	15,970 *0*	40,450	174,970	9,700
1.31 Backcountry Recreation Nonmotorized	0	9,700	14,000	13,860	1,830	126,660
1.31a Backcountry Recreation Nonmotorized: Pine Ridge Recreation Area	6,540	6,540	6,540	6,540	6,540	6,540
TOTALS	**14,350**	**24,050**	**44,320**	**68,660**	**191,850**	**150,720**

Management Area	Alt 1	Alt 2	DEIS Alt 3 *Alt 3a*	FEIS Alt 3	Alt 4	Alt 5
Category 2						
2.1 Special Interest Areas	70	1,060	54,490 *103,030*	26,870	2,820	55,190
2.2 Research Natural Areas	500	3,090	6,740 *1,560*	6,800	5,270 (4,060)	4,120
TOTALS	**570**	**4,150**	**61,230** ***104,590***	**33,670**	**8,090**	**59,310**
Category 3						
3.4 National River System: Scenic Rivers Recommended	0	0	0	0	1,790 (40)	0
3.51 Bighorn Sheep	0	0	6,590	5,650	5,950	5,950
3.63 Black-footed Ferret Reintroduction Habitat	8,050	61,510	109,140 *83,870*	104,030	109,930 (11,450)	86,780
3.64 Special Plant and Wildlife Habitat	54,340	16,640	107,290 *6,850*	104,840	15,580	20,140
3.66 Ecosystem Restoration	0	0	0	0	22,410	0
TOTALS	**62,390**	**78,150**	**223,020** ***90,720***	**214,520**	**155,200**	**112,870**
Category 4						
4.32 Dispersed Recreation: High Use	1,110	1,110	6,350 *5,250*	6,520	1,110	11,550
4.4 National River System: Recreation Rivers Recommended	0	0	0	0	140	1,790
TOTALS	**1,110**	**1,110**	**6,350** ***5,250***	**6,520**	**1,250**	**13,340**
Category 5						
5.12 General Forest and Rangelands: Range Vegetation Emphasis	0	22,410	27,000	27,940	27,000	0
5.13 Forest Products	0	31,990	0	0	0	0
TOTALS	**0**	**54,400**	**27,000**	**27,940**	**27,000**	**0**
Category 6						
6.1 Rangeland with Broad Resource Emphasis	977,180	891,380	691,300 *673,790*	701,750	670,130	716,980
TOTALS	**977,180**	**891,380**	**691,300** ***673,790***	**701,750**	**670,130**	**716,980**
Category 7						
7.1 Residential/Forest Intermix	0	2,600	2,610	2,610	2,610	2,610
TOTALS	**0**	**2,600**	**2,610**	**2,610**	**2,610**	**2,610**
Category 8						
8.3 Designated Utility Corridors: Existing and Potential	240	0	0	0	0	0
8.4 Mineral Production and Development	0	0	0	0	0	0
8.5 Nursery	80	70	70	70	20	70
8.6 Administrative Sites	390	230	230	230	190	230
TOTALS	**710**	**300**	**300**	**300**	**210**	**300**

Table 2-10. Comparison of Alternatives by Major Revision Topic for Nebraska National Forest Units.

Revision Topic/Key Indicators	Existing Condition	Alt 1	Alt 2	DEIS Alt 3 *Alt3a*	FEIS Alt 3	Alt 4	Alt 5
Community/Lifestyle Relationships							
Range-fed livestock grazing on NFS & Intermingled lands (percent change from Existing Condition)		-18%	-9%	-8% / -9%	-18% / -18%	-31%	-27%
direct and indirect jobs (number)	487	402	442	448 / 445	401 / 401	336	356
direct and indirect income (millions of 1997 $)	$7.9	$6.5	$7.2	$7.2 / $7.2	$6.5 / $6.5	$5.4	$5.7
Oil / gas activities on NFS lands (percent change from Existing Condition)	0%	0%	2%	2%	2%	2%	2%
direct and indirect jobs (number)	85	85	87	87	87	87	87
direct and indirect income (millions of 1997 $)	$2.3	$2.3	$2.4	$2.4	$2.4	$2.4	$2.4
Effects on major use / interest segments	See social effects section in Chapter 3.						
Livestock Grazing							
Acres suitable rangeland	1,000,013	967,850	969,190	1,005,550 *1,005,550*	969,860 *967,300*	969,060	967,480
Estimated AUMs of livestock grazing	363,885	301,271	333,120	333,800 *332,200*	301,064 *300,845*	247,673	263,450
Thousands lbs. forage available to livestock	283,835	234,990	259,870	260,360 *259,110*	234,830	193,185	205,488
Acres average pasture size	500 – 1,170	NA	500 - 1,170	620 - 1,170	Variable	680 - 1,290	680 - 1,290
Average # water developments / sq. mile	1.5 – 3.6	1 - 3	1 - 2.4	0.5 - 3.7	1.6 – 3.7	0.3 - 3.3	1 - 3.7
Oil and Gas							
Acres with existing leasing decisions	246,850	246,850	246,850	246,850	246,850	246,850	246,850
Acres available for leasing	246,850	246,850	246,850	246,850	246,850	246,850	246,850
Available with stipulations (some acres have more than one type of stipulation)	43,020	43,020	246,850	246,850	246,850	246,850	246,850
Not currently authorized for leasing	14,360	14,360	0	0	0	0	0
No Surface Occupancy (NSO)	21,720	21,720	6,600	6,600	6,600	19,610	19,170
Controlled Surface Use (CSU)	9,440	9,440	7,620	47,450	48,360	8,130	73,040
Paleontology CSU	0	0	232,640	192,820	191,910	219,100	154,630
Timing Limitation (TL:)	11,540	11,540	42,420	26,070	42,430	26,060	41,030
Standard Lease Terms Only	189,470	189,470	0	0	0	0	0

Revision Topic/Key Indicators	Existing Condition	Alt 1	Alt 2	DEIS Alt 3 *Alt3a*	FEIS Alt 3	Alt 4	Alt 5
Plant and Animal Control							
Acres prairie dog poisoning	Variable	No change	Increase	Decrease	Minimal poisoning	No poisoning	Decrease
Reduction in noxious weeds and invasive plants	Contain or reduce	No change	Reduce by 15%	Contain or reduce	Contain or reduce	Reduce by 15%	Contain or reduce
Rangeland and Forest Health							
Predicted habitat suitability for management indicator species							
plains sharp-tailed grouse	1-55%	15-55%	10-35%	10-50%	10-55%	30-80%	25-80%
greater prairie chicken	1-25%	30-55%	10-35%	40-50%	35-55%	45-80%	45-80%
sage grouse	Evaluation Incomplete	20-30%	10-20%	Maintain or increase	20-30%	45-55%	25-35%
black-tailed prairie dog (predicted total colony acreage)	6,400 to 7,850	6,400 to 7,850	$\leq$ 6,400	20,900 to 50,200	24,700 to 40,200	24,700 to 40,200	22,500 to 36,600
pygmy nuthatch	Not estimated	Not specified	10%	Not specified	10%	10%	10%
Endangered Species Act species, candidate species, other species at risk	See Biological Assessment and Evaluation						
Black-footed ferret areas (number and acres)	1 8,050	1 8,050	1 61,510	2 109,140	2 104,000	2 120,920	2 86,780
Desired grass / shrub structure (midpoint)							
percent low	Unknown	18	27	23	17	16	19
percent moderate	Unknown	64	56	42	50	37	39
percent high	Unknown	18	17	35	33	47	42
Desired grass / shrub composition							
percent early seral stage	13	10-15	20	10-15	9	10	10-15
percent early intermediate seral stage	22	NA	NA	NA	16	NA	NA
percent late intermediate seral stage	57	NA	NA	NA	46	NA	NA
percent late seral stage	8	NA	NA	NA	29	NA	NA
percent mid / late seral stage	NA	85-90	80	85-90	NA	90	85-90
Forest structure							
percent late successional	0	0	10	20-30	20	90	30-40
Percent riparian / woody draw regeneration	40	40	80	80	80	80	80
Acres / decade tree plantations maintained on Bessey Ranger District	NA	NA	Based on need	20,000	20,000	0	12,000 to 15,000
Percent rest	2	2	>1	5	6	13	11
Percent suitable rangeland bison-only grazing	0	0	0	0	0	5	0
Acres prescribed burning	500	0	0	1,800	1,750	9,000	3,500

Revision Topic/Key Indicators	Existing Condition	Alt 1	Alt 2	DEIS Alt 3 *Alt3a*	FEIS Alt 3	Alt 4	Alt 5
Recreation and Travel Management							
Scenic Integrity Levels							
very low	900	0	0	0	0	0	0
low acres	907,660	945,000	926750	784,290	785,520	773,210	326,540
moderate acres	27,100	55,320	60,330	112,250	111,750	58,860	472,720
high acres	65,720	1,060	14,100	104,820	104,080	169,290	201,340
Recreation Opportunity Spectrum Classes							
urban acres	240	320	310	310	310	260	310
rural acres	59280	92540	59210	59210	59210	58380	58150
roaded natural acres	625820	626350	633650	617860	603160	577580	597470
roaded natural nonmotorized acres	0	31130	3090	4300	4240	5310	4120
semi-primitive motorized acres	337180	291060	315820	309430	303400	235600	238220
semi-primitive nonmotorized acres	33380	14490	43820	64780	85570	178730	157610
Capacity of developed sites/clusters of dispersed sites (persons at one time)	2,280	2,280	2,280	2,360	2,360	2,280	2,360
Trails miles	120	120	120	150 - 160	150 - 160	120	170
Dispersed Recreation							
change in fishing opportunity	No change	No change	No Change	No change	No change	No change	Add 1
change in quality deer habitat	No change	No change	++	++	++	++	++
change in quality upland bird habitat	No change	No change	No change	++	++	+++	+++
acres prairie dog colonies closed to shooting yearlong	All ferret habitat on Buffalo Gap NG	All ferret habitat on Buffalo Gap NG	All ferret habitat on Buffalo Gap NG	All ferret habitat on Buffalo Gap NG	All ferret habitat on Buffalo Gap NG	All NFS lands	All ferret habitat on Buffalo Gap NG
Acres allowing off-road motorized travel	855,330	868,560	895,460	5,200	5,410	0	10,400
Acres where no motorized use is allowed (except administrative use)	55,793	17,820	18,820	81,060	77,770	214,020	180,910
Acres with seasonal motorized travel restrictions (except administrative use)	144,880	139,980	139,980	0	35,280	0	0
Acres with designated routes for motorized travel	0	30,900	3,000	971,000	937,540	843,240	865,950
Miles expected designated routes (does not restrict snowmobile use)	NA	NA	NA	1,450 to 3,040 *980 to 2,100*	1,450 to 3,040 *980 to 2,100*	1,264 to 1,977	1,970 to 2,710
Expected designated routes per sq. mile)	NA	NA	NA	0.5 to 2.0 *NA*	0.5 to 2.0 *NA*	0.5 to 1.75	1.5 to 2.0

Revision Topic/Key Indicators	Existing Condition	Alt 1	Alt 2	DEIS Alt 3 *Alt3a*	FEIS Alt 3	Alt 4	Alt 5
Special Area Designations							
Recommended for Wilderness (number of areas and acres)	0	0	0	1 15,970 *0*	1 40,450	1 174,970	1 9,700
Recommended Wild / Scenic rivers							
Cheyenne River							
miles wild classification	0	0	0	0	0	0	0
miles scenic classification	0	0	0	0	0	8.6	0
miles recreation classification	0	0	0	0	0	0	8.6
Rapid Creek							
miles wild classification	0	0	0	0	0	0	0
miles scenic classification	0	0	0	0	0	1.7	0
miles recreation classification	0	0	0	0	0	0	1.7
Middle Loup River							
miles wild classification	0	0	0	0	0	0	0
miles scenic classification	0	0	0	0	0	0	0
miles recreation classification	0	0	0	0	0	0.5	0
Special Interest Areas (number of areas and acres)	2 70	2 70	8 1,060	15 54,490 *17* *105,256*	14 26,870	12 2,820	18 55,190
Research Natural Areas (number of areas and acres)	1 500	1 500	3 3,090	6 8,300	6 6,800	9 9,330	4 4,120

Thunder Basin National Grassland

For the following table, acres are rounded to nearest 10. Acres in parentheses are concurrent management area acres, meaning they overlap other management area acres.

Table 2-11. Management Area Acres by Alternative for Thunder Basin National Grassland

Management Area	Alt 1	Alt 2	DEIS Alt 3	FEIS Alt 3	Alt 4	Alt 5
Category 1						
1.2 Recommended for Wilderness	0	0	14,850	0	59,280	15,260
1.31 Backcountry Recreation Nonmotorized	0	0	6,540	6,550	4,200	22,710
TOTALS	**0**	**0**	**21,390**	**6,550**	**63,480**	**37,970**
Category 2						
2.1 Special Interest Areas	0	6,590	12,570	26,780	6,590	6,590
2.2 Research Natural Areas	0	0	1,210	1,210	3,520	0
TOTALS	**0**	**6,590**	**13,780**	**27,990**	**10,110**	**6,590**

Management Area	Alt 1	Alt 2	DEIS Alt 3	FEIS Alt 3	Alt 4	Alt 5
Category 3						
3.63 Black-footed Ferret Reintroduction Habitat	33,750	41,230	45,470 (5,930)	47,890 (5,930)	112,510 (16,550)	27,850 (13,380)
3.65 Rangelands with Diverse, Natural-appearing Landscapes	0	0	116,560	83,430	17,920	0
3.68 Big Game Range	4,270	0	33,890	33,890	0	0
TOTALS	**38,020**	**41,230**	**195,930**	**165,210**	**130,430**	**27,850**
Category 4						
4.22 Scenic Area, Vistas or Travel Corridors	0	0	0	0	0	6,030
4.32 Dispersed Recreation: High Use	0	1,930	25,780	25,780	1,930	0
TOTALS	**0**	**1,930**	**25,780**	**25,780**	**1,930**	**6,030**
Category 5						
5.12 General Forest and Rangelands: Range Vegetation Emphasis	0	253,550	129,480	160,870	89,630	0
TOTALS	**0**	**253,550**	**129,480**	**160,870**	**89,630**	**0**
Category 6						
6.1 Rangeland with Broad Resource Emphasis	514,470	199,850	118,130	118,090	212,840	424,690
TOTALS	**514,470**	**199,850**	**118,130**	**118,090**	**212,840**	**424,690**
Category 8						
8.4 Mineral Production and Development	0	49,350	47,990	47,990	44,060	49,350
TOTALS	**0**	**49,350**	**47,990**	**47,990**	**44,060**	**49,350**

Table 2-12. Comparison of Alternatives by Major Revision Topic for Thunder Basin National Grassland

Revision Topic/Key Indicators	Existing Condition	Alt 1	Alt 2	DEIS Alt 3	FEIS Alt 3	Alt 4	Alt 5
Community/Lifestyle Relationships							
Range-fed livestock grazing on NFS & Intermingled lands (Percent change from Existing Condition)		13%	13%	7%	2%	-10%	5%
direct and indirect jobs	291	329	327	311	298	261	304
direct and indirect income (millions of 1997 $)	$6.2	$7.0	$6.9	$6.6	$6.3	$5.5	$6.4
Oil and gas activities on NFS lands (Percent Change From Existing Condition)	0%	0%	0%	0%	0%	-1%	0%
direct and indirect jobs	664	664	664	664	664	660	664
direct and indirect income (millions of 1997 $)	$24.4	$24.4	$24.4	$24.4	$24.4	$24.2	$24.4
Effects on major use/interest segments	See social effects section in Chapter 3.						

Revision Topic/Key Indicators	Existing Condition	Alt 1	Alt 2	DEIS Alt 3	FEIS Alt 3	Alt 4	Alt 5
Livestock Grazing							
Acres suitable rangeland	572,518	532,100	532,100	532,100	532,060	531,060	532,100
Estimated AUMs of livestock grazing	112,700	127,530	126,940	120,700	115,430	101,340	117,840
M pounds of forage available to livestock	87,900	99,470	99,010	94,150	88,140	79,040	91,910
Average pasture size in acres	1,640	NA	1,640	1,720	Variable	1,720	1,720
Average # water developments/sq. mile	2.1	NA	NA	1.9	Variable	1.9	2.1
Oil and Gas							
Acres with existing leasing decisions	1,158,760	1,158,760	1,158,760	1,158,760	1,158,760	1,158,760	1,158,760
Not currently authorized for leasing	0	0	0	0	246,850	0	0
acres available for leasing	1,158,760	1,158,760	1,158,760	1,158,760	911,910	1,158,760	1,158,760
Available with stipulations (some acres have more than one type of stipulation)	205,740	205,740	1,158,760	1,158,760	911,910	1,158,760	1,158,760
No Surface Occupancy (NSO)	7,580	7,580	130,940	152,570	120,340	190,360	162,180
Controlled Surface Use (CSU)	106,470	106,470	92,580	144,540	143,810	112,240	182,970
Paleontology CSU	0	0	928,600	855,220	641,260	839,532	807,020
Timing Limitation (TL)	110,270	110,270	278,490	308,750	245,760	308,130	266,180
Standard Lease Terms Only	953,020	953,020	0	0	0	0	0
Plant and Animal Control							
Acres of prairie dog poisoning	Variable	No change	Increase	Decrease	Minimal poisoning	None	Decrease
Reduction in noxious weeds and invasive plants	Contain or reduce	No change	Reduce by 15%	Contain or reduce	Contain or reduce	Reduce by 15%	Contain or reduce
Rangeland and Forest Health							
Predicted habitat suitability (where applicable) for management indicator species							
plains sharp-tailed grouse	Unknown	10-20%	10-20%	5-15%	30-40%	25-35%	15-25%
sage grouse	Evaluation Incomplete	10-20%	10-20%	Maintain or increase	30-40%	25-35%	15-25%
black-tailed prairie dog (predicted total colony acreage)	$\geq$ 5,400	$\geq$5,400	$\leq$5,400	23,300 to 59,700	29,900 to 47,500	29,900 to 47,500	25,100 to 39,900
Endangered Species Act species, candidate species, other species at risk	See Biological Assessment and Evaluation						
Black-footed ferret reintroduction areas (numbers and acres)	1 33,750	1 33,750	1 41,230	1 51,400	1 53,830	1 129,060	1 41,230
Desired grass/shrub structure (midpoint)							
percent low	Unknown	25	29	22	23	25	21
percent moderate	Unknown	57	55	49	43	37	57
percent high	Unknown	18	16	29	34	38	22

Revision Topic/Key Indicators	Existing Condition	Alt 1	Alt 2	DEIS Alt 3	FEIS Alt 3	Alt 4	Alt 5
Rangeland and Forest Health, cont.							
Desired grass/shrub composition							
percent early seral stage	37	10-15	20	10-15	18	10	10-15
percent early intermediate seral stage	17	NA	NA	NA	32	NA	NA
percent late intermediate seral stage	45	NA	NA	NA	33	NA	NA
percent late seral stage	1	NA	NA	NA	17	NA	NA
percent mid/late seral stage	NA	85-90	80	85-90	NA	90	85-90
Forest structure							
percent late successional	0	0	10	20-30	10	90	30-40
Percent riparian/woody draw regeneration	27	27	80	80	80	80	80
Percent rest	0	0	0	5	10	10	5
Percent suitable rangeland bison-only grazing	0	0	0	0	0	5	0
Acres prescribed burning	400	400	1,000	500	Variable	4,500	2,000
Recreation and Travel Management							
Scenic Integrity Levels							
very low	3,880	0	0	0	0	0	0
low acres	53,120	550,960	490,670	432,150	432,110	451,040	413,090
moderate acres	495,490	1,530	55,230	85,840	85,840	28,530	95,520
high acres	0	0	6,590	34,490	34,530	72,910	43,890
Recreation Opportunity Spectrum							
urban acres	13,250	13,250	49,780	48,130	48,130	44,680	49,790
rural acres	69,530	69,530	51,190	41,200	41,200	51,260	51,850
roaded natural acres	442,620	442,620	424,430	418,940	418,940	388,100	391,680
roaded natural nonmotorized acres	0	0	0	1,210	15,380	3,520	0
semi-primitive motorized acres	27,090	27,090	27,090	22,290	22,290	2,140	21,870
semi-primitive nonmotorized acres	0	0	0	20,720	6,550	62,800	37,300
Capacity of developed sites/clusters of dispersed sites (persons at one time)	5	5	5	80	80	5	200
Trail miles	0	0	0	Add some trails	Add some trails	0	100
Dispersed Recreation							
change in fishing opportunity	No change	No change	No change	No change	No change	No change	No change
change in quality deer habitat	No change	No change	++++	++++	++++	++++	++++
change in quality upland bird habitat	No change	No change	No change	+	+	++	+

Revision Topic/Key Indicators	Existing Condition	Alt 1	Alt 2	DEIS Alt 3	FEIS Alt 3	Alt 4	Alt 5
acres prairie dog colonies closed to shooting yearlong	0	0	All ferret habitat	All ferret habitat	All ferret habitat	All NFS lands	All ferret habitat
Acres allowing off-road motorized travel	552,510	552,510	552,510	0	0	0	0
Acres where no motorized use is allowed (except administrative use)	0	0	0	22,600	28,560	65,500	38,000
Acres with seasonal restrictions (except administrative use)	0	0	0	39,800	39,880	0	0
Acres with designated routes for motorized travel	0	0	0	495,100	484,070	492,000	519,500
Expected designated routes per sq. mile	NA	NA	NA	1.0 - 2.0	1.0 - 2.0	1.0 - 1.5	1.5 - 2.0
Expected miles of designated routes	NA	NA	NA	970 to 1,550	970 to 1,550	960 to 1,150	1,220 to 1,620
Special Area Designations							
Recommended for Wilderness (number and acres)	0 0	0 0	0 0	1 14,850	0 0	6 59,280	1 15,260
Special Interest Areas (number and acres)	0 0	0 0	3 6,590	4 12,570	6 26,780	3 6,590	3 6,590
Research Natural Areas (number and acres)	0 0	0 0	0 0	2 1,230	2 1,220	4 2,880	0 0