

TABLE OF CONTENTS

COMMENTS AND RESPONSES ON THE FINAL REVISED PLANS AND ENVIRONMENTAL IMPACT STATEMENT	104
Community and Lifestyle Relationships Summary	104
Livestock Grazing Summary	105
Oil, Gas, and Minerals Summary.....	106
Plant and Animal Damage Control Summary	106
Rangeland and Forest Health Summary	107
Recreation and Travel Management Summary.....	109
Special Area Designations Summary.....	110
Land Use Summary.....	110
Planning and Regulations Summary.....	111
Water Resources Summary.....	111
Fees Summary.....	112
Form Letters Summary	112
Community and Lifestyle Relationships.....	126
Ecological Management.....	142
Landscape	156
Land Use	156
Livestock Grazing.....	158
Oil and Gas	188
Planning	197
Plant and Animal Damage Control.....	218
Rangeland and Forest Health.....	222
Recreation and Travel Management	277
Soil	282
Special Designations.....	283
Water.....	302

Comments and Responses on the Final Revised Plans and Environmental Impact Statement

This section of the addendum includes comments received during the 6-month comment period (from July 2001 through January 2002) initiated after the release of the Land and Resource Management Plans and the Final Environmental Impact Statement. The Forest Service received approximately 48,000 comment letters and postcards during this second comment period. Of those, 98% were form letters or postcards.

The public comment documents were read and analyzed. Individual statements within the comments were separated into major revision topics and other topics. Many of comments reiterated opinions, feelings, and observations expressed during the comment period between release of the draft and final documents. Those sentiments are summarized in the following section under major and sub-topic headings.

Some of the comments contained new and/or substantive issues not expressed during the initial comment period. Some pointed out errors in the Land and Resource Management Plans, the Final Environmental Impact Statement, and the appendices. The Forest Service responded to these comments. The comments and their responses begin on page 123 following the summaries. The errors are corrected in the Errata.

Community and Lifestyle Relationships Summary

Affected Lifestyles

Many commentors stated that livestock ranching is an important component of their lifestyle and has been, in some cases, for several generations in their families. Some respondents asked that their way of live be safeguarded so their children would have opportunities similar to those they had experienced. Some people stressed the contribution of livestock grazing to local communities and businesses. The Forest Service was encouraged to keep personnel in communities near the public lands and make decisions locally. Some commentors suggested that expanding recreation opportunities on public lands might provide additional jobs and improve the quality of life for local citizens.

Economic Viability

Respondents stressed the contributions of livestock grazing to local economic viability. The Forest Service was encouraged to explore the relationships of these public lands to local economies and to use accurate data for economic effects and benefits. Respondents wanted management plan decisions to result in a stable and diverse economic base. The Forest Service was also asked to develop rural economic partnerships. Some people stated that recreation and tourism could be an economic boost to their businesses if promoted.

Public Finances - County Revenues and Payments in Lieu of Taxes

Comments on this subject dealt with the economic efficiency of public land management and the loss of property taxes to local tax rolls because of federal ownership. The merits of

livestock grazing, energy development, and tourism were discussed as revenue sources.

Valuing Natural Resources

Many arguments were presented regarding the importance of one management approach or emphasis over another. Many people suggested that these lands should benefit all Americans. Some people stated that Forest Service management favors extractive industries, such as grazing, energy development, and logging. Some commentors asked that natural resource protection and nonconsumptive uses be given stronger consideration in Forest Service management to benefit more Americans. Some also asked that there be no development on the National Grasslands.

Livestock Grazing Summary

Grazing in Principle

Many comments on this topic favored a continued program of livestock grazing. Some comments referred to the Bankhead-Jones Farm Tenant Act as the foundation for their position. Other commentors were concerned about grazing levels that compromise other resource values, such as wildlife habitat and recreation settings. Some people thought it came down to a fairness issue. In their view, livestock grazing is a dominate use and other uses are not given equal consideration on the National Forest System lands. Some commentors proposed management practices to reduce negative livestock grazing effects.

Grazing Suitability/Capacity

Comments urged either increases or decreases in livestock grazing levels. Some comments addressed specific grazing management practices, such as grazing warm-season grasses or woody draws.

Desired Future Condition

Many commentors debated the benefits or negative effects of livestock grazing on rangeland health. Some people asked how healthy rangeland is defined and determined. Other people offered their own definitions.

Grazing Capacity

Under this topic, grazing levels were discussed, both in principle and specific terms. Some respondents recommended stocking livestock at less than full capacity to allow some management flexibility. In some cases, commentors encouraged maintaining the current levels. Other people thought the Forest Service was overly conservative in determining grazing capacity. The methods for calculating grazing capacity were also questioned.

Grazing Systems

Most commentors supported grazing systems that rest pastures to some degree. Some people believe too much rest can lead to old, dead grass that isn't good for cattle or wildlife. Some commentors suggested that rested pastures can increase grassland diversity. A few respondents also observed that all pastures are not the same, and grazing systems should be

based on site-specific conditions. Some recommended that there should be financial measure for smaller pastures.

Grazing Developments

Some people wrote that fences and other artificial structures on the grassland diminish recreation experiences and alter wildlife habitat. Some commentators stated that fence gates are difficult to open, and cattle guards might be an improvement over gates. Fencing was endorsed as a way to protect sensitive areas. Designing structural improvements to benefit wildlife or minimize negative impacts was mentioned, as was using wells to help distribute cattle. Plastic water pipe was proposed as a more efficient way to move water. There were also comments regarding specific sites and situations.

Oil, Gas, and Minerals Summary

It was suggested that if the nation is to remain sovereign, it must mine its minerals rather than depend on foreign sources. Commentors also discussed their environmental concerns with mineral production. Most commentors wanted more protective measures in environmentally sensitive areas. Some people suggested that roadless areas and important wildlife and recreation areas should not be leased. Some respondents stated that current oil and gas stipulations are almost too burdensome to make it worth pursuing development.

Plant and Animal Damage Control Summary

Noxious Weeds

While most people agreed that noxious weeds are a problem, the suggestions for specific species and treatments varied. Some people encouraged biological treatments, and others wanted all methods considered. There was some concern about indiscriminate and widespread use of pesticides and herbicides. Buck thorn, leafy spurge, brome, Canada thistle, and spotted knapweed were among problem species mentioned. Some people contend that noxious weeds crowd out endangered species of plants and that nesting birds do not rest where noxious weeds are so thick.

Prairie Dogs

Two divergent themes emerged from comments; control prairie dogs, and stop killing prairie dogs. Some people suggested that prairie dogs and livestock grazing can be compatible. Some people contend that the chemical agents used to poison prairie dogs are carried on through the system and can poison other nontargeted animals. Other commentors were concerned about negative effects on species associated with prairie dogs. Some respondents stated that prairie dogs are agricultural pests whose populations expand rapidly and spread out onto private land.

Predators

Some people think that no predator control should occur. Some commentors proposed restoring native predators. It was suggested that predator control may be needed for the survival of some rare species. The necessity of using predator control to ensure the survival

of some rare species was mentioned. The Forest Service was also urged to consider all practices that would control predators. Some respondents offered their ideas on methods to control predators.

Rangeland and Forest Health Summary

Biodiversity

There were many philosophical views expressed on this topic. In general, numerous comments encouraged protection and restoration of native biological communities. More specific comments questioned the definition of biodiversity, made the points that species come and go naturally over time, and advocated considering human activities in developing a carrying capacity for wildlife. A few commentors thought game species management should be addressed separately, rather than be included in this topic.

Threatened, Endangered and Sensitive Species

Most comments encouraged restoration and preservation of habitats for threatened, endangered, sensitive, and rare species. Among species mentioned were prairie chickens, grouse, prairie dogs, swift fox, mountain plover, burrowing owls, ferruginous hawks, black-footed ferrets, wolves, western prairie-fringed orchids, bison, bats, birds, and butterflies. Other commentors stated that the government overreacts to endangered species concerns. Some people commented that species listings lead to limits on grazing, energy development, and recreation activities.

Management Indicator Species

There were many questions about how management indicator species are selected and used. Prairie dogs and game animals were suggested as management indicator species.

General Wildlife and Fisheries

Some commentors encouraged the Forest Service to protect wildlife habitats. Some commentors reported that wildlife populations have increased, and populations of some species may have exceeded the land's carrying capacity. Some respondents stated that livestock operators and ranches should be recognized for the contributions they make to wildlife habitat.

Forest and Grassland Health

Commentors requested that native plant species and communities be restored and protected. There is concern over the influence of nonnative plant species and noxious weeds. The effects of practices, such as burning, haying, and grazing, on vegetation were discussed.

Prairie Dogs

Most comments were in support of prairie dogs and the ecosystems associated with them. Respondents often described prairie dogs as a "keystone" species, influencing the success of other species, such as the black-footed ferret. Opportunity for recreational shooting was

Addendum

also offered as a reason for maintaining prairie dog colonies. Most comments requested protection and expansion of prairie dog colonies. The Forest Service was requested to restore prairie dog towns until they occupy 5-20 percent of their suitable habitat on the national grasslands.

A few comments did question the value of prairie dogs and complained about prairie dogs moving off the public land on to adjacent lands. Some people believe the Forest Service doesn't have accurate data on prairie dogs and are underestimating the current populations. (Comments on prairie dog control are under the Plant and Animal Damage Control topic.)

Fire Management

Most comments supported the use of controlled or prescribed fire as a way to improve vegetation conditions. Some people questioned the benefits of using fire in woody draws or in areas prone to erosion. There was also concern about the fire risk in tall grass.

Bison

Many respondents asked that bison be restored to the Northern Great Plains. Some people see bison as a symbol of American Indian heritage and as a positive natural biological contributor better suited to prairie ecosystems than cattle. To promote their request for bison, some respondents asked the Forest Service to provide grazing permittees with incentives to switch from grazing cattle to bison. Some commentors responded that the Forest Service should not treat bison as livestock; some commented that they should be treated as livestock.

Birds

Commentors requested that management consider the habitat needs of prairie chickens, grouse, burrowing owls, wild turkeys, and songbirds. A few commentors questioned the habitat requirements of bird species.

Recreation and Travel Management Summary

Recreation Use and Values

Many people expressed appreciation for the recreation opportunities offered on the national grasslands and forests and encouraged more consideration for recreation users. Some commentors requested recreation investments, such as campgrounds, picnic sites, trails, interpretive stations, signs, brochures, and accessible gates. Other commentors value the primitive nature of these public lands and discouraged additional developments. The conflicts and concerns associated with increasing public recreation use were evident in many comments. Some respondents think that the Forest Service puts recreation second to grazing in their management priorities. Some people commented that putting grazing ahead of recreation is the correct management approach. Other people insist recreation and grazing are compatible, and neither should succeed at the expense of the other. Some people commented to not limit or restrict some recreation activities, such as rock hunting.

Motorized Use

Two themes surfaced in these comments. Many people maintained that the need to address the negative effects of uncontrolled off-road travel surpass the rights of people to pursue those activities. Many of the same people promote more control and enforcement of restrictions. Off highway vehicle (OHV) enthusiasts emphasized that the national

Addendum

grasslands and forests are among the few, if not the only, places for them to ride. OHV organizations believe they encourage responsible riding and request that the Forest Service work with them to address off-road travel issues. They suggested designating specific trails and areas for OHV activities to reduce impacts on other recreation users. Some people would entertain the idea of a user fee if it would ensure continued opportunities. Other comments under this topic dealt with specific sites and situations.

Hunting and Fishing

Several subjects were addressed under this topic. Some hunting comments concerned wildlife habitat requirements; some discussed access for hunters; some addressed hunter trespass on private land. There were comments that both endorsed and opposed recreational prairie dog shooting. Some people think the number of hunters is reducing the hunting experience. Walk-in hunting areas were proposed as a method of improving hunting experiences for some. Interest was also expressed in creating or renovating ponds and improving stream and river segments to enhance sport fishing.

Access - Roads

Some commentors requested no additional road construction; some requested more road maintenance. A few people requested either more access or less access during hunting season. The desire for public access to public lands, where access is restricted by the lack of rights-of-way, was also expressed. Some requested access for range maintenance.

Landscape and Visual Resources

The comments on this topic supported a system of visual standards, preferably simple.

Special Area Designations Summary

Roadless/Wilderness Areas

Many commentors requested that roadless areas be recommended to Congress for Wilderness or that roadless areas be protected in some fashion to maintain their undeveloped character. Specific proposals were made in some comments. Commentors requested no additional Wilderness. Some wanted motorized access maintained or expanded. There were questions about the effect of Wilderness designation on county road rights-of-way, if a county chose to assert that right in the future.

Wild and Scenic Rivers

While there was some support for Wild and Scenic River designations in principle and for the Little Missouri River specifically, most comments opposed designations for the Little Missouri River in North Dakota and the Middle Loup River in Nebraska. There were also questions about the effects and implications of federal designation and concern over infringement on private property rights.

Land Use Summary

Land Exchanges

Most people who addressed this topic favored land exchanges. Among the reasons stated was the following: land exchanges can consolidate small, isolated public tracts, making it easier for the public to distinguish private from public lands. Some people also stated land exchanges improve hunting opportunities, prairie dog management, and overall management efficiency.

Private Property Rights

Foremost among the comments was the concern over infringement of private property rights related to Wild and Scenic River designation. As expressed in the comments, condemnation of private land should not be considered. It was suggested that if purchases are made, they should involve only willing sellers. There were also concerns over public trespass on private land.

Planning and Regulations Summary

Planning Principles

Many different subjects fell under this topic. Some comments offered support for commercial activities. Some people requested little or no change in management. Some people implied their desired management emphasis was more virtuous because it would not benefit them financially. The debate over local interests versus national interests carried through some comments. Multiple use was advocated as a management principle by many. Some respondents promoted their particular use or interest, whether commercial enterprises or biological concerns. Flexible, site-specific management practices were suggested by some people. Several comments were in support of the preferred alternative. Commentors requested monitoring objectives and measurable benchmarks be clearly stated.

Alternatives

Most commentors offered their opinions on the preliminary alternatives. Some people questioned the need for change in the current management. Some shared their philosophical views on management emphases. Some people asked for more detail on the alternatives. The Forest Service was encouraged to build bison grazing options into the management alternatives. Commentors favored Alternatives 1, 2, 4, and 5.

Water Resources Summary

Water Quality and Yield

Comments on this topic concerned quality of water needed for a variety of uses. Respondents discussed sources of pollution, and some requested that these issues be dealt with in management direction. It was suggested that fall haying might be more beneficial than grazing and less of a sediment generator.

Riparian Areas and Wetlands

Most respondents requested that riparian areas be protected. Some commentors cited livestock grazing as a source of concern for riparian conditions and suggested methods to reduce impacts. Others asked the Forest Service what measures were planned to protect

riparian areas. The comments on wetlands asked that important wetlands be identified and protected.

Fees Summary

Recreation Fees

Some commentors promoted recreation-user fees to either ensure the continued availability of the public lands for their activity or correct a perceived inequity among those who benefit from the public lands, whether commodity users or recreationists. Commentors felt that a fee should be charged for repairs when destruction had occurred.

Form Letters Summary

Postcard

Content: I support the conservation and restoration of wildlife habitat on our National Grasslands, and ask you to manage our National Grasslands for these values. I urge you to include measurable benchmarks for the restoration of riparian and grassland health in the new plan, and to recommend that suitable roadless areas be designated as Wilderness. We need to ensure a place on these public lands for wildlife and recreation.

Postcard (132)

Content: The National Grasslands contain the last remaining undisturbed wild places in the prairies. These places still retain the character of the Plains as they were known by Native American people. However, these wild places are now threatened by oil, coal, and gas development, off-road vehicle use, and railroad expansion. I request that the Forest Service ensure the protection of these areas as wilderness for future generations.

Postcard

Content: Our National Grasslands are public lands and belong to all Americans. The Forest Service is currently revising its management plans for the National Grasslands in the Northern Plains. The new management plan should include:

- ▶ Protecting the last remaining roadless lands on the National Grasslands as wilderness.
- ▶ Constructing hiking and horseback riding trails.
- ▶ Protecting and enhancing wildlife habitat for animals such as elk, prairie dogs and bighorn sheep.
- ▶ Designating environmentally sensitive lands of-limits to oil and gas development.
- ▶ Wilderness, wildlife and recreation have a place in our National Grasslands and should be protected.

Letter (28)

Content: The should restore the number of eligible acres designated as Special Interest Areas (significant botanical, cultural, geological and paleontological sites) to the original

54,490 acres in the earlier 1999 draft EIS.

The plan should restore the bighorn sheep designated habitat to the 6,590 acres in the 1999 draft.

Prairie dog expansion and restoration on the Fort Pierre National Grasslands should not be limited by the success of land exchange programs.

The plan should provide benchmarks to measure the progress in restoring woody draws and riparian areas.

The plan should provide strong, measurable standards for determining adverse wildlife impacts caused by oil and gas development.

The plan should provide benchmarks to measure progress toward the restoration of grassland health and prevent overgrazing.

The plan should not treat buffalo as livestock and should manage buffalo as wildlife.

The plan should recommend to Congress appropriate river segments on National Forest System lands for consideration under the Wild and Scenic River System.

If we don't save something for the future, there won't be a future. Thank you for considering the above.

Letter

Content: Here are five provisions that should be included in the revised plans, to ensure the continuation of the wonderful natural wealth of these areas:

- ▶ Restore riverbanks, riverbeds, and woody draws to a condition that can once again support native wildlife. These areas are of critical importance.
- ▶ Improve habitat to insure the long-term survival of species such as sharp-tailed grouse, black tailed prairie dogs, blowout penstemons, burrowing owls, prairie chickens, prairie-fringed orchids, and mountain plover.
- ▶ Provide at least four viable reintroduction sites for black-footed ferrets. These are the most endangered mammals in North America, not because of hunting pressure, but simply because of habitat loss.
- ▶ Recommended Wilderness designation for all road less areas to keep habitat intact.
- ▶ Allocate forage for elk, mule deer and wild bison. Prohibit grazing by domesticated bison on public land to move this impediment to the reintroduction of wild bison.

Letter

Content: I applaud the Forest Service's steps toward management of our National Grasslands that shifts emphasis toward habitat management and away from the livestock forage management emphasis of the past. I am happy to read that the New Plan is much more responsive toward wildlife resources, however, I feel that the plan falls short in some key areas. Specifically, the plan:

- ▶ Does not recommend that any of the roadless areas in Wyoming and North Dakota be designated as Wilderness. Wilderness designation, by keeping these areas free

Addendum

from roads, oil and gas drilling, and motorized vehicles, would help maintain productive wildlife habitat and prevent habitat fragmentation.

- ▶ Does not provide measurable standards for determining impacts on wildlife from oil and gas development.
- ▶ Does not provide measurable standards to monitor the progress of woody draw and riparian area restoration.
- ▶ Does not provide benchmarks to measure progress toward grassland health and prevent habitat deterioration.

Conservation scientists and wildlife biologists are finding that our nations prairie grasslands in Nebraska, Wyoming, North Dakota and South Dakota are one of the fastest declining ecosystems in the world. For this reason they have suggested that the prairies are today's highest conservation priority. I strongly suggest that the New Management Plan be modified to accommodate and include the above listed deficiencies.

Letter (91)

Content: I urge the Forest Service to recommend that all 266,000 currently-roadless acres in the Little Missouri Grasslands be made part of the National Wilderness Preservation System.

Wildlife habitat is more important than off-road vehicle use, which now threatens this area.

Any oil that might be produced in this area could also be obtained by miniscule improvements in vehicle efficiency. Furthermore, draining this country's remaining oil reserves will, in the long run, threaten our national security by making us even more dependent on foreign sources.

Letter (32)

Content: Please take into consideration the following points. I would like to see addressed in the new Northern Great Plains National Grasslands Final Environmental Impact Statement (affecting the Dakotas).

- ▶ Increase bighorn sheep designated habitat to the original 67,210 acres in the earlier 1999 draft.
- ▶ Wilderness should be designated for key roadless areas (22,190 acres which were recommended in the earlier 1999 draft of the EIS).
- ▶ The plan does not go far enough to ensure adequate protection against extensive new oil and gas wells in roadless areas.
- ▶ The plan should ensure adequate protections for the Sheyenne National Grassland: one of America's last remaining Tallgrass prairies.
- ▶ The plan should provide strong, measurable standards for the restoration of woody draws and riparian areas.
- ▶ The plan should treat bison as wildlife, not livestock.

Postcard (87)

Content: Dear Senators and Congressman:

America is at a crossroads. The decisions we make today will affect us now and our children tomorrow.

Addendum

That's why we're asking you to use your voice to urge President Bush and his administration to make wise choices.

- ▶ Urge him to set air quality standards to protect our children, not let industries choose which standards they want to meet.
- ▶ Urge him to pursue real solutions to our energy needs- such as making our cars go farther on a gallon of gas. Don't destroy our coast or the Arctic Wildlife Refuge when drilling can't provide either a quick fix or a long-term solution to our energy needs.
- ▶ Urge him to protect what's still wild and natural in our National Forests, not open these last remaining areas to logging and industry development.

We can have clean energy and a healthy environment. But we must choose wisely - for our families, for our future.

Postcard (917)

Content: Dear Grasslands Supervisor:

In the early 1970's, a half million acres of North Dakota's national grasslands were undisturbed wilderness. Today, more than half of that acreage has been developed into oilfields, which continue to threaten the badlands' ecosystems and their wildlife.

It's time to protect the remaining, undisturbed roadless areas of North Dakota's national grasslands. I urge the Forest Service to recommend these North Dakota treasures for wilderness protection in the Final Grasslands Management Plan.

Protect North Dakota's grasslands - for our families, for our future.

Postcard (1,979)

Content: Dear Grasslands Supervisor:

In the early 1970's, a half million acres of North Dakota's National Grasslands were undisturbed wilderness. Today, over half of the acreage has been impacted by oil development, which continues to threaten the Badlands' ecosystems and their wildlife.

It's time to protect the remaining, undisturbed roadless areas of North Dakota's national Grasslands. I urge the Forest Service to recommend these North Dakota treasures for wilderness protection in the Final Grasslands Management Plan.

I also ask that the National Park Service recommend the Little Missouri River for Wild and Scenic designation. This graceful prairie river flows through the heart of the Badlands and deserves national recognition and protection.

Protect North Dakota's Grasslands; for our families, for our future.

Postcard (58)

Content: Dear Grasslands Supervisor,

It is time that recreation and wildlife are recognized as important resources on our National Grasslands. The National Grasslands of North Dakota contain some of the most important wild life habitat left in the prairie region. The land needs to be managed to conserve these values for present and future generations to enjoy. I urge you to protect the habitat and hunting opportunities on the National Grasslands and to recommend that the last remaining wild lands on the National Grasslands be designated "Roadless".

Postcard (2,053)

Content: It is time that recreation and wildlife are recognized as important resources on our national Grasslands. The National Grasslands of North Dakota contain some of the most important wildlife habitat left in the prairie region. The land needs to be managed to conserve these values for present and future generations to enjoy. I urge you to protect the habitat and hunting opportunities on the National Grasslands and to recommend that the last remaining wild lands on the National Grasslands be designated Wilderness.

Postcard (46)

Content: Dear Senators and Congressman:

More than half of our National Forest land has been damaged by logging, roadbuilding and other development. The remaining roadless areas in our National Forests are sources of clean drinking water, quality wildlife habitat, and special places to hike, hunt, camp, and fish. I strongly support the Forest Service's Roadless Area Conservation Rule, which would protect 58.5 million acres of the last wild roadless areas in our National Forests.

Unfortunately, the Forest Service is now considering weakening the rule to allow logging and roadbuilding in our wild forests. Please urge the administration to let the popular Roadless Area conservation Rule stand as it is written in the January 2001 Final Rule. We need to protect and restore all of our National Forests, including Alaska's Tongass, and reject all attempts to weaken roadless area protection

Postcard (54)

Content: Dear U.S. Forest Service:

Our National Forests should be protected from logging and other destructive activities. I applaud the president's initiative and urge you to protect at least 60 million acres of remaining roadless wildlands in our National Forests.

I support a final roadless protection policy that:

- ▶ Immediately protects all National Forest roadless areas of more than 1,000 acres and smaller areas of special biological importance;
- ▶ Includes the Tongass and Chugach National Forests and areas not previously inventoried as roadless; and
- ▶ Protects all roadless areas from new road construction, logging, mining, off-road vehicle use, oil and gas development and other harmful activities.

Addendum

The Forest Service must seize this opportunity to protect wild America and our children's inheritance. Please count this as my formal comment on the Draft Environmental Impact Statement on the roadless initiative

Postcard (1,954)

Content: Dear Supervisor Bright:

South Dakota's national grasslands present the last and best opportunity to preserve wild areas within the prairie region of the United States.

It's time to protect the remaining, undisturbed wild areas of South Dakota's public grasslands. I urge the Forest Service to recommend these South Dakota treasures for wilderness designation in the final Grasslands Management Plan.

Please help protect South Dakota's wild places.

Postcard, Letter or Email (26,555)

Content: Dear National Grassland Planning Team,

I urge you to recommend all of the last remaining roadless areas in the National Grasslands of the northern plains be protected as wilderness. Most of our native prairie has been converted to farmland, cities and towns as well as oil fields. Less than 1% of the prairie still qualifies for wilderness and almost all of these areas are located on public lands, our national grasslands.

We urge you to protect these areas as wilderness for our families and for our future. With wilderness designation ranchers will continue to be allowed to graze these areas, but they would be protected from road building, oil and gas development, off-road vehicle use, and other destructive activities.

Postcard (611)

Content: Dear Planning Team Leader:

- ▶ The last remaining roadless areas left on the National Grasslands should be recommended for wilderness, thus protecting them from oil and gas development. Only two areas in South Dakota were recommended for wilderness. Most disturbing was the Forest Service removed its recommendation from 3 areas in North Dakota and the Cow Creek Buttes area in Wyoming.
- ▶ The Little Missouri and Cheyenne Rivers need to be recommended for Wild and Scenic designation. Their recreational values are currently unprotected.
- ▶ Areas considered key to the long-term survival of bighorn sheep in North Dakota have been opened to Oil and gas development has occurred in the past have led to decline and extirpation of bighorn sheep.

I appreciate this opportunity to comment.

Postcard or Letter (1,744)

Content: Dear US Forest Service:

I support the conservation and restoration of wildlife habitat on our National Grasslands. Please manage our National Grasslands for their wildlife and recreational opportunities. I urge you to restore the designated bighorn sheep habitat to 67,210 acres and to recommend that suitable roadless areas be designated as Wilderness. We need to ensure a place on these public lands for wildlife and recreation.

Postcard, Letter or Email (915)

Content: Dear U.S. Forest Service,

Nearly 200 years ago, Lewis and Clark found vast prairies, amber ways of grasslands, wildflowers, and wildlife all across America's Northern Plains. Today, only pieces of that wild prairie landscape are left. The National Grasslands Management Plan should protect these rare areas in our National Grasslands.

All remaining undisturbed prairies, roadless areas in the National Grasslands, should be recommended for wilderness protection in the Management Plan. The Little Missouri and Cheyenne Rivers should be recommended for Wild and Scenic River protection. Remaining wild prairie habitats of bighorn sheep should be off-limits to new oil and gas drilling because these habitats and bighorn sheep are now so rare.

Postcard, Letter or Email (30)

Content: Dear U.S. Forest Service Don Bright,

Please take into consideration the following points I would like to see addressed in the new Northern Great Plains National Grasslands Final Environmental Impact Statement (affecting Wyoming).

- ▶ The plan should recommend wilderness designation for key roadless areas (14,850 acres were recommended in the 1999 draft EIS).
- ▶ The plan should not treat buffalo as livestock and should manage buffalo as wildlife.
- ▶ The plan should provide strong, measurable standards for determining adverse wildlife impacts caused by oil and gas development.

The plan should provide benchmarks to measure progress in restoring woody draws and riparian areas.

Letter or Email (8,461)

Content: Dear Northern Great Plains Planning Team,

I write to urge you to increase protection for native wildlife and habitat on our national grasslands. Specifically, I ask that you

- ▶ Manage for healthy populations of all native species on all national grasslands. Priority should be given to adequately protecting imperiled species, such as the

Addendum

swift fox, mountain plover, and ferruginous hawk, and to restoring native species such as the black-footed ferret and prairie dog.

- ▶ Eliminate prairie dog poisoning and shooting and take other steps in order to conserve and restore prairie dog towns to a minimum of 10 percent of suitable habitat on our national grasslands.
- ▶ Rest one-third of national grasslands from livestock grazing annually, to allow the growth of adequate amounts of taller grasses necessary for several wildlife species. Also, keep livestock away from streams and wetlands.
- ▶ Restore wild bison on our national grasslands.
- ▶ Reintroduce black-footed ferrets into all nine ferret reintroduction sites identified by the U.S. Fish and Wildlife Service and make the reintroduction sites as large as possible.
- ▶ Prohibit oil and gas development where it is incompatible with other uses, such as proposed wilderness areas. Disallow placement of fixed structures for all remaining roadless areas, special interest areas, natural research areas, and other important wildlife and recreation areas.
- ▶ Propose the remaining 574,000 acres of roadless grassland areas for wilderness designation.

Protecting our national grasslands will be an important step in restoring the Northern High Plains ecosystem and can serve as the foundation of a stable economy in the region.

Letter or Email (74)

Content: Dear NGP Planning Assistant & FOIA Coordinator Carla Loop,

I'm asking you to please protect the future of wildlife on our National Grasslands for the following reasons. Please include the following in any Northern Great Plains Management Plan revisions.

- ▶ Allocate forage for elk, mule deer and wild bison so that these species can again find a home on our National Grasslands.
- ▶ Provide improved habitat and management prescriptions to ensure the long term survival of at-risk native prairie grasslands species such as sharp-tailed grouse, black tailed prairie dogs, blowout penstemons, burrowing owls, prairie chickens, prairie-fringed orchids, and mountain plover.
- ▶ Provide at least four viable reintroduction sites for black-footed ferrets, the most endangered mammal in North America.
- ▶ Restore riparian areas and woody draws to a condition that can support native wildlife.
- ▶ Manage Sheyenne National Grassland, home to the endangered prairie fringed orchid, as a Research Natural Area.
- ▶ Prohibit grazing by domesticated bison on public lands so that there are no impediments to reintroducing wild bison to these lands.

Postcard or Letter (64)

Content: I support travel regarding trapping, in the Upper Missouri Grasslands.

Letter or Email (145)

Content: Dear Northern Great Plains Planning Team:

The proposed Plan for the Thunder Basin doesn't give this public prairie the protection needed to conserve and restore the important wildlife and other natural values dear to me. I call on the Forest Service to improve the Plan by:

- ▶ Recommending all six roadless areas for wilderness designation.
- ▶ Recommending the Cheyenne River for wild and scenic river designation.
- ▶ Increasing the black-footed ferret restoration area to the full acreage available.
- ▶ Shifting from an emphasis on domestic livestock grazing (93%) to grazing by wildlife. To this end, wild bison restoration should be made a priority.
- ▶ Restoring prairie dog colonies to at least 20% of suitable habitat and eliminating poisoning and shooting on these public lands.
- ▶ Strengthening standards to conserve at risk wildlife and plants. Lethal predator control must be prohibited, protection must be provided for native fisheries dependant on turbid waters, all construction and pesticide use within 2 miles of important sites for breeding and nesting birds and swift fox must be prohibited, and a complete list of at risk species must be developed and protections devised.
- ▶ Designating all the potential research natural areas.
- ▶ Protecting roadless areas, special interest areas, research natural areas, and important wildlife and recreation areas from oil, gas and coal-bed methane development.

Letter or Email (198)

Content: Dear Planning Team:

I hereby submit the following as formal comments to the Land and Resource Management Plan and FEIS for the Dakota Prairie National Grasslands.

- ▶ These lands, now named the National Grasslands, were purchased for a specific purpose - namely, Demonstrational Grazing Projects. This is stated on the condemnation documents for parcel purchased from the homesteaders, by the federal government. To date, the purposes for the purchase has not been changed.
- ▶ The Preamble to the Bankead-Jones Farm Tenant Act states the Act is to provide for the more secure occupancy of farms and farm homes and to stabilize the local economies. This plan does none of this - in fact, it does the exact opposite.
- ▶ The US Forest Service statement that there will only be a 9% reduction in cow numbers from permitted numbers over a **20-year average** is misleading. The Plan will impose at least a 29% reduction in grazing from the 20-year average and a 43% reduction from the grazing preference.
- ▶ If a permittee can never go over a ceiling of his preference number, but always has to adjust to lower livestock numbers for drought, grasshoppers, etc., it's not a true average.

- ▶ Non-use for personal convenience and economic reasons being averaged and applied to everyone is not showing a true picture of everyone's circumstances.
- ▶ The Plan calls for VOR (Visual Obstruction Reading) reading for sharptail grouse habitat of 3.5. These are totally unattainable. When readings were taken in Theodore Roosevelt National Park, in areas that are inaccessible and have not been grazed for many years, the highest readings were 3.2 to 3.4. The Plan states that the 3.5 reading will be taken after the grazing season and must be maintained year-round. This is an unrealistic goal for a short to mixed grass prairie.
- ▶ The USFS statement that the 19% reduction for cow size will only be used if necessary to achieve desired conditions is almost certain to be implemented, when you require an unattainable VOR reading of 3.5.
- ▶ If permittees were allowed to utilize modern and innovative range science and techniques instead of antiquated grazing systems, that have been proven not to work, livestock numbers would not have to be reduced, but may be increased.
- ▶ The lands in the northern Great Plains evolved under heavy grazing pressure from bison, elk, etc. Prolonged non-use or management strategies that don't mimic that pattern can be detrimental to the range.
- ▶ The 5% rest stated in the Plan is not 5% of everyone's allotment, but 5% of a geographic area or watershed where entire allotments could be required to be rested for at least one year. This causes instability in tenure of ranching lifestyle and a financial hardship of selling cows or buying cows at random. Financial security will be severely compromised.
- ▶ The USFS has stated that "rest" means complete non-use for a 12-month period. Running under preference aums will not be considered "rest" (i.e. Taking a 10% or 20% reduction).
- ▶ It has been said that permittees could establish services such as outfitting and guiding, bed and breakfasts, etc., to offset reduced revenue from livestock. These are value added enterprises that are supposed to enhance the quality of life - not to be used as a trade off for survival because of a re-allocation of use.
- ▶ Prairie dogs are known carriers of bubonic plague, which can pose a serious human health risk. It seems ridiculous to want increased numbers of prairie dogs for a re-introduction of the black-footed ferret with the associated health risk. (The Plan calls for no "control" of prairie dog colonies until they reach 37,000 acres.)
- ▶ The USFS has stated that they will produce the habitat for the prairie dogs, but the ND Game & Fish Department will manage the species.
- ▶ The Game & Fish Department has been trying to raise Big Horn Sheep in North Dakota has been trying to raise Big Horn Sheep in North Dakota for the past 50 years, and have been unsuccessful. To place restrictions on oil and gas development and grazing for an unsuccessful venture that shows no sign of being productive, is a joke.
- ▶ The different area designations are nothing more than rural zoning. This takes away from the original intent of the purchase program and is unworkable. It creates a hardship on inholders of both oil and gas minerals and surface rights, and could be considered a "taking".

Addendum

- ▶ Requiring landowners to obtain a special use permit to cross federal lands to access their private property (or to have to provide public access across their private property to federal in order to obtain this special use permit) is quite simply, blackmail.
- ▶ Ecosystem management is nothing more than an experiment and incorporates none of the principles of peer reviewed and accepted concepts of Range science.
- ▶ The Plan is so vague, that the USFS cannot tell a permittee what the effects will be on an individual allotment. The USFS has stated that the effects will not be available new Allotment Management Plans (AMP's) are written.
- ▶ Interpretation of the Standards and Guidelines in the Plan are left to the "deciding official". This could be the District Ranger, the Grasslands Supervisor, the Regional Forester, or whomever. This leaves too much leeway for abuse and allows environmental groups to sue.
- ▶ There are certain environmental groups that have collected comments for this Plan from an unformed public, by having them sign postcards to be sent to the USFS to retain the Plan. The signers were misled into thinking they were signing up for a chance to win a rod and reel.
- ▶ All told, the following reductions were found by an independent Range Scientist when analyzing the Plan:
 - ▶ There is a 14% difference between **actual use numbers** (which the USFS is using), and preference numbers.
 - ▶ There will be an 11% reduction for structure (high, mid and low structure).
 - ▶ There will be an 8% reduction for riparian areas (creeks, streams, etc).
 - ▶ There will be a 5% reduction for rest.
 - ▶ There will be a 5% reduction for upland game birds.
 - ▶ There will be a 1% reduction for prairie dogs.
 - ▶ There will be a 6% reduction for sensitive species.
 - ▶ There will be a 19% reduction for cow size.
- ▶ The Plan threatens agriculture operations, reduces likely energy development and reduces recreation access, especially hunting.
- ▶ The Plan contradicts national energy policy. President Bush's Executive Order requires the USFS to remove all possible barriers to domestic energy production. The standards for wildlife habitat, designation of Roadless and special interest areas, and transportation policies all greatly increase production costs for energy resources.
- ▶ The Plan demands high structure standards (for grasses). This increases the fire risk and many result in millions of dollars in losses.
- ▶ The Plan will reduce recreation use of the Grasslands through the combined effect of designating Special Interest Areas, Research Natural Areas, "decommissioning" roads under the transportation rule, and prohibiting all cross-country motor vehicle use.

- ▶ The Plan fails to recognize that the State of North Dakota has a “right of retrieval of game” by off-road methods during hunting season.
- ▶ The Plan states that springs and seeps will be “restored”. When questioned, the USFS stated that in some cases, these developments could be removed to allow for additional habitat for wildlife.
- ▶ The Plan states that 20% - 30% of the Grasslands must be in high grass structure. The USFS currently estimates that 3% - 6% of the Grasslands are in high structure, after using the Robel Pole to take VOR readings. The Robel Pole is supposed to be used to measure residual cover for ground nesting birds – not utilization by livestock.
- ▶ The best **estimate** of forage production that the USFS can come up with is 908 pounds/acre, instead of the 1,567 pounds/acre proven by Drs. Whitman and Brand. The 908 – pounds/acre figure will be used when AMP’s are written.
- ▶ The USFS has stated that they do not know, at this time, how “rest” will be applied on Inventory permits. That will be determined later.
- ▶ This Plan states that 6,500 acres a year will be burned using “controlled burn” methods. The USFS is somewhat notorious in letting their controlled burns get out of hand and burn onto private property.
- ▶ The USFS has stated that they are trying to restore the ecological role of fire on the National Grasslands. This could be interpreted to mean that rural volunteer fire departments will be restricted from fighting fires on the Grasslands.
- ▶ Winter feeding on federal lands on Inventory permits may not be allowed. This will be addressed only when AMP’s are written, and if allowed in the current AMP, may be changed.
- ▶ The Plan states that there will be no ground disturbing activities within the Little Missouri River Corridor. This restriction cannot be allowed to pertain to the private lands along the river, and should not be allowed to pertain to the federal lands.
- ▶ The Plan was written by USFS employees who have very limited, if any, knowledge of the Grasslands, and with no input from landowners, permittees and/or Grazing Associations.
- ▶ The Plan manages for an Indicator Species in the form of a bird (sharptailed grouse). Scientists at NDSU have stated that management of the Grasslands should, instead, be based on plant species.
- ▶ The Plan does not consider the effects of cumulative and connected actions, such as the off-highway vehicle policy, the Roadless rule, and the transportation regulations. This violates federal law.
- ▶ These lands have been well-cared for by the people of Western North Dakota for many years. These same people must be allowed to shape the planning process – not outside environmental groups or federal employees with an agenda of their own.
- ▶ The US Forest Service does not have adequate monitoring data to justify what they are proposing.

Addendum

- ▶ As pursuant to our independent analyses of the Plan, a 100 million dollar per year loss of revenue at the cost of 300-500 jobs, is unacceptable for southwest North Dakota. We are already struggling with decreased energy production, in addition to the depressed agricultural economy.
- ▶ This Plan, including the Standards and Guidelines, is so incomprehensible that the average citizen or permittee cannot understand it, so how can we intelligently comment.
- ▶ The USFS Plan is totally unworkable and is so flawed, that it needs to be withdrawn and work started on a second draft, which recognized the purchase program and uses current, peer-reviewed science available from our ND Universities.

Letter (13)

Content: I am writing to comment on the Final Environmental Impact Statement for the Northern Great Plains National Grasslands Plan. In Nebraska, the 351,000 acres of land covered by the Plan represent 44% of the 800,000 acres of publicly owned land available for hunting and fishing in our state. Better management of these lands to improve wildlife habitat is very important to the economy and ecology of our state.

- ▶ I support the Preferred Alternative (#3), but with revisions that will strengthen the Plan as follows:
- ▶ The Plan needs strong, measurable standards to better protect wetlands, woody draws, and streamside areas from the impacts of livestock grazing.
- ▶ The Plan needs benchmarks to measure progress towards the restoration of grassland health, and explicit strategies to deal with areas that fail to meet those benchmarks.
- ▶ The Plan needs to designate additional land with a focus on wildlife habitat, including habitat for bighorn sheep in the Pine Ridge, and protection of wetlands and streams at Samuel McKelvie National Forest.

Community and Lifestyle Relationships

Comment: Looking at all your cuts and restrictions on the Dakota Prairie, including oil and gas, it appears to me North Dakota will be affected to the tune of \$100,000,000 loss per year. This does not only affect grassland users but the whole state.

The FEIS economic impacts were assessed with IMPLAN and were compared with the analysis submitted by Leistriz through HAND and evaluated the underlying causes for the differences between Forest Service results and Leistriz's results. From that evaluation, the Forest Service did not find it necessary to go back and change the FEIS analysis. IMPLAN is the standard Forest Service tool for analyzing economic impacts and is supported by a number of universities and is used throughout the country by federal, state, and private entities. It is well documented in the scientific literature and represents good science (See <http://www.implan.com>).

Many assumptions used in the HAND analysis that created the referenced economic loss, are not based on valid assumptions of what this plan will do. The huge economic losses predicted in HAND's economic analysis are based on much larger direct impacts than are predicted by the Forest Service. Grazing reductions are almost 5 to 7 times what the Forest Service predicted and oil and gas impacts are 3 to 4 greater than Forest Service predictions. This difference results in very different predicted economic effects.

The Forest Service has re-examined our predictions and still believe they are reasonable. The Forest Service analysis shows very little change associated with jobs and income in each economic impact area. In addition, the Forest Service analysis is based on assumptions such as season-long grazing, no growth in recreation and tourism, and it does not reflect drilling that can and is occurring on existing oil and gas leases. Growth in tourism is occurring as is drilling on existing leases these will reduced effects below those determined by the Forest Service. In addition, there are management techniques that can increase grazing above levels predicted by the Forest Service, and again further reduce any adverse economic effects. The Forest Service understands the needs of these communities and will do all they can to reduce adverse effects and provide positive effects when and where this is feasible. The economic effects are discussed in Appendix A, pp. A-17 to A-22 (reference FEIS pp. 3-61 to 3-66). This portion of the analysis shows the anticipated effects using the assumptions mentioned above. This plan does not set stocking rates; that will be done during the allotment management plan revisions and will use site-specific information when allotment management plans are completed.

The Land and Resource Management Plan for the Dakota Prairie Grasslands incorporates a delayed decision in regard to grazing. The Forest Service will not change allotment management plans until a scientific team reviews the Land and Resource Management Plan and verifies the estimated effects that will occur. If the effects are as estimated by the Forest Service, the plan will be implemented. If they are not, the plan will be changed to address the identified needs.

Comment: For both ND and the Thunder Basin NG, the differences between the losses in revenue and jobs calculated by independent economists and those calculated by the FS are very large. This clearly indicates that the economic impacts, as calculated by the Forest Service in these tables, are extremely badly skewed on the low side. These improper calculations of economic impact demand that these documents be withdrawn.

It is true that there were large differences in the Forest Service and HAND economic impact predictions. The Forest Service has reviewed the HAND report and finds most of the difference to be attributable to much larger estimations of direct effects on livestock grazing and oil and gas production. HAND estimates of grazing reductions vary from nearly 5 times to 7 times the estimated Forest Service reductions and oil and gas reductions are nearly 4 times the Forest Service's estimate. HAND grazing estimates were based on misinterpretations of the plan. Oil and gas reductions are based on an reasonably foreseeable development (RFD) prepared by the ND oil and Gas commission. The Forest Service has not received a copy of this RFD, consequently it unclear how it differs fro the Forest Service RFD. However, through the consultation process with the state, the ND Oil and Gas Commission has indicated that the Forest Service RFD is credible.

The Land and Resource Management Plan for the Dakota Prairie Grasslands incorporates a delayed decision in regard to grazing. The Forest Service will not change allotment management plans until a scientific team reviews the Land and Resource Management Plan and verifies the estimated effects that will occur. If the effects are as estimated by the Forest Service, the plan will be implemented. If they are not, the plan will be changed to address the identified needs.

Addendum

The plan has also made a change in the final selected alternative that will make more area available for oil and gas leasing and development (3.51B). While this change does not significantly alter the predictions with regard to the Forest service RFD, it does change the effect to the state RFD. The effect is that differences in the predicted effects of the two RFDs are reduced.

Comment: We feel the economic significance to the state from mineral industries exploration and development is minimized in this plan. Pg 3-13 discusses royalty amounts given to other states but not WY. The state and counties receive 1/2 6.25% of federal mineral royalties, as well as severance taxes (6% oil and gas, 7% coal) and ad valorem taxes (varies by county) from the production of minerals. Revenue from minerals is significant to WY and warrants additional discussion.

The Dakota Prairie Grasslands has looked at impacts associated with 6 ¼% royalties. Forest Service records indicate that there are approximately 52,000 acres with county royalty interests attached. McKenzie County has the largest share of these royalty interests. Over 44,000 of the 52,000 acres are available for development under the new plan. The remainder are not currently available. A royalty interest only entitles the county to royalties when the mineral estate is developed and produced. To alleviate this problem, the Forest Service has indicated its willingness to exchange royalty interests for other parcels that can be developed now or the counties can retain their current interests and collect royalties when these acres are developed. This decision resides solely with the county. Exchanges of royalty interests would be based on equal appraised values. McKenzie County has indicated they believe they own royalty interests in over 100,000 acres. To verify this information, the Forest Service has requested their records. This request has been refused. If records are submitted later, the Forest Service will review them and try to resolve any differences.

Comment: We object to the Forest Service decision to make the FEIS available for free only via a CD. This created an environmental justice problem. Many people, especially tribal people in the affected areas are low income. To really study this document you needed a computer with a CD drive or approximately \$200 to purchase a copy of the FEIS and the plans. Thus, the poor did not have equal access to the documents that richer people and affected businesses did. It creates an uneven playing field.

In accordance with 40 CFR 1502.19, a summary was sent to all those who commented on the DEIS, and copies of the FEIS were made available at local libraries. The FEIS, Appendices, all maps, and the three Land and Resource Management Plans were available for no charge on the Internet at www.fs.fed.us/ngp and available on a CD. Hard copies of these documents were mailed to all federal, state, and local governments, as well as tribal governments. County commissioners also received hard copies of the documents. Local libraries also received 5 copies each of the documents for the public to review. Documents were also made available for purchase from the Superintendent of Documents.

Comment: There are many costs associated with livestock production on public lands. These costs are seldom considered, nor do ranchers pay these full costs. These include the spread of weeds, reduction in fire frequency, predator control, "pest control," loss of wildlife habitat, forage going into exotic animals instead of native species, losses in nutrient cycles, impacts on microbiotic crusts (yes they exist on the plains as well), and so forth. It's difficult to argue that any ecological benefits derived from livestock production aren't outweighed by the multiple

impacts. I therefore ask that the National Grassland EIS provide a full evaluation of the real costs of livestock production and also provide a full spectrum of alternatives, including the termination of all commercial livestock grazing.

The Land and Resource Management Plan and FEIS discuss noxious weed control, fire, wildlife habitat, grazing, and maintenance of the long-term productivity of the land. Costs due to predator control are outside the scope of this document. A reasonable range of alternatives was considered in the FEIS. The No Grazing Alternative was considered but eliminated from detailed study (FEIS, Chapter 2, p. 2-15). An economic analysis was completed and is located in FEIS, Chapter 3, p. 3-29.

Comment: Managerial Reasons for Revising Existing Plans (1-7) There is little or nothing in the EIS or anywhere else to document what that "new information and knowledge" is, or to demonstrate (with monitoring data or other factual information) what the "insights" are. There is no real indication that "the public" has indicated any need for change.

Plan revision is required under law. Over 26,000 comments were received in response to the DEIS and over 46,000 in response to the FEIS. The Forest Services believes that the public has indicated a need for change. The managerial reasons for revising the Land and Resource Management Plans are found in Chapter 1 of the FEIS, pp. 1-7 through 1-16. In addition, the Forest Service has been monitoring grassland structure for the last 6 years. The data indicate that high structure is lacking on the grasslands. This data was verified by the 1999 Governor's Report, which showed little residual cover, remained on the grasslands and the wildlife conditions on many of the plots reviewed was poor to fair (Hand 2000, 1999 Governors Report on Grassland Condition).

Comment: This section implies that no increase in jobs and income linked to recreation would be expected under Alternative 1 and 2. Why not? "Recreation related jobs and income are growing under current Forest Service management direction." Why would it stop growing if current management is continued?

When analyzing recreation, the Forest Service assumed no growth in the recreation sector (FEIS Appendix B. p. B-22) under all the alternatives of this plan, because credible scientific literature that would support the conclusion that one alternative would draw more people to the area than another was lacking (FEIS, Chapter 3, p. 3-38). One can make a case that growth in the recreation sector is occurring independent of national grassland and forest management, but is due to economic, social, or demographic trends outside the influence of the Forest Service. Recreation sector growth has been occurring and the FEIS did examine a number of potential recreation growth scenarios and the economic effects of each scenario (See FEIS, Chapter 3, pp. 3-14 to 3-15). Since the rate of growth is not consistent across the entire area and the appearance is that this will continue regardless of which alternative is selected, there was no credible way to estimate future growth without running the risk of significantly overestimating future recreation. Given the lack of evidence that one alternative would draw more people to an area, no firm estimate of future recreation growth, and the purpose of the analysis being to compare alternatives, the analysis presented in the FEIS (the no recreation growth assumption coupled with a growth scenario sensitivity analysis) presented the most reasonable and supportable approach to examining recreation economic effects between alternatives. The FEIS analysis was not designed to estimate absolute recreation trends or effects, only to identify the relative effects of different Forest Service alternatives on the surrounding communities.

Comment: The rules and regulations will more likely cause ranches to be subdivided into small recreational tracts. A limited few may subsidize their business with outside tourism to keep the family ranch intact but there are currently several such operations and the number that can use the National Grassland is restricted.

It is unclear what rules and regulation the commentor is referring to. All across the West, land is being subdivided, but these subdivisions are not the result of public land management changes. More people are looking for rural lifestyles. The economic effects are discussed in FEIS Appendix A, pp. A-17 through A-20 (reference livestock grazing analysis FEIS pp. 3-79-99 and FEIS, economic analysis, pp. 3-61 to 3-66). The assumptions that went into these analyses (e.g., season-long grazing, no growth in recreation, and the assumption that no oil and gas drilling will occur on existing leases) are important to understanding the effects. These assumptions may cause the depicted effects to be more adverse than will ever likely occur.

While the plan has no direct effect on private land outside jointly managed federal-state-private grazing pastures, this comment does point out the fact that market prices will affect what is occurring on these lands. Land prices already reflect that people are willing to pay more for this land than can be justified for agricultural production. The price paid is based on the desires for lifestyle and/or recreation rather than what can be made through a livestock business. These factors have much larger impacts than any changes made by this plan.

With regard to special use permits for outfitting and guiding, this plan provides no site-specific decision to implement or deny additional special uses. In the last three years, the Dakota Prairie Grasslands (DPG) has increased the numbers of this type of special use.

The Land and Resource Management Plan for the Dakota Prairie Grasslands incorporates a delayed decision in regard to grazing. The Forest Service will not change allotment management plans until a scientific team reviews the Land and Resource Management Plan and verifies the estimated effects that will occur. If the effects are as estimated by the Forest Service, the plan will be implemented. If they are not, the plan will be changed to address the identified needs.

Comment: It has been suggested that 70 jobs would be lost as a result of changed to the management system provided for in Alternative 3. The loss of 70 jobs is not significant on a national or even statewide basis; however, in an area of ND, like Slope County, which is already sparsely populated, this number is extremely significant, as would be the indirect impact upon the communities from which the 70 jobs would be lost.

The 70 jobs that the commentor mentions are associated with livestock grazing on the entire Little Missouri National Grassland (Table 3-7, FEIS p. 3-29). They are not confined to Slope County, but to a twelve-county area. The economic effects are addressed in FEIS Appendix A, pp. A-17 through A-20 (reference FEIS pp. 3-61 to 3-66). Much of the flexibility to affect change rests with the permittees and Grazing Associations.

It is not the intent of the Forest Service to cause the loss of any jobs. It is true that the analysis shows some losses (reference livestock grazing analysis FEIS pp. 3-79 through 3-99 and the economic analysis FEIS pp. 3-61 through 3-66). To understand the analysis, one must also understand the assumptions that went into it. For instance, season-long grazing was assumed for livestock grazing and no growth was assumed in tourism even though it is currently increasing. These assumptions result in greater predicted adverse effects in grazing than may actually occur, and they do not reflect growth that may be really occurring in recreation and tourism. In addition, the analysis of effects did

not consider drilling that may occur on existing leases in areas where oil and gas development is not planned in the future. Nearly half of the mineral estate underlying the inventoried roadless acres is leased (reference the administrative record).

The FEIS does project a small decrease in the numbers of wells drilled and the amount of oil and gas produced under the Preferred Alternative compared to Alternative 1 (FEIS, Chapter 3, p. 3-35). However, the FEIS does not anticipate drilling that may occur on existing leases in areas where oil development would be restricted or eliminated in the revised plan. Nearly half of the mineral estate underlying the inventoried roadless acres is leased (see Medora or McKenzie District stip_lease GIS analysis 6/02). This later fact will moderate the projections made in the FEIS because if oil and gas is produced on the existing leases this can continue as long as the production continues.

This analysis is used as a standardized methodology to compare alternatives. It is the intent of the Forest Service to minimize actual adverse economic impacts while meeting the goals, objectives, standards, and guides of the plan. This information, and consideration of the assumptions, means not all the estimated adverse effects may actually occur. However even if they do, the estimated effects are still very small in comparison to the total jobs and incomes for each economic impact area (reference FEIS, Chapter 3, Table 3-25). Annual changes in climate and commodity prices have a much larger effect on these communities than changes attributable to the Land and Resource Management Plan.

In December 1999, Larry Leistriz and Dean Bangsund published a report entitled, "Regional Economic Effects of Proposed Revised Management Plans for the National Grasslands in North Dakota: A Summary." This report, which was prepared for the Heritage Alliance of North Dakota (HAND), analyzed the economic impacts on the grazing and energy sectors of the preferred alternative in the draft environmental impact statement. In response to the issuance of the final environmental impact statement, Leistriz/Bangsund published a revised report in January 2002.

The economic impact estimates developed by Leistriz/Bangsund differ significantly from the economic effects displayed in the draft and final environmental impact statements. The differences can generally be attributed to the assumptions that were made and the models that were used. Leistriz/Bangsund used the North Dakota Input-Output Model in their analysis. This is a 17-sector model that is based upon survey data collected, it appears, in the 1980s. The USFS estimates were prepared using IMPLAN, a 528-sector input-output model that is updated annually. (The IMPLAN model used for the FEIS was based upon 1997 data.)

An examination of the assumptions and the models used by Leistriz/Bangsund and by the U.S. Forest Service to estimate the economic impacts of the preferred alternative suggests that the differences in the economic effects estimates were more attributable to the assumptions than to modeling issues. Even though the output and employment multipliers applied by Leistriz/Bangsund in their model were higher than those generated in the Forest Service's IMPLAN model, the disparity was even greater, relatively speaking, in the assumptions about the number of wells eliminated, the amount of oil and gas production that would be lost, and the degree to which grazing activity would be reduced. The Leistriz/Bangsund analysis was based upon assumed decreases in grazing and oil and gas activity that were several times higher than the reductions anticipated by the Forest Service. Further, the manner in which the economic impact results were displayed was another source of differences in the estimates of effects (e.g., gross business volume and full-time equivalent jobs (Leistriz/Bangsund) vs. labor income and total number of jobs (USFS)). After evaluating the underlying reasons for the differences in the results, the Forest Service concluded that the assumptions and methodologies used to generate its economic impact estimates were reasonable and, therefore, do not need to be revised.

The Land and Resource Management Plan for the Dakota Prairie Grasslands incorporates a delayed decision in regard to grazing. The Forest Service will not change allotment management plans until a scientific team reviews the Land and Resource Management Plan and verifies the estimated effects

that will occur. If the effects are as estimated by the Forest Service, the plan will be implemented. If they are not, the plan will be changed to address the identified needs.

Comment: John Lacey estimates that livestock AUMs would be reduced by 43% or more. This would be economically disastrous for most ranchers on the grasslands.

The Forest Service disagrees with this interpretation. This assumes that each goal or objective requires a separate piece of land to be obtained. Many of the Land and Resource Management Plan standards and guidelines are synergistic and multiple benefits can be obtained from a single acre such as one acre of rest can also be counted on to produce high structure if the vegetation is capable of producing it. High structure objectives are applied to herbaceous plant communities only (see vegetation standards and guidelines for all Geographical Areas in the Plan), not to the total acreage as Dr. Lacey's interpretation implies. The Land and Resource Management Plan does not set stocking levels or carrying capacity. Those allotments with systems in place may in fact already be meeting many of the Land and Resource Management Plan's goals and objectives. That determination will be made during analysis at the allotment management plan level (see FEIS, Chapter 3, p. 3-83 and administrative record memorandum, subject: *Clarification of the Analysis of Grasslands Plan S&Gs Relating to Livestock Grazing on the Dakota Prairie Grasslands*).

Comment: Your plan needs to include a compensation clause addressing the loss of the 25% Payment in lieu of taxes (PILT) for grazing fees and oil production to counties and the additional loss to the state of ND over the next 10 years.

Revising the compensation authorities for payments to counties is outside the scope of this decision. However, payments to states and counties are addressed in FEIS Chapter 3, pp. 3-42 to 3-46.

Comment: To that end, I am calling for a dialogue with the Forest Service to address concerns and validate expectations raised by the public, so we can incorporate assurances and solutions in the Record of Decision. We must have confidence that the management plan will be fair, and factually based in science - that it is a plan that creates a climate that allows for economic prosperity and security for our western communities, rather than uncertainty and economic injury. Severe negative consequences are not acceptable.

Refer to FEIS Appendix A, pp. A-10 through A-12 and A-14 through A-15. The economic effects are discussed in Appendix A, pp. A-17 to A-22 (reference FEIS pp. 3-61 to 3-66). This portion of the analysis shows the anticipated effects of the plan given the assumptions that were used. The Forest Service analysis predicts minor impacts (reference economic analysis FEIS pp. 3-61 to 3-66). The Forest Service is very confident of the science used to develop the plan. Hundreds of scientific papers were referenced in the development of the plan. The Forest Service is also concerned about communities, and if effects are different than those given, plan amendment can occur.

Many assumptions in the HAND analysis that created the referenced economic uncertainty are not valid assumptions of what this plan will do. The Forest Service is working to provide this type of clarification in the administrative record to assure users and permittees that the plan will not be interpreted as it was done in the HAND report.

In an effort to provide more certainty, the Forest Service will delay implementation of the grazing portion of the Land and Resource Management Plan. This portion of the Land and Resource Management Plan will not be implemented until sample allotment management plans are developed and the effects of implementation are verified. A technical review team will be formed to verify the projected stocking and/or recommend changes to meet the plans intent.

Comment: I have been ranching and farming in and around the Sheyenne Grasslands area for 42 years. The economic effects would be many and devastating to all concerned. I do my banking in Kindred and Fargo. Both are in Cass County. I sell my cattle at Central Sales of Fargo, which is also in Cass County. I also utilize the sale barns of Sisseton and Aberdeen and those cities just happen to be across the border, in the state of SD. When I need irrigation systems, the money I spent goes to the people in Oakes, ND, which is in yet, another county. Oakes is in Dickey County.

No site-specific decisions will be made in the Land and Resource Management Plan. These will be made through the allotment management plan process. This plan does not set stocking rates. The Forest Service is committed to working with permittees to design grazing allotment management plans needed to achieve the vegetation objectives with minimum impact to permittees. The Grazing Associations also have management flexibility to help manage some of the needed changes and minimize impacts to local ranching operations.

The Land and Resource Management Plan for the Dakota Prairie Grasslands incorporates a delayed decision in regard to grazing. The Forest Service will not change allotment management plans until a scientific team reviews the Land and Resource Management Plan and verifies the estimated effects that will occur. If the effects are as estimated by the Forest Service, the plan will be implemented. If they are not, the plan will be changed to address the identified needs.

Effects to grazing operations are addressed in FEIS Appendix A, p. A-34 (reference livestock grazing analysis FEIS pp. 3-79 to 3-99 and the economic analysis FEIS pp. 3-61 to 3-66). The assumptions that went into these analyses are important to understanding the effects. The selection criteria for the economic impact area is discussed in FEIS Appendix B, pp. B-12 to B-16. The rationale for this selection is still valid.

Comment: With the kinds of numbers that the state estimated, how can the US Forest Service claim that recreation will replace livestock's portion of the economy will replace the income from 6,600 head of cattle plus ALL of the secondary dollar impacts?

It is unclear what state estimate is being referenced. Regardless of the reference, the Forest Service did not indicate that recreation would offset changes (see FEIS Chapter 3, pp. 3-61 to 3-66). In fact, the Forest Service assumed no growth in recreation would occur. A sensitivity analysis was presented in the FEIS (pp. 3-40 to 3-41). This analysis described how various possible recreation industry growth rates in jobs and income compare to decreases in livestock industry jobs and income. As indicated in the analysis, relatively moderate growth in recreation can offset many predicted losses (FEIS, Chapter 3, p. 3-15, Table 3-1).

Comment: The economic assessment of the area, leaving out Cass and Sargent counties, is also flawed as much money from these ranches flows to these 2 counties also.

The selection criteria for the economic analysis area is discussed in FEIS Appendix B, pp. B-12 to B-16. The rationale for this selection is still valid. Inclusion of the two suggested counties would further dwarf the effects of changes in grasslands management on the economic impact areas.

Comment: US Forest Service has stated that on the SNG that permittees could use tourism and recreational opportunities to help in ranch operation- as birding-guiding- horse rental and guiding for hunters- will replace the lost revenue from livestock production.

The Forest Service assumed no increase in recreation and tourism for any of the alternatives, however the Forest Service did say that some "alternatives can be said to better support increases in tourism" (FEIS Chapter 3, p. 3-38). The Forest Service did not indicate that recreation would offset changes in livestock production (FEIS Chapter 3, pp. 61-66).

Comment: The FEIS does not appreciate the importance of Forest Service grazing permits to ranching operations and the local community. As to Wyoming, the FEIS admits ranch average annual net cash income declined significantly and that the probability of negative cash flow increased substantially with reductions in grazing of federal AUMs (Van Tassell, et al. 1998). The FEIS does not acknowledge the same sensitivity to reductions for ranches in ND, even though the market and economic factors are very similar.

The Forest Service does understand that grazing permits are important to members of grassland Grazing Associations and communities. The Forest Service did not differentiate between North Dakota and Wyoming with regard to this data (FEIS Chapter 3, p. 3-11). The information on permit values was added to respond to public requests made between draft and final. The FEIS also describes the potential uses and limitations to this data (FEIS Chapter 3, pp. 3-11 and 3-12). The FEIS considered economic information specific to each economic impact area. That information is documented in the project record (FEIS Chapter 3, pp. 3-63 to 3-66).

The Land and Resource Management Plan for the Dakota Prairie Grasslands incorporates a delayed decision in regard to grazing. The Forest Service will not change allotment management plans until a scientific team reviews the Land and Resource Management Plan and verifies the estimated effects that will occur. If the effects are as estimated by the Forest Service, the plan will be implemented. If they are not, the plan will be changed to address the identified needs.

Comment: Another misleading statement is made up on p. 3-11--"Alternative sources for grazing capacity (feed, rented land, etc.) are generally invested in a grazing permit by owning base property". Property with appurtenant federal grazing permits includes the added value of the permit and this value is a real cost to the permittee.

The referenced statement deals with the costs of grazing non-federal lands. In that regard, the comment is out of context. The Forest Service does not recognize grazing privileges as a property right although we understand that lending institutions have treated them as a value added to the associated ranches.

Grassland users have the same options as those who graze cattle solely on private land. These options include feeding or renting of additional pasture for their livestock in contrast to making other business decisions. Each producer needs to make these decisions independently. The Forest Service has provided information that shows the value of a federal permit on private land values (FEIS, Chapter 3, p 3-11).

Comment: Tourism has been one of the few parts of the North Dakota economic base that has shown steady growth both statewide and in rural counties. In the state as a whole, tourism's share of the economic base has grown to be larger than the energy sector's share. Even in rural, agricultural areas such as Billings County in western North Dakota, recently tourism has been as important a part of the economic base as agriculture. More important, tourism is likely to be an ongoing source of new jobs and income. That is not true of either agriculture or energy production from a long run point of view.

The FEIS analyzes and discusses the effects of a wide range of alternatives. The Forest Service believes the positive effects of its preferred alternative outweigh any minor adverse effects. The FEIS notes that some alternatives will support anticipated increases in tourism better than others. Alternative 3 Final ranks second in enhancing recreational opportunities (FEIS p 3-38 and 39). The Forest Service will work to minimize any adverse effects and maximize positive effects.

Comment: We are very concerned about the fuel load with Alternative 3.

Refer to FEIS Appendix A p. A-71 and the Land and Resource Management Plan, Chapter 1, Section G. The administrative record also contains additional information on fire. In the Errata, the Forest Service has added an objective under Goal 4 a (Land and Resource Management Plan for the Thunder Basin National Grassland, Chapter 1) which addresses reducing fuel loads in interface areas. The Errata also contains additional guidelines in Section G that address this issue. The Land and Resource Management Plan for the Dakota Prairie Grasslands contains a similar guideline (Chapter 1, #5, p 1-18).

Comment: Grass structure requirements: low, medium, and high. I feel this is another cut in grazing. Trying to meet the requirements of Alt #3 will in effect require me to cut cow numbers to try to reach an unattainable grass height. This is for most part short grasslands.

The FEIS discusses the effects of a wide range of alternatives. While this plan does not set stocking numbers, it did project some reductions in livestock use on some grasslands (FEIS 3-91). This portion of the analysis shows the anticipated effects of the plan given the assumptions used. Site-specific decisions will be made at the site-specific level during allotment management plan revisions. Many options are available other than the assumptions used in the analysis that can positively affect livestock use numbers. If effects of implementation are dramatically different than anticipated, plan amendment can occur. Refer to the Geographic Direction in the Land and Resource Management Plan pp. 2-2 through 2-32. Forest Service analysis indicates the structure goals are attainable.

The Land and Resource Management Plan for the Dakota Prairie Grasslands incorporates a delayed decision in regard to grazing. The Forest Service will not change allotment management plans until a scientific team reviews the Land and Resource Management Plan and verifies the estimated effects that will occur. If the effects are as estimated by the Forest Service, the plan will be implemented. If they are not, the plan will be changed to address the identified needs.

Comment: Take away these rights will leave a lot of people with no source of income/and there will be a lot more people moving out of North Dakota..

From an economic standpoint, almost every community bordering the Sheyenne National Grassland would lose some sort of commerce with this plans acceptance.

This statement is not correct, as no site-specific decisions will be made in this decision. The FEIS grazing analysis did project a 9% and 17% reductions on the Little Missouri and Sheyenne respectively. The Cedar and Grand River National Grasslands were projected at a 1% increase. These projections are likely lower than may actually occur due to the assumption that the least intensive season long grazing system was used (FEIS Appendix B, p. B-106). Site-specific projections will be made thorough the allotment management plan revision process.

None of this will occur until sample allotments are tested to verify the results of the Forest Service projections. The Land and Resource Management Plan for the Dakota Prairie Grasslands incorporates a delayed decision in regard to grazing. The Forest Service will not change allotment management plans until a scientific team reviews the Land and Resource Management Plan and verifies the estimated effects that will occur. If the effects are as estimated by the Forest Service, the plan will be implemented. If they are not, the plan will be changed to address the identified needs.

Comment: The Forest Service deliberately misleads the reviewer by claiming that Alternative #1 (No Action) would continue current land and resource management plans directions and emphases when, in fact, it does not. The recent level of grazing on all areas is lower because of drought, economic conditions, and many other reasons. Alternative 1 should list permitted numbers of AUMs and all comparisons should be based on these numbers. Because Alternative #1 does not represent the actual situation, a reviewer does not have the option of recommending an alternative that represents the "real" current management situation.

The meaning of Alternative 1 is discussed in FEIS Appendix B, p. B-106; a table on p. B-107 displays existing, as well as no action, alternatives. The existing condition alternative was added between the draft and the final to respond to this issue. A 20-year average authorized use for livestock was added to display the existing condition because it includes fluctuations over time due to weather and other factors. This is the only area where the existing condition deviates from Alternative 1. The Forest Service disagrees that permitted numbers represent the existing condition as proposed by the commentor. In reality, permitted numbers of livestock use have not occurred in the last 20 years.

Comment: Our independent analysis of the Plan show a 100 million dollar per year loss of revenue and a loss of 300 to 500 jobs. This is unacceptable for southwestern North Dakota.

The Forest Service believes this comment refers to the Hand Report, published by Larry Leistriz and Dean Bangsund. It is incorrect to refer to this report as an "independent" report since it was commissioned by a particular interest. The economic effects are discussed in Appendix A, pp. A-17 through A-20 (reference livestock grazing analysis FEIS pp. 3-79-99 and FEIS, economic analysis, pp. 3-61 to 3-66). The assumptions that went into these analyses are important to understanding the effects.

Assumptions (such as season long grazing, no increase and recreation, and no drilling occurring on the existing leases in some areas where development is not planned under new leases) all contribute to projections that that will likely never occur. If they do occur, the adverse impacts are very small

when compared to the total jobs and income in the economic impact area.

The economic impact estimates developed by Leistriz/Bangsund differ significantly from the economic effects displayed in the draft and final environmental impact statements. The differences can generally be attributed to the assumptions that were made and the models that were used. Leistriz/Bangsund used the North Dakota Input-Output Model in their analysis. This is a 17-sector model that is based upon survey data collected, it appears, in the 1980s. The USFS estimates were prepared using IMPLAN, a 528-sector input-output model that is updated annually. (The IMPLAN model used for the FEIS was based upon 1997 data.)

An examination of the assumptions and the models used by Leistriz/Bangsund and by the U.S. Forest Service to estimate the economic impacts of the preferred alternative suggests that the differences in the economic effects estimates were more attributable to the assumptions than to modeling issues. Even though the output and employment multipliers applied by Leistriz/Bangsund in their model were higher than those generated in the Forest Service's IMPLAN model, the disparity was even greater, relatively speaking, in the assumptions about the number of wells eliminated, the amount of oil and gas production that would be lost, and the degree to which grazing activity would be reduced. The Leistriz/Bangsund analysis was based upon assumed decreases in grazing and oil and gas activity that were several times higher than the reductions anticipated by the Forest Service. Further, the manner in which the economic impact results were displayed was another source of differences in the estimates of effects (e.g., gross business volume and full-time equivalent jobs (Leistriz/Bangsund) vs. labor income and total number of jobs (USFS)). After evaluating the underlying reasons for the differences in the results, the Forest Service concluded that the assumptions and methodologies used to generate its economic impact estimates were reasonable and, therefore, do not need to be revised.

In addition, the Forest Service decided to continue to use jobs and income as a measure of economic well-being. The Forest Service determined that gross economic activity does not provide as good a measure of economic well being.

The Land and Resource Management Plan for the Dakota Prairie Grasslands incorporates a delayed decision in regard to grazing. The Forest Service will not change allotment management plans until a scientific team reviews the Land and Resource Management Plan and verifies the estimated effects that will occur. If the effects are as estimated by the Forest Service, the plan will be implemented. If they are not, the plan will be changed to address the identified needs.

Comment: Much of the economic growth in the tourism industry in McKenzie County has been due to the increase in agricultural based expansions into the hospitality business. We suggest the plan include an attempt to expand permits to ranches and businesses interested in guiding and conducting excursions into the grasslands. To date, permits have been extremely difficult to obtain and the trend does not appear to be improving.

Plan direction allows for these opportunities (Land and Resource Management Plan, Chapter 1, p 1-22), but these decisions will be made at the site-specific project level.

Comment: The Plan has potential to reduce recreational use of the grasslands because of special designations, removal of roads and restrictions businesses to offset reduced revenue from livestock does not work for the average ranch. The Plan lists restrictions for the number of commercial activities on the federal land. There are already several outfitting, guiding, and bed and breakfast entities. these value added enterprises should not be used as a trade off for survival, they are supposed to

enhance the quality of life by bringing additional income to the family ranch.

The decision to establish outfitting and guide services is a personal one and not directed by the Land and Resource Management Plans. It is only shown as an opportunity.

The Land and Resource Management Plan may result in decreased use in some areas: for instance, areas where nonmotorized use is specified. Such settings currently do not exist on the grasslands, and adding a new setting could attract new users that previously did not use the grasslands reference (see OHV/roadless/transportation rule/cumulative effects submitted to administrative record on 6/02).

Comment: We find out concerns about a "wildlife centric" document elevated when we read that under Effects From Fish and Wildlife Management on page 3-95 that, "These standards and guidelines could require changes to livestock management and range development construction ...". This indicates that wildlife will require livestock management changes, which in many (most) cases will mean added costs to the livestock producer. In the economics analysis section, there doesn't even appear to be an acknowledgement that these activities will have an impact on the financial viability of operators.

"These considerations have been taken into account in the predictive model for estimated available forage on a landscape basis" (FEIS, p. 3-95).

Comment: The Little Missouri National Grasslands were purchased for Demonstrational Grazing Projects; the new plan is nothing more than an attempt at rural zoning seemingly designed to get cattle off the grasslands. In no way will this plan strengthen local ag economies as was the intent of the original land purchase.

The original purpose of the grasslands are discussed in FEIS, Appendix A, p. A-14. As stated in the FEIS these lands were purchased under several different authorities.

In order to exercise the condemnation authority delegated by Congress, the Secretary must demonstrate that the land to be acquired will be applied to a "public use." 40 U.S.C. §§257, 258a. In general, the term covers a use affecting the public generally, or any part thereof, as distinguished from particular individuals. No set definition of what degree of public good will meet the requirement of a "public use" exists since in each case it is a question of public policy which depends on the facts and circumstances of a particular case. However, the meaning of the term is flexible and is not confined to what may constitute a public use at any given time. The term must be applied in the light of what the legislature seeks to accomplish and what it may properly consider to be a public use at the time.

Thus, the fact that lands now comprising national grasslands may have been originally purchased in order to establish a "demonstrational area for the public grazing of livestock" is significant in that it proves that the land was acquired for a "public use" and that the Secretary thus had the authority to acquire it through condemnation. It does not obligate the Forest Service, however, to maintain that use in perpetuity. The appropriate mix of permissible uses of the national grasslands must be determined by the Forest Service in accordance with the applicable statutory and regulatory authorities taking into account the condition of the grassland resources. This is reinforced by NFMA's inclusion of grasslands in the National Forest System multiple use framework. Clearly, it would be an incongruous result if the Forest Service was required to perpetuate a specific use on a parcel of land based on the manner in which it was acquired many years ago even if the resources were inadequate or if there was no longer any interest in such a use.

The Forest Service currently administers 3.8 million acres of national grasslands as part of the 191 million acre National Forest System. These lands were originally acquired under the authority of Title III of the Bankhead-Jones Farm Tenant Act of 1937 and were assigned to the Forest Service for administration in 1954. In the Forest and Rangeland Renewable Resources Planning Act of 1974, Congress specifically included national grasslands as a unit of the "National Forest System." National grasslands therefore are subject not just to the requirements of the BJFTA but also to the requirements of other laws generally applicable to the rest of the National Forest System. Although the revelation that national grasslands are subject to the BJFTA and other laws applicable to the National Forest System may not seem especially startling, it should help to dispel certain myths that have been perpetuated over the years about which laws apply to national grasslands and how those laws should be interpreted.

The first myth is that the only law which the Forest Service should consider in its administration of national grasslands is the BJFTA. This is plainly incorrect. The Forest Service must consider the BJFTA but it must equally consider other laws applicable to units of the National Forest System. Until there is a conflict between the requirements of the BJFTA and one or more of these other laws, the Forest Service is obliged to manage the national grasslands in conformance with all of the applicable laws. To date, no such conflict has manifested itself.

The second myth is that the BJFTA established livestock grazing as the preferred or dominant use of the national grasslands. This too is plainly incorrect. There is simply nothing in the BJFTA, its preamble or legislative history to corroborate such an assertion. Grazing has been and will continue to be an important use of the national grasslands. But it is just one of many recognized uses and it is within the discretion of the Forest Service to determine through the planning process how those uses should be managed and where they should occur. (National Grasslands Management - a Primer - <http://www.fs.fed.us/r2/nebraska/gpng/section.html>).

Comment: From the economic standpoint, almost every small community bordering the SNG [Sheyenne National Grassland] would lose some sort of commerce with this plans acceptance.

This statement is not correct as no site-specific decisions will be made in this decision. The FEIS grazing analysis did project a 9% and 17% reductions on the Little Missouri and Sheyenne respectively. The Cedar and Grand River NGS were projected at a 1% increase. These projections likely show greater reductions than may actually occur due to the assumption that the least intensive season long grazing system was used (FEIS Appendix B-106). Site specific projections will be made thorough the allotment management plan revision process.

None of this will occur until sample allotments are tested to verify the results of the Forest Service projections. The Land and Resource Management Plan for the Dakota Prairie Grasslands incorporates a delayed decision in regard to grazing. The Forest Service will not change allotment management plans until a scientific team reviews the Land and Resource Management Plan and verifies the estimated effects that will occur. If the effects are as estimated by the Forest Service, the plan will be implemented. If they are not, the plan will be changed to address the identified needs.

Comment: The State Land Department reviewed the Proposed Land and Resource Management Plan and remains concerned about the potential impact of this Plan on the school trust lands that are intermingled with the National Grasslands.

The effects on state school lands are discussed in Appendix A, pp. A-38 and A-87. The Land and Resource Management Plan repeatedly states that existing valid rights will be honored. This applies to all in-holdings, including state lands (Plan, p 1-12 and 1-23). In addition, the Land and Resource Management Plan encourages land and mineral ownership adjustments (acquisition and disposal) to

Addendum

resolve problems (Land and Resource Management Plan p.1-23 and 1-24).

Additionally, the goals and objectives of the State Land Department and the Forest Service may be different for their individual lands. When allotment management plans are developed, the Forest Service will work with the State Land Department to meet their goals and objectives within the context of the management plans. Individual lessees do have the option of fencing the state lands. Also changing MA 3.51A areas to MA 3.51B will make additional acres of state land more appealing for leasing under the Dakota Prairie Grasslands Plan.

Comment: The creation of structure setting—high, moderate, and low—were means to an organized end. The organized end is less livestock and less ranch and farm families. The underlying problem behind this plan is the false impression that the public lands, or National Grasslands, are now for public use. Ranchers and Farmers are part of the public, so is the handicapped, the elderly and those outside the range of 18 to 50 years of age. This plan is a major step back to segregation as it selects people who will use selected areas and excludes those that don't meet the new racism.

The National Grasslands are in fact public lands available for public use. The Land and Resource Management Plan makes no statement limiting use by specific groups of people (reference FEIS 3-409 Environmental Justice). The grasslands are still planned for grazing uses, recreation, wildlife, etc. Slight adjustments in management are being made to address the public's desires. For instance, the plan provides for more diverse opportunities in recreational settings, and more diverse wildlife habitats are planned as part of the desired conditions. Under the new plan, approximately 10% of the Dakota Prairie Grasslands will be managed for non-motorized opportunities, leaving the remaining 90% to continue to be managed as it currently is—for motorized opportunities.

The Forest Service is committed to working with permittees to adjust operations as needed to meet desired vegetative conditions and minimize adverse impacts and maximize positive impacts. Much of the flexibility to affect change rests with the permittees and Grazing Associations. Structure is but one means to measure diversity.

Comment: An independent analysis of the plan, conducted by the Heritage Alliance of ND, impacts the local ranchers and communities, but has a huge impact on state tax revenues

It is incorrect to refer to the HAND analysis as "independent" since it was commissioned by a particular interest.

The economic effects are discussed in Appendix A, pp. A-17 to A-22. The economic effects to the state and counties are addressed in Appendix A, pages A-12 and A-13. A wide range of alternatives was considered and the effects of these alternatives are displayed (FEIS pp. 3-61- 3-66.). The effects on state and counties are discussed on FEIS pp. 3-42 to 3-46.

Assumptions (such as season long grazing, no increase and recreation, and no drilling occurring on the existing leases in some areas where development is not planned under new leases) all contribute to projections that show adverse impacts that are likely worse than will occur. Still if they do occur the adverse impacts are very small when compared to the total jobs and income in the economic impact area FEIS Table 25 (p 3-62).

The huge economic losses predicted in HAND's economic analysis are based on much larger direct impacts than are predicted by the Forest Service. Grazing reductions are almost 5 times what the FS predicted and up to over 7 times what the Forest Service predicted. Oil and gas impacts are at least 3 to 4 times what the Forest Service predictions indicate. This difference results in very different

predicted economic effects. The Forest Service has re-examined our predictions and still believe they are reasonable.

In addition, the Forest Service decided to continue to use jobs and income as a measure of economic well being. The Forest Service determined that measures of gross economic activity do not provide as good a measure of economic well being as the change in jobs and income.

Uncertainty about the effects created controversy about the plan. To allay these fears and to provide the assurances to North Dakota, The Land and Resource Management Plan for the Dakota Prairie Grasslands incorporates a delayed decision in regard to grazing. The Forest Service will not change allotment management plans until a scientific team reviews the Land and Resource Management Plan and verifies the estimated effects that will occur. If the effects are as estimated by the Forest Service, the plan will be implemented. If they are not, the plan will be changed to address the identified needs. This change is intended to provide communities the assurances that the dramatic impacts predicted by some will not occur.

In addition, the Forest Service has changed a portion of MA 3.51A to 3.51B. This change provides more certainty about leasing areas for development in 3.51B. This change has little change on the Forest Service's predicted effects to oil and gas, but it does significantly reduce the differences between the Forest Service RFD and the ND Oil and Gas Commission's RFD.

Comment: Implementation of the Plan Revision will also directly decrease county revenues from federal and county mineral royalties. The effects are estimated to be: \$208,000 for Billings County, \$4,311,000 for McKenzie County, \$149,000 for Slope County, and \$51,000 for Golden Valley County. In the next 9-year period, the counties will probably lose about \$151,000 a year in direct revenues. The reduction in economy-wide personal income will be between \$17 and \$23 million a year.

These numbers differ significantly from the Forest Service estimation of effects. It is unclear whether annual payments or 10-year dates are being referred to. Revenues to counties with 6.25 % royalties will decrease by 4 % or \$13,900 per year over the next 10 years (FEIS, Chapter 3, Table 3-12, page 3-38). These assumptions were based on current leases not being drilled, yet, at the present, they are being developed. Based on the Forest Service database, 52,100 acres are affected by county 6.25 % royalties. Of those acres, 44,610 have standard lease terms or can be accessed from one-half mile out. From Alternative 1 to Alternative 3, NSO acreage decreased by 2.5 % and Not Administratively Available for lease (NAA) acreage increased from 24,940 to 46,590 acres (FEIS, Chapter 3, Table 3-51, page 3-120). Not Currently Authorized for leasing decreased from 16,230 acres in Alternative 1 to 6760 acres in Alternative 3. The economic effects to the state and counties are addressed in Appendix A, pages A-12 and A-13 (FEIS pages 3-61 to 3-66). Oil and gas effects on revenues are presented in the FEIS, pages 3-42 to 3-46.

Comment: Alternative 3 FEIS will have too large an impact on jobs and revenues, creating a loss of jobs and income to the local social and economic base. This alternative studies the entire Grasslands as one unit in estimating jobs and income lost. The losses in Billing County will be much greater than the average. Recreation and tourism are estimated to provide two-thirds of the jobs and three-fourths of the income on the NGP (pages 3-14). Tables 3-2 and 3-3 do not indicate anything near that figure. The economic analysis by NDSU does show recreation as a very small portion of Billing County's economic base. Minerals and agriculture share three-fourths of our economic base.

The economic effects are discussed in Appendix A, pp. A-17 to A-22 (reference FEIS pp. 3-61 to 3-66).

Addendum

When the effects are looked at in context with the economic impact area the effect on all economic impact areas is very small. (Table 25 p 3-62).

In addition this analysis shows the anticipated effects of the plan given the assumptions used. Assumptions (such as season long grazing, no increase and recreation, and no drilling occurring on the existing leases in some areas where development is not planned under new leases) all contribute to projections that show adverse impacts that are likely worse than will occur.

It is unclear why the commentor believes losses in Billings County will be larger. Jobs and income were reviewed by economic impact areas (3) as well as by one unit (FEIS Appendix B p 15 and 16 and FEIS 3-61 and 62). Billings county is the one place that the Forest Service does have recreation growth data that shows significant growth (FEIS p 3-15). Still we assumed no growth for the Little Missouri economic impact area. The other assumptions apply to Billings County as well as the remainder of the LMNG counties.

The statement referenced by the commentor on page 3-14 cannot be found. The information cited in Table 3-2 and 3-3 is different from the commentor's referenced statement. The economic dependency and diversity indices displayed in Table 3-2 (FEIS Chapter 3, p. 3-17) are for current county livestock and mineral production only. This is based on county information. The economic impact area dependency indices in Table 3-3 (FEIS Chapter 3, p. 3-9) display dependency on the Forest Service portion of area-wide industries. As stated in FEIS Chapter 3, p. 3-38, alternatives can be said to better support anticipated increases in tourism that are likely to occur whether or not additional facilities or services are provided by the Forest Service. The Forest Service agrees that recreation is a very small portion of economic dependency in Billings County as displayed in Table 3-3 (FEIS Chapter 3, p. 3-9).

The Forest Service did look at changes by county in areas available for oil and gas development (reference additional supplemental information submitted 6/02, Ability to Develop Oil and Gas by County, FEIS 3-44). Billings Co did see a minor increase in area where development will not occur (5%). However, Billings Co. is also experiencing the most development of existing leases in areas where no development was forecast under the revised plan. Nearly half of the inventoried roadless areas are currently leased, and can be developed under current lease stipulations. The change creating MA 3.51B addressed or partially addressed this issue for Billings County.

The huge economic losses predicted in HAND's economic analysis are based on much larger direct impacts than are predicted by the Forest Service. Grazing reductions are almost 5 times what the Forest Service predicted. Oil and gas impacts are at least 3 to 4 times what the Forest Service predictions indicate. This difference results in very different predicted economic effects. The Forest service has re-examined our predictions and still believe they are reasonable.

Uncertainty about the effects created controversy about the plan. To allay these fears and to provide the assurances to North Dakota, The Land and Resource Management Plan for the Dakota Prairie Grasslands incorporates a delayed decision in regard to grazing. The Forest Service will not change allotment management plans until a scientific team reviews the Land and Resource Management Plan and verifies the estimated effects that will occur. If the effects are as estimated by the Forest Service, the plan will be implemented. If they are not, the plan will be changed to address the identified needs. This change is intended to provide communities the assurances that the dramatic impacts predicted by some will not occur.

Ecological Management

Comment: Based on Uresk's published research, high structure and late seral stage are the same thing. Therefore, the percentages of late seral tabulated previously for each Geographic Area are ridiculously too low (or the area of late seral are far too high). All of these figures were not correlated with each other and they make no

ecological sense from a sage grouse habitat or any other standpoint.

The Forest Service disagrees with the interpretation of Uresk's research. High structure and late seral stage are not the same. Rangeland vegetation composition and structure objectives in each geographic area are presented separately (Chapter 2 of the Land and Resource Management Plans). One of the reasons for this is that during any one year, livestock grazing intensity can be elevated to a level that produces low structure on late seral rangelands. Habitat information for each geographic area was also considered in the development of desired conditions.

Comment: The FEIS fails to follow the present Prairie Dog Management adopted by North Dakota State nor does it analyze the effect of that plan within the FEIS. The North Dakota Prairie Dog Management Plan is a sound plan developed by many groups, including the Forest Service, and the FEIS should be changed to include it.

The Forest service will consider recommendations from the North Dakota Prairie Dog Management Plan during project analysis. The North Dakota Prairie Dog Management Plan was finalized after the FEIS was released. As stated on page 1-18 of the Land and Resource Management Plan for the Dakota Prairie Grasslands, the Forest Service will respond to unwanted prairie dog colonization when consistent with state-wide prairie dog conservation strategies approved by the U.S. Fish and Wildlife Service. It has been pointed out during public input however, that a mechanism for dealing with unwanted prairie dog colonization is needed in the absence of such an approved strategy. Based on this input, the Forest Service will consider prairie dog control, on a case-by-case basis, if the Forest Service's nation-wide moratorium on prairie dog poisoning is lifted. Any such action would require subsequent public involvement through the NEPA process. See the Record of Decision for more details.

Comment: Shooting has not controlled prairie dogs, the towns keep growing despite a rapidly growing sport that is enjoyed by hunters from all over the U.S. It should be allowed (as it is now) on public lands. Prairie dogs are definitely not endangered in and are classified as a pest in ND.

I believe in yearlong discontinuation of prairie dog hunting, and that prairie dogs should be subject to poisoning only in colonies near private land boundaries.

FEIS Appendix H (pp. H-93 through H-100), specifically page H-96, states that though the effects of shooting are not fully known, it is suspected that, at a minimum, shooting can reduce densities and indefinitely maintain reduced densities in smaller isolated colonies. This plan does not prohibit prairie dog shooting except in Management Area 3.63. See Land and Resource Management Plan, p. 1-16, Standard and Guideline #47 and FEIS Appendix A (p. A-74).

The Forest Service and various state working groups are developing strategies to address the concerns about recreational shooting of prairie dogs. The Forest Service may poison prairie dogs if there is a public health or safety risk, where damage to private and public infrastructure or facilities is occurring, or to respond to unwanted colonization on land adjoining national grasslands. See also FEIS Appendix A (pp. A-62, A-65, A-66, and A-74); FEIS Appendix H (p. H-93); Land and Resource Management Plan, Chapter 1, Standards and Guides, Biological Resources, #47, and Animal Damage Management, #2 and #3.

Comment: Goal 1.b: Why are we using non-native species for MIS?

The Forest Service is required to maintain viable populations of native and desired non-native species (36 CFR 219.19). MIS are plant or animal species selected because their population changes are believed to indicate the effects of management activities on other species of selected major biological

Addendum

communities or on water quality. Additional discussion on MIS is found in various locations: FEIS Chapter 3, pp. 3-258, Appendix A p.A-67, and Appendix B, p. B-34. There are no non-native MIS species on the Thunder Basin National Grassland.

Regarding the selection of greater prairie chicken as a MIS on the Sheyenne National Grassland, the species was not introduced. The greater prairie chicken expanded into North Dakota in the 1890s during European settlement.

Comment: Key indicators for rangeland and forest health, although they are described as "indicators for the plant and animal control," are listed on page 1-17. There is no demonstrated link between the percent of an area with suitable habitat for any given management indicator species and the sustainability of the "integrity of the soil and the ecological processes of rangeland ecosystems. Grass/shrub composition is the only indicator on the list that is scientifically related to rangeland health. The methodologies (satellite imagery and thematic mapping, and VORs) the FS proposes to use in the FEIS are not developed or appropriate for quantifying and monitoring grass and shrub cover. While satellite imagery and thematic mapping have some degree of use at the landscape level, resolution and detail make them inappropriate for use at the allotment or pasture level.

The list on page 1-17 (FEIS, Chapter 1) refers to indicators of Rangeland and Forest Health **topic**, which is not synonymous with the definition of "rangeland health" found in the glossary. The terms are similar and do cause confusion. The rangeland and forest health topic includes biodiversity, grass structure, grass composition, MIS, and other indicators. Therefore, MIS habitat suitability is an appropriate measure. These key indicators are not intended to directly link to the definition of "rangeland health" as found in Appendix G, p. G-41. The Forest Service uses satellite imagery in various applications. It may be an appropriate tool for some monitoring.

Comment: The FEIS and Plan Revision assume that management for optimum habitat of selected MIS will assure that goals for "ecosystem health" will be met. This is not documented and appears to contradict previously established guidelines. There is no reason to assume that optimum habitat for these MIS can be positively correlated to other ecosystem properties and processes or with desired outputs of goods and services. Focusing on the populations and/or habitat for a few individual animal species is the antithesis of "ecosystem management," which is one of the stated grounds to revise the forest plan.

The Forest Service did not assume that management for optimum MIS habitat will assure that all goals of "ecosystem health" would be met. The FEIS and the Land and Resource Management Plan do not propose managing for optimum MIS habitat. The Forest Service is required to select, evaluate, and monitor management indicator species (MIS) and their habitat (36 CFR 219.19 and 219.20). MIS are plant or animal species selected "because their population changes are believed to indicate the effects of management activities on other species of selected major biological communities or on water quality." The intent of these regulations is to manage for habitat conditions that benefit MIS and a suite of species with similar habitat needs. Additional discussion on MIS is found in various locations: FEIS Chapter 3, pp. 3-258; Appendix A, p. A-67; and Appendix B, p. B-34.

Comment: Some of the current MIS were used as MIS for the previous plans. If the statement above is correct then surely the Forest Service must have monitoring data to demonstrate whether actions taken under the previous plan lead to decline or increase of populations of MIS, and thus document the need for change in or continuation of the previous plan. None was presented or even referenced in the EIS. "The latter is accomplished by monitoring population trends and by determining habitat relationships (36 CFR 219.19(a))." If either of these have been carried out, it has not been documented in the EIS.

Past monitoring of MIS has been very limited. Efforts have included participating in joint sharp-tailed grouse lek surveys with the North Dakota Game and Fish Department and participating in breeding bird surveys (several MIS from current plans are songbirds). Data on past monitoring efforts are included in the administrative record and as Land and Resource Management Plan monitoring reports. In addition, Governor Schafer established a team to review the condition of the grasslands in 1999. This team included state experts. Their findings noted that range conditions were generally fair to good; they also noted that wildlife conditions were generally poor to fair. This report is included in the administrative record. .

Comment: In addition to this legal requirement, the Forest Service has stated as their purpose, the attempt to institute an "ecosystem-management strategy" based on science to enable transition to "ecologically sustainable and socially desirable" conditions. These purposes are not legally mandated and have their roots in changes in the Forest Service Planning Regulations, which are not to be implemented until the end of this year. This Plans Revision essentially implements the shelved draft Planning Rule and suffers from the same deficiencies.

Long-range planning is a prudent management action and is also required by law. The National Forest Management Act requires that management plans be reviewed and updated every 10-15 years to respond to changed conditions. In developing this Land and Resource Management Plan, the Forest Service has followed existing regulations, laws, and directives. This plan was completed under the 1982 planning regulations.

Comment: The Forest Service listed approximately 46 sensitive plant and animal species within the Sheyenne National Grassland. Guilds were also designated requiring special management considerations. Restrictions on resource uses will be implemented, "Develop and initiate implementation of conservation strategies for the following plant guilds and sensitive plant species: prairie boggy wetlands, tall grass prairie wetlands, tall grass prairie deciduous hardwoods, tall grass prairie choppy sandhills, upright pinweed, and handsome sedge. (Guideline, LRMP, page 2-32). The Forest Service has similar concerns regarding the impact of livestock on other guilds. Therefore, a scenario leading to the exclusion of livestock from all riparian and wetland areas on the SNG has been established. Ecologically, the Forest Service strategy to protect these plants and guilds is dead wrong. The tall grass prairie evolved with grazing and other disturbances.

The Forest Service is proposing to develop and implement conservation strategies to "maintain viable populations" of sensitive species, as directed by FSM 2670.22. Conservation strategies will provide guidance on appropriate management for sensitive species.

Comment: Chapter 2, page 2-12 Badlands Geographic Area describes the serial of three very generalized landscape positions. These landscape descriptions or so-called soil types misrepresent NRCS range site descriptions. Why are steep south and west facing slopes recognized while ignoring north and east facing slopes? Buffalograss is seldom ever found on landscapes exceeding 35% slope, even in late seral stages. Western wheatgrass is not a dominant species in late seral stages even in very late seral stages. The three landscape positions listed are very simplistic and technically unsound. Saline lowland sites are a very minor component in the Badlands Geographic Area. There is no consideration given to soil texture class or soil profile characteristics or development. This section needs review and substantial revision. Where did this information come from?

The listings on page 2-12 are not meant to be all-inclusive of all sites, rather they are representative of a large part of the Badlands Geographic Area. These descriptions are intended to give an overview of the entire Geographic Area. See FEIS Appendix B p. B-62 for a discussion of the how the vegetative composition section was developed. Information for this section was obtained from NRCS range site descriptions and from work done by Dr's Whitman and Barker of NDSU.

Comment: "Riparian utilization or stubble-remaining standards are to be developed and included in AMPs. Consider season of use to minimize the impacts on riparian zones" (National and Regional Policy (FSM 2200), LRMP, page L-7). However, I did not see riparian stubble height standards in the land use planning documents.

Utilization or stubble height requirements will be developed at the allotment level. Since they are highly dependent upon site-specific conditions, no broad guideline has been identified.

Comment: Whether "Alternatives 3, 4, and 5 would result in more diverse landscapes than Alternatives 1 and 2" is open to serious question because "diverse landscapes" was not defined anywhere in the documents and no evidence was present to substantiate the statement. What makes up a "diverse landscape"? Lack of fire in the recent past and the fact that such small areas are proposed to be burned each year on every National Grassland will certainly has led to and will lead to a less diverse landscape in the future.

As shown on FEIS Tables 2-8, 2-10, and 2-12 (pp. 2-44, 2-49, and 2-53 respectively), alternatives would result in differing mixes of vegetative structure. Alternatives 3 through 5 would result in greater amounts of high structure than would Alternatives 1 and 2. Increasing the extent and interspersion of high structure would result in a more diversified landscape, as much of the current landscape is dominated by mid and low structure vegetation. Variables other than vegetative structure also affect landscape diversity. As you suggest, fire is one such variable. As indicated in FEIS Tables 2-8, 2-10, and 2-12 show more acreage burned under Alternatives 3 through 5 than under Alternatives 1-2.

Comment: H-191 - "Scarcity of nesting habitat for burrowing owls" - They don't need dog towns. They are often seen out in the middle of pastures in old badger holes, miles from any dog towns.

As noted in FEIS Appendix H, page H-192, burrowing owls usually rely on burrowing mammals to excavate their nest sites. Prairie dog colonies are the preferred habitat of burrowing owls in the majority of the planning area. Burrow availability may be limiting in areas lacking colonial burrowing rodents; in such areas, burrowing owls frequently use American badger excavations.

Comment: 3-414 - Air quality value impactors - should include railroads, existing and planned. 3-418 - "no occurrence of exceeding... air quality standards" - Guess the reports of bad air quality on the news have all been since your 1999 source of information? What about the ORANGE CLOUDS?

As stated on page 3-414 of the FEIS, activities that impact air quality includes power plants and other fossil fuel users. Railroads are included in other fossil fuel users.

Comment: Not providing impacts of predators on wildlife does not provide adequate information on predators and the FEIS leaves the reader with the impression that predators only impact livestock producers. The FEIS does not adequately describe the Affected Environment under this section.

The effects of predators on other wildlife species is discussed in several locations in the FEIS. Reference FEIS, p. 3-465 and Appendix H, pp. H-90 and H-91.

Comment: I don't see a qualitative or quantitative difference in what appears to a blanket protection regardless of category (page 1-14 - 1-22). Again, I'd think it would be prudent to target habitat maintenance, not population maintenance.

Definitions for species at risk, threatened, endangered, proposed, and sensitive species are provided in the Glossary. Also reference FEIS pp. 3-199 and 3-252 thru 3-258 for additional discussions on the differences of these categories. The National Forest Management Act requires the Forest Service to maintain population viability for all native and non-native species, including species at risk, threatened, endangered, proposed, and sensitive species.

Comment: We feel that impacts by wildlife can be as significant and the Agency should seek to address other impacts to riparian areas and not just livestock. We also feel that utilizing Proper Functioning Condition protocol as the sole measure for riparian health is not appropriate.

The goals and objectives for riparian habitats and the standards and guidelines in Chapter 1 of the Land and Resource Management Plan for these areas are not directed only at livestock grazing. Direction in the Land and Resource Management Plan addresses regeneration of riparian vegetation in addition to Proper Functioning Condition (Goal 1a, Objective 2, and Guidelines Section I and p. 4-11 of Land and Resource Management Plan). The Forest Service has not proposed using Proper Functioning Condition protocol as the sole measure of riparian health (see Land and Resource Management Plan, Chapter 4, Monitoring Strategy table).

Comment: The Agency seems to once again only want to focus on impacts by livestock and ignore other potential forces. In the section on Environmental Consequences - Ecological Processes under Effects from Fish and Wildlife Management we find that the only wildlife analyzed apparently were prairie dogs. While prairie dogs and bison were components, other wildlife impacted the Great Plains and in modern times continue to impact the area. We feel the FEIS falls short in their analysis.

The discussion on p. 3-291 of the FEIS, is limited to prairie dogs as historic major grassland herbivores. However, discussions in Appendix H for numerous species address the values these species play in ecological processes: for example, the importance of butterflies as pollinators.

Comment: Page 1-20 #70 and #71 This assumes that fox dens are known and that the Forest Service is going to notify everyone entering the grasslands of the location.

These standards and guidelines apply to activities authorized by the Forest Service. The Forest Service maintains records of den locations and updates them periodically as new information becomes available. These standards are applied at the time of site-specific projects.

Comment: Under the Direct and Indirect Effects section on page 3-242, the FEIS lists Table 3-199 and Table 3-200 for data on the minimum acres of prescribed burning planned under each alternative. When we looked up these tables we found they pertain to undeveloped natural characteristics.

The Forest Services agrees, and this has been addressed in the Errata. It should be Table 3-144 and not Table 3-199 and 3-200.

Comment: The Forest Service biological assessment and evaluation of threatened endangered and sensitive species analyses exaggerates potential concerns for the respective plants and animals. Table H-6 contains a list of nearly 80 species described as at risk regionally or at state levels. About 30 of the species are listed at risk by states such as Iowa, Minnesota, Nebraska, SD, WY, and MT. Even though the Forest Service will apparently be managing these species as sensitive on Grassland Units in ND none are listed as threatened by the ND Natural Heritage Program. The NDNHP considers each of the species listed in Table H-6 as G4 apparently secure, uncommon but not rare and usually widespread, typically more than 100 occurrences and more than 10,000 individuals or G5 secure common widespread and abundant, not vulnerable in most of its range, typically with more than 100 occurrences and more than 10,000 individuals.

It is Forest Service policy (FM 2670.32) to avoid or minimize impacts to species whose viability has been identified as a concern (sensitive species). By listing sensitive species from other states as species of concern of the National Grasslands in ND, the Forest Service may be increasing its regulatory power on the grasslands.

The Forest Service considered species' global rank, state rank, and other factors in developing these lists of species at risk. Criteria used by the Forest Service to identify sensitive species are applied at a regional level. Sensitive species are identified by Regional Foresters for each Forest or Grasslands unit in a process separate from this decision. The only species that will be managed as sensitive on

the grassland units in North Dakota are those designated by the Northern Region's Regional Forester.

The NDNHP does not actually assign designations such as threatened, therefore it is not surprising that these species would not receive a threatened rank from NDNHP. However, NDNHP does use global ranks and state ranks to determine rarity and status. The Forest Service considered these ranks during the development of sensitive species lists.

Comment: A casual look at the list of "rare" plant communities shown in Table 3-117 will indicate that almost all of the species mentioned as dominants in these communities are in fact very common species. Species listed as dominants may not commonly occur together, at least not as co-dominants. But it may be that they happen to occur together in relative abundance in limited cases due to unusual environmental conditions or chance. Does that have any real environmental significance or any other significance that would justify an effort to "preserve" such communities?

The Forest Service presents a list of 47 plants species in Table 3-118 that are "at risk." However, the footnote to the table indicates that 41 of these species are "secure globally" or "apparently secure globally." Why are they even listed here?

Plant community status is assessed and ranked on a state, national, and global basis by state Heritage Programs and the organization, NatureServe. Rare plant communities are identified through this process. For more information on how rare plant communities are determined and their ecological significance, see the FEIS and literature sources cited, Chapter 3, p. 3-195. The Forest Service is required to consider the distribution and abundance of plant and animal communities (including rare plant communities) to address biological diversity and meet overall multiple-use objectives (36 CFR 219.19 and FSM 2622).

These species are identified as "sensitive" species. These species may have local populations on NFS lands that may be at risk of being extirpated. The Forest Service is directed to identify and manage for sensitive species (FSM 2672). For more information on how sensitive species are selected see FEIS Appendix H.

Comment: 3-201,2 - Plant species at risk include nodding buckwheat and alkali sacaton. "Possible but unconfirmed occurrence." Again, are you serious - both these plants are quite common on the TBNG.

As stated on p. 3-199 of the FEIS, species at risk are either protected under the Endangered Species Act, are globally imperiled, or vulnerable. Even though they may be common locally, they still meet the definition of species at risk. As indicated in Table H-6, these 2 species are only listed as sensitive on the Dakota Prairie Grasslands. Table H-6 is in error for those 2 species for NNF and TBNG and has been corrected in the Errata.

Comment: Page 1-21 #76 if a raptor nest is vacant for 3 years it should be considered abandoned. A development within 1 mile of a bald eagle roost would not have any population effects and could be mitigated. The "disturbance" dates are too wide. The most critical time is between nest building and hatching. For most that would run between March and June. Even for eagles, if a pair is prone to start building their nest in February they will use one of their alternate nests if they don't like a disturbance. And, the population is so large the Forest Service can't justify raising the eagle priority over other activities.

The standards and guidelines are based upon information presented in the Biological Assessment/Biological Evaluation. The references consulted are included in the NGP Administrative Record and are cited in Appendix H.

Comment: On page 3-243 under Effects from Range Management and Livestock Grazing, the Agency indicates that increasing the level of late seral communities would benefit rare plant communities, but on page 3-199 under the Species at Risk section we find that at least two federally listed species (blowout penstemon and western prairie fringed orchid) are early seral species and have had their habitat altered because of range management which has resulted in less early seral areas. Therefore we question the blanket statement made by the Agency as to the benefits from a movement from mid to late seral stages.

Most rare shrubland and rangeland community types found on National Forest System lands are found on mid to late seral stage community types. Therefore, the statement on benefits to rare plant communities from increasing late seral communities is accurate. Rare plant communities do not necessarily contain threatened, endangered, or sensitive plant species such as blowout penstemon and western prairie fringed orchid.

Comment: On page 3-306 two tables are presented. Table 3-152 shows a 29% increase from 1980-1990 for non-consumptive, non-residential wildlife use for Wyoming, while Table 3-153 shows and 27% decrease from 1985-1990 for Wyoming. Such a wide variation in numbers in such a short time frame would indicate something is wrong in the methods used to obtain the numbers.

There is a difference in the two tables. This difference is explained in the narrative on page 3-306 following the tables.

Comment: 3-262 - "P. dog acreage constrained by poisoning" More acres reduced by plague than poisoning since 1995. Acknowledge some facts, please.

Plague is acknowledged as a direct effect on prairie dog populations (FEIS, p. 3-262).

Comment: B-64 - "Low seral stage in p. dog towns - high livestock use, often areas where club moss is dominant floral feature." WRONG - club moss is excellent indicator of lack of hoof action.

This describes early seral condition, including areas where club moss is a dominant floristic feature. It is not clear where the commenter is obtaining information about hoof action and club moss. There are many factors that can influence the presence/absence of club moss. As indicated in Table B-9 (FEIS), blue grama and club moss are frequently codominant species on grassland cover class 3130 on the Dakota Prairie Grasslands.

Comment: 3-187 - TBNG not listed under veg. structure.

Thunder Basin National Grassland is not mentioned because grassland structure was not measured as stated in the FEIS p. 3-191.

Comment: 3-214-16 - Nearly identical descriptions for plants in all areas - not true, work not done.

The descriptions starting on page 3-214 (FEIS) are very general since interactions between succession and disturbance can only be described in general terms because they are difficult to predict. As a result, successional pathways are not linear and do not follow a single pathway.

Comment: 3-257 "little is known about beetles..." But they are declared endangered anyway - just to err on the side of caution, huh?

The American burying beetle has been designated an endangered species by the U.S. Fish and Wildlife Service, under the authority of the Endangered Species Act. The Forest Service analyzes potential effects on endangered species, as required by federal law.

Comment: 3-467 - Yearlong bird residents should include bald eagles, among other species.

Bald eagles are discussed on FEIS, p. 3-252.

Comment: The FEIS indicates that 1-10% of the habitat is suitable for sharp-tailed grouse. What data supports this assertion?

As explained on FEIS p. 3-261, "Estimates of potential habitat and current habitat suitability for plains sharp-tailed grouse are presented in Table 3-129. Current habitat suitability is based on the percentage of the potential habitat on each planning unit that is estimated to be quality habitat, based on the habitat description provided in Appendix H of the revised plans." Estimation of current habitat quality incorporated grassland structure levels presented on pp. 3-188 to 3-191.

Comment: Predicted habitat suitability for sharp-tailed grouse and prairie chickens is shown in Table 2-8 to be 1-10% under existing conditions, yet the percentages of high, moderate, and low structure are shown as "unknown." How can one know desired vegetation structure if there is no information on present structure and no information of populations or trends in populations of the MIS under current conditions? Tables 2-10 and 2-12 show similar situations for the Nebraska National Forest and Thunder Basin NG units.

The Forest Service did not evaluate existing habitat suitability for sharp-tailed grouse or prairie chicken on individual national grasslands or forests if vegetation structure information was not available.

The Forest Service has added data on the percentage of high, moderate, and low structure in the Errata. This information is only available for some of the Dakota Prairie Grasslands units. The estimate of habitat suitability was based on both field data and best professional judgment.

Comment: The VORs shown are not necessarily representative of the units involved, don't account for differences in site potential and/or range condition, and do not indicate how or whether the areas sampled were only on grazed areas or not.

The Forest Service used the best information available. Site selection for VORs is discussed in FEIS, Chapter 3, pp. 3-188 to 3-191 (example: "Grassland structure on clayey, silty, and sandy range sites were randomly sampled on the..." Additional details are available in the administrative record.

Comment: The Plan calls for VOR readings for sharp-tailed grouse habitat of 3.5. The Theodore Roosevelt National Park has not been grazed for years and their readings were 3.2 to 3.4. The Plan states that the 3.5 reading will be taken after the grazing season and must be maintained year round.

Theodore Roosevelt National Park is grazed. Species include elk, deer, and bison, among others. Furthermore, some VOR transects inside the park have exceeded 3.5 inches. Details can be found in the administrative record.

Comment: Also, no data was presented to substantiate other resource trends under current management. Data probably existed but were not presented to include trends in range condition (seral stages), livestock utilization, weather conditions, wildlife populations, harvest of game animals, etc.

Known trend information was included in FEIS Chapter 3.

Comment: On page 3-261, the Forest Service makes statements about the population trends of sharp-tailed grouse and prairie chickens on some of the management units. However, no data is shown to substantiate these statements and no explanation for the causes of such trends is given. In Table 3-129, most of these units are said to have a current habitat suitability of 1-10%. This level of suitability does not appear very favorable, but populations are said to be increasing.

Data used for this analysis are available in the administrative record. In many cases, the cause of population trends is difficult to determine. This does not excuse the Forest Service from reporting those trends when sufficient data is available. Table 3-129 (FEIS, Chapter 3) refers to estimates of potential habitat for plains sharp-tailed grouse habitat and current levels of habitat suitability (for nesting). Calculation of current habitat suitability was based in large part on the availability of nesting cover. Nesting cover is provided by sites with taller and denser vegetation. The current distribution of vegetative structure on the various units is shown in FEIS Tables 3-103 to 3-111 (tables begin on FEIS, Chapter 3, p. 3-188). Trend information on this species is given in FEIS, Chapter 3, p. 3-261 and notes that some populations are trending upward, while others are stable or trending downward. As noted earlier by this commentor, grouse populations are affected by many things, so population increase with low habitat quality is not necessarily contradictory. For example, even low amounts of suitable habitat can support an upward trend if the pre-existing grouse population is particularly low.

Comment: We do not agree with this definition and believe sharp tailed grouse leks should be unoccupied for more than one year before being considered inactive. Statement on Pg D-9 concerning oil and gas activity suggests sharp-tailed grouse leks should be unoccupied for at least two seasons prior to waiving activity restrictions. This contradicts the statement on pg 1-14.

Pg 1-14 item 15 states disturbance activities will be restricted within one mile of sharp-tailed grouse lek sites during the breeding season. In the absence of citations to the contrary, we believe activities should be limited during the breeding period within a two mile radius similar to sage grouse leks.

Pg 1-18 Item 46. The document uses a standard of five years in unoccupied status to

qualify a lek as historical or no longer active. Since it appears that sage grouse populations cycle at approximately ten-year intervals a better guideline would be 10 years of documented non use in order to say that a lek is no longer active. The Department's Sage Grouse Working Group has agreed to use the 10-year criteria unless a lek is lost directly from mining or other obvious development.

The guidelines on page 1-14 of the Land and Resource Management Plans for the Nebraska National Forest and for the Thunder Basin National Grassland are incorrectly stated. The following correction has been made in the Errata: "A sharp-tailed grouse display ground is no longer considered active if it's known to have not been used during the last 2 breeding seasons."

Standards and guidelines were developed using available research (reference FEIS p. H-171). At this time, the Forest Service is evaluating the 10-year recommendation and is waiting for completion of the final Sage Grouse Conservation Plan currently in progress in Wyoming. As this and other information become available, adjustments to the Land and Resource Management Plan may be desirable and can be accomplished through the amendment process.

Comment: Some of the data (riparian conditions and range sites for the VOR date) received via the FOIA request is inconsistent with data reported in the FEIS. Appendix H (Page H-170, in Appendices) indicates high structure is needed within 3-mile radius of sage grouse nests. This requirement would greatly enlarge the 50,000 acres affected by a 2-mile radius around sage grouse display grounds (LRMP, Guideline 1-14). These discrepancies and data gaps make it difficult to evaluate.

Guideline #15 in the Land and Resource Management Plan for the Dakota Prairie Grasslands (Chapter 1, p. 1-14) refers to limiting disturbance, not managing habitat. Guideline #17 on p. 1-14 does call for emphasizing quality nesting and brooding habitat within 3 miles of active sage grouse display grounds. That is the way the Land and Resource Management Plan was analyzed for effects. There is no discrepancy.

Comment: Greater prairie chicken, sharp-tailed grouse management guidelines state that there will be no grazing within a one-mile radius of an active lek until after June 15, this provision covers most of the Sheyenne Grasslands. The Forest Service states that not all of the habitat will be affected such but the guidelines do not STATE that.

The Land and Resource Management Plan for the Dakota Prairie Grasslands does not state that no grazing is allowed within a mile of a lek. The plan does limit activities within one mile of display grounds from March 1 to June 15th (Chapter 1, p. 1-14) if the activities are likely to adversely affect the reproductive success of these species. This guideline is aimed at limiting the impact of direct disturbance. Normal grazing practices do not fall in that category. As noted in Chapter 1 of the Land and Resource Management Plan, p. 1-14, project-level analysis will consider the type, source, frequency, and duration of the potential disruption, as well as the affected species and presence of screening vegetation or topography. Activities most likely to be affected would include large recreational events and construction projects. Livestock grazing most typically affects prairie grouse by its impact on the vegetation. Vegetative structure and compositional objectives, and management direction on where to emphasize these objectives is intended to address this concern.

Comment: GSI participants would like formal clarification as to how much of the one-mile radius for active sharp-tailed and prairie chicken display grounds and the three-mile radius for active sage grouse display grounds will be dedicated to nesting

and brooding habitat and how this guideline will be implemented.

The Land and Resource Management Plan for the Dakota Prairie Grasslands, Appendix H, describes habitat needs for sharp-tailed and prairie chicken. Standards and guidelines, both grassland-wide (Chapter 1) and for geographic areas (Chapter 2), provide instruction on how to implement habitat needs. Some flexibility is left for site-specific management. This flexibility will be used to periodically rotate and move areas of high structure. It is important to note that the amount of area around a lek can be modified. The Land and Resource Management Plan states that these areas will be emphasized for quality nesting and brooding habitat (Land and Resource Management Plan for the Dakota Prairie Grasslands, Chapter 1, p 1-14, #17). Specifics on how much and where high cover will be managed for around a given lek must be determined at the site-specific level. Such details are beyond the scope of this plan.

Comment: Pg 1-19 (General #55). We suggest an unburned and unsprayed buffer of 150 feet instead of 100 yds for meadows, riparian areas and other foraging habitats. Also in the Spring Creek Area sage grouse also use silver sagebrush communities. We suggest adding silver sagebrush to these discussions on sage grouse wintering habitats.

The description of sage grouse wintering habitat in Appendix H of the Land and Resource Management Plan is not limited to big sagebrush. In the Errata, Standard #55 in the Thunder Basin Land and Resource Management Plan will be changed to reflect silver sagebrush and greasewood as well as big sagebrush are components of winter habitat. To be more specific, this will be changed to read, "big sagebrush silver sagebrush, or greasewood within 100 yards of meadows and riparian areas should not be burned or sprayed." The 100-yard buffer is direction that applies across all of Region 2 of the Forest Service (FSM 2630, R2 Supplement 2600-92-3).

Comment: Under the sage grouse section of the plan, we believe the Forest Service should consider a standard of no net loss of sage grouse habitat, given this species continued likelihood of federal petitioning. If construction or exploration activities result in the loss of sage grouse habitat the Forest Service could mitigate by improving habitat elsewhere.

As noted in FEIS Appendix H, pp. H-172 to H-175, the Land and Resource Management Plans already contain extensive sage grouse management objectives, standards and guidelines. These were developed using available research (see FEIS Appendix H, p. H-171). Site-specific analysis would be conducted on any subsequent construction and exploration projects. Suitable site-specific mitigation measures would be assessed at that time. Because of these facts, the Forest Service does not believe that a grassland-wide standard for no-net-loss is necessary to maintain sage grouse viability.

Comment: For the Buffalo Gap NG, the percentages of high seral and high structure do not correspond and the amount of high structure sagebrush desired is far in excess of recommended levels.

The high seral stage objectives for plant composition is the same as the high structure objective on pp. 2-35 and 2-36 of the Nebraska Land and Resource Management Plan. The plant composition in sagebrush canopy falls within the range of vegetative composition structure (FEIS p. 2-39).

Landscape

Comment: Page (1-6): Scenery, Objective 1: We recommend adding, "Immediately implement..." We believe that upon implementation of this Plan this objective should drive all relevant management actions.

Scenic Integrity Objectives in Chapter 2 of the Land and Resource Management Plan are effective when the Record of Decision is issued.

Land Use

Comment: Guideline 1-18-3. Reduce conflicts with adjacent landowners over prairie dog management through an active land ownership adjustment program. Recommended GSI Alternative - Reduce conflicts with adjacent landowners over prairie dog management through an active land ownership adjustment program that places highest priority on voluntary land exchanges. GSI participants would like to see the top priority placed on land exchanges over acquisition. Participants feel that there is a widespread opportunity, need, and stakeholder support for land exchanges that address the economic needs of ranchers, industry and other private users while enhancing multiple use values to the general public. GSI participants would like formal clarification of the Forest Service's understanding and intentions relative to fee title acquisition as part of any land ownership adjustment efforts under the Plan.

Land acquisitions are based on willing buyer and willing seller premise. The Forest Service has emphasized this with management direction (see Land and Resource Management Plan, Chapter 1, p. 1-23, #1).

Comment: pg 1-25 #4 We recommend that the word 'transfer' be substituted for 'disposal' as the Forest Service has a responsibility to maintain or increase the acreage of holdings rather than reducing its acreage.

The Forest Service feels that the term *disposal* is properly used as defined in Title 7, Code of Federal Regulations, Section 2.60.

Comment: Page (1-8) (Objective 4.b.1) We suggest language be added to land ownership adjustment plan (exchanges) that further describe its purpose. For instance, "Such a plan could help consolidate contiguous parcels of land, and help protect particularly valuable natural resources. With respect to prairie dogs and other species, acquiring a larger patch of contiguous land would help reduce conflicts with private landowners."

This is further discussed on pp. 3-406 and 3-407 of the FEIS, where the purpose for land ownership adjustments is described.

Comment: 3-81 - Change in acres from 572,518 to 532,100 - (40,000 less - land exchange???)

The acreage figure of 572,518 is what the 1985 Medicine Bow National Forest Management Plan listed as suitable for grazing. Based on the process to determine capable rangeland acres, there are 532,100 acres of capable rangeland for livestock grazing on the Thunder Basin National Grassland.

Comment: Land and Resource Management Plan, Administration, Land Ownership, Guideline #4, Bullet #3 (Pg 1-27). Although the criteria was reduced from 3,000 acres in the DEIS, the criteria of 2,000 acres is still quite high. Such a parcel can offer very high recreational value and wildlife habitats. Efforts should be made to obtain access to parcels this large. Perhaps a criterion of 640 acres would be better.

The guideline provides a course filter useful in considering proposals. Site-specific analysis will identify and retain those areas with special qualities such as high recreational value and wildlife habitat.

Comment: On page 3-20 of the Nebraska Plan, the mean annual temperature of the Signal Hill RNA, Bessey Unit, Nebraska National Forest is listed as "49 degrees Celsius." This is probably supposed to read "Fahrenheit."

This has been corrected in the Errata.

Comment: Use of Condemnation of Private Lands by the Forest Service - GSI participants are concerned about potential use of condemnation of private land in the implementation of the Plan. Participants noted that current condemnation provisions relate to the Wild and Scenic Rivers Act and are subject in that context to strict criteria and limitations. GSI participants, while not opposing any condemnation, prefer that it be pursued as a last resort, with emphasis on voluntary measures such as land exchanges. GSI participants request that the Forest Service clarify whether the Plan includes the use of condemnation as part of active land ownership adjustment (e.g. as in guideline 1-18-3 on prairie dog management) and, if so, specify under what circumstances it would be used.

The Forest Service changed the plan between draft and final to allay some of these fears. A guideline was added that indicated land acquisitions will be on the basis of a willing buyer and seller (Dakota Prairie Grasslands Land and Resource Management Plan p. 1-23, #1). The use of condemnation cannot currently be precluded. While no condemnation is foreseen, the federal government cannot indicate it will not use condemnation if an appropriate public need arises.

Livestock Grazing

The following response applies to all comments about stocking levels:

The Land and Resource Management Plan does not set stocking levels. Stocking level decisions will be made through the allotment management plan process. The Forest Service is committed to working with permittees to design grazing allotment management plans needed to achieve vegetation objectives with minimum impact to permittees. The Grazing Associations also have flexibility to help manage some of the needed changes and minimize impacts to local ranching operations.

Comment: The US Forest Service statement that there will only be a 9% reduction in cow numbers from permitted numbers over a 20-year average is misleading. The plan will impose at least a 29% reduction in grazing from the grazing preference. Non-use for personal convenience and economic reasons being averaged and applied to everyone is not showing a true picture of everyone's circumstances.

The assumptions used, including the 20-year average, were displayed in the FEIS, Appendix B, p. B-106. The commenter can logically draw a personal conclusion about the scope of effect by basing it against a range of different parameters such as preference or any length of yearly authorizations. The Forest Service felt that the 20-year average more adequately portrayed the annual variance in authorizations that are primarily due to environmental factors such as precipitation fluctuations.

Comment: The Forest Service effort to restrict pasture size and water developments in order to protect secondary range is just another way to lay the groundwork for reducing or eliminating livestock grazing. The next step is the determination of key areas or critical areas and then setting utilization levels for those areas that are unattainable in any economically viable livestock production system.

There is no restriction on pasture size or water development in the Land and Resource Management Plan. There is direction to use nonstructural range management techniques to achieve desired conditions (Chapter 2, p 2-7, 2-15, and 2-22, Land and Resource Management Plan for the Dakota Prairie Grasslands). This direction also states that if nonstructural methods are not successful, new structures can be used to achieve desired conditions. Secondary range is one method that can be utilized to meet the desired vegetation conditions described in Chapter 2 of the Land and Resource Management Plans for each geographic area (reference FEIS, Chapter 3, pp. 3-84 through 3-85 and pp. 3-458 thru 3-460). Grazing is authorized in each alternative considered in detail.

The Land and Resource Management Plan do not set stocking levels or utilization levels. Those determinations will be made during analysis at the allotment management plan level. The Forest Service is committed to working with permittees to design grazing allotment management plans needed to achieve the vegetation objectives with minimum impact to permittees. The Grazing Associations also have management flexibility to help manage some of the needed changes and minimize impacts to local ranching operations.”

Comment: Stocking rates were confused with forage harvest efficiencies and the NRCS method of estimating stocking rates was not used.

Specific methodology used by the Forest Service for determining stocking rates is in the administrative record in a May 22, 2002 memorandum.¹ Mathematical adjustments were made to the NRCS stocking formula to account for structure objectives. The NRCS in North Dakota uses a feeding efficiency of 0.35. This is assumed to result in moderate structure. The question then is "What feeding efficiency would result in high and low structure?" If high structure is desired, a lower feeding efficiency would be used as less vegetation could be removed by livestock. The opposite holds true for low structure.

Comment: Appendix I and the administrative record for the Northern Great Plains planning effort leave the answer to these questions unclear. At one point Appendix I cites the NRCS's National Range and Pasture Handbook, however elsewhere it repeatedly references "NRCS stocking guides for the local area" Ordinarily, it might generally be assumed that stocking guides developed for the local area by NRCS personnel would persist in not following standard NRCS protocols and methodologies. However, if local NRCS personal persist in not following standard protocols, then what? The ambiguity is further compounded by the DPG livestock carrying capacity such as harvest efficiency with adjustments relating to slope and distance to water. We believe the answer to these question is clear, should the Forest service choose to utilize NRCS protocols, they should be protocols developed and prescribed nationally.

The Forest Service will work with the local NRCS office to apply methodologies in a consistent fashion. Because these methodologies are designed to identify a starting point, monitoring of specific allotment decisions will verify if stocking rates are meeting plan goals and objectives. If monitoring indicates the need, further stocking rate adjustments will be made.

Comment: FEIS, A-10 states private landowners have voluntarily given the Forest Service control of grazing use on intermingled private land. The Forest Service rangers consistently tell us that they do not have any control of private land. The statement needs to be clarified.

The response to the comment on page A-10 references waiving control of private land for the purposes of using it in conjunction with public lands to improve management efficiency. In that case, private landowners waive control of the land voluntarily to the Grazing Associations who agree to manage it in compliance with the Land and Resource Management plan and other site-specific plans. Landowners have the option of removing private land from waived status at any time.

¹ Memorandum subject: *Clarification of the Analysis of Grasslands Plan S&Gs Relating to Livestock Grazing on the Dakota Prairie Grasslands.*

Comment: Vegetation Structure EIS the Forest Service does not make much, if any, distinction between the long-term (or historical) effects of grazing management and the effects of current utilization. Because only "flat to gently rolling grasslands" were sampled, there was no indication of whether areas sampled were representative of the grazing applied to the grassland, and there was no indication of the potential values to be expected on the range sites sampled.

Structure is a result of grazing in a current year. It is measured in the fall after grazing. The values obtained are based on sampling and reflect the amount of forage left after grazing, regardless of potential. Long-term effects of historical grazing is most easily seen in the vegetative composition of a site. Flat to gently rolling grasslands were the strata selected for intense VOR monitoring because it is both the habitat of greatest interest (in that it is the area most capable of producing high structure vegetation) and the upland habitat that receives the greatest impact from permitted livestock management.

Comment: Stocking levels will be determined for individual allotments. An example from FPNG and Medora Ranger District was given. Why didn't the Forest Service provide data on every unit? Authorized use level. The statement is made that the increase in stocking levels and the increase in cow size have had a combined effect of up to 50% increase in grazing use on some units. No data was included anywhere to back up that allegation. The Forest Service has not presented any consistent figures for actual stocking, for utilization, or for trends in vegetation, soils, wildlife populations, or almost any other goal identified in the previous Forest Plans. "Forage allocation" approach that is incapable of determining reliable estimates of carrying capacity.

Individual allotments will be reviewed during allotment management plan revision process. The characterization of a 50% increase in grazing use is in error. Analysis showed that beef production (lbs. of red meat) has increased by as much as 50%. That analysis was based on NDSU data from western North Dakota. Documentation of this analysis is in the administrative record.

Comment: The Forest Service should work with the allotment management plans to develop management strategies to utilize C3 and C4 plant species.

Management strategies will consider all plant species.

Comment: The Forest Service should ensure that development of allotment management plans are completed in cooperation with the permit holders.

The Forest Service, through the appropriate Grazing Association, will work closely with livestock operators when developing allotment management plans.

Comment: Consider the last 5 year actual use as more reflection of "Normal" stocking rates.

The use of a longer time frame of actual use provides a better opportunity to level highs and lows thereby providing better average stocking rates.

Comment: The FEIS fails to incorporate or reflect the Rangeland Management Guidelines adopted by both the Forest Service and the Bureau of Land Management in 1993 and offers no explanation for this significant omission, even though the HIS index will not address the same factors.

The purpose of the Land and Resource Management Plan is to develop a set of standards and guidelines based on current public comment and the best information available. The 1993 guidelines may be incorporated at the allotment management plan level if they are consistent with the Land and Resource Management Plan.

Comment: The plan uses the 20-year actual use numbers in the baseline AUMs, thus there will be an initial cut. FS says not until AMPs and monitoring work are done- this is not written as a guideline into the plan as of now.

The 20-year average was used because it was more representative of the temporal variation in authorized stocking levels that were based primarily on differences in annual forage production due to wet and dry precipitation patterns. There is reasonable potential that the grasslands will experience a similar pattern in precipitation over the next 20 years as the Land and Resource Management Plan is implemented. Some of the variation could also be attributable to non-use by association members. However, many of the grazing associations re-allocate non-use to other members resulting in no effect to specific annual allocations. The best site-specific information will be used at the allotment management plan level. Decisions will be based on Land and Resource Management Plan standards and guidelines and the desired future condition for the allotments.

Comment: I have read Exhibit: --Congressional Grazing Guidelines, effective 6/21/90, and find no evidence of grazing restrictions. Seven pages of detailed management specifications emphasize the authority to maintain and manage proper grazing practices on wilderness designated areas, even permitting motorized vehicles when necessary. With these conditions, it would appear that grazing on wilderness would cause no hardship.

The Land and Resource Management Plan does not designate wilderness areas. If Congress should choose to designate wilderness on the grasslands, grazing activities will be addressed in the enabling legislation.

Comment: One issue, "Primary of livestock grazing on national grasslands" is excluded from the DEIS as being a Departmental or Legislative topic. The statement here should be: "The primary of livestock grazing on National Grasslands defined by important change was suggested in the review of the DEIS and was not even addressed in the FS's summary of public comments.

The Land and Resource Management Plan allows for grazing on all suitable acres on the Dakota Prairie Grasslands. In FEIS, Appendix A, p. A-8, the comment addresses emphasize historical grassland uses. FEIS, Appendix A, p. A-14 addresses the issue of the grassland being acquired for the purpose of demonstrational grazing projects.

In order to exercise the condemnation authority delegated by Congress, the Secretary must demonstrate that the land to be acquired will be applied to a "public use" (40 U.S.C. §§257, 258a.). In general, the term covers a use affecting the public generally, or any part thereof, as distinguished from particular individuals. No set definition of what degree of public good will meet the

Addendum

requirement of a "public use" exists since in each case it is a question of public policy which depends on the facts and circumstances of a particular case. However, the meaning of the term is flexible and is not confined to what may constitute a public use at any given time. The term must be applied in the light of what the legislature seeks to accomplish and what it may properly consider to be a public use at the time.

Thus, the fact that lands now comprising national grasslands may have been originally purchased in order to establish a "demonstrational area for the public grazing of livestock" is significant in that it proves that the land was acquired for a "public use" and that the Secretary thus had the authority to acquire it through condemnation. It does not obligate the Forest Service, however, to maintain that use in perpetuity. The appropriate mix of permissible uses of the national grasslands must be determined by the Forest Service in accordance with the applicable statutory and regulatory authorities taking into account the condition of the grassland resources. This is reinforced by NFMA's inclusion of grasslands in the National Forest System multiple use framework. Clearly, it would be an incongruous result if the Forest Service was required to perpetuate a specific use on a parcel of land based on the manner in which it was acquired many years ago even if the resources were inadequate or if there was no longer any interest in such a use (National Grasslands Primer pp. 39-40).

Comment: In checking with the North Dakota Secretary of State's office earlier this year, it was learned that the Cedar River Cooperative Grazing Association has been dissolved by "operation of law." North Dakota law requires that cooperative organizations file annual reports in order to retain a legal standing. One year after they fail to file an annual report, their legal authority is terminated. The Cedar River Cooperative Association did not file an annual report in 1993. That organization was terminated by "operation of law" on March 31, 1994. THEY DON'T LEGALLY EXIST. The U.S. Forest Service should not be conducting any business with an entity that does not legally exist. The U.S. Forest Service should require that each cooperative grazing association they work with file a "Certificate of Good Standing." That is a document that the Secretary of State office can provide to any entity. The grazing associations should prove they exist before any agreements should be extended to them for the next year and a Certificate of Good Standing must be filed annually with the U.S. Forest Service District Office.

This issue is outside the scope of plan revision.

Comment: It needs to be emphasized that FS data confirm a dramatic improvement in range condition on the Dakota Prairie during the 1986-1998 period. The proposed stocking rate cuts are clearly contrary to the actual situation. These condition and trend data should be included into the FEIS and used in the analyses.

The projected stocking rate reductions reflect the need to meet grassland goals and objectives. The final decision on how individual allotments are meeting those goals and objectives will include the best site-specific information available, including any monitoring data for specific allotments. This will occur during the allotment management planning process.

Comment: The Forest Service's Plan will have major negative impacts on the livestock grazing permittees. Livestock grazing on the National Grasslands within Billings County was estimated by Dr. Lacey to be reduced by 30% to 55%. Range management specialist, John Lacey, Ph.D. states that the methodology used by the USFS is the complete opposite of what the profession of range science advocate. A monitoring program would make it unnecessary for the Forest Service to reduce stocking numbers because of animal size or on the premise of secondary or unsuitable range. Stocking numbers should be determined based on range trend after monitoring.

Dr. Lacey's report erred in the assumption of total reduction numbers. The report's reduction estimates are the result of his assumption that the effects of each standard and guide are **additive**, with each requiring its own land base rather than one piece of land satisfying multiple goals and objectives. Many of the standards and guidelines can in fact be synergistic with multiple resource values from a specific piece of land. Documentation of analysis is in the administrative record.

Comment: The structure height requirement will not work as a lot of this land is short grass varieties.

Land and Resource Management Plan, Chapter 2, p. 2-13, Desired Structure Objectives. The Forest Service recognizes that high structure can be achieved by mid and/or tall grass and productive soils. Forest Service monitoring has indicated that the high structure objective can be obtained. Some transect data revealed that as much as 21% of the readings taken met the definition for high structure (greater than 3.5 VOR).

Comment: The tall grass prairie of the Sheyenne National Grasslands cannot be treated in the manner of the western grasslands.

See FEIS Appendix A, p. A-56. The Sheyenne National Grassland has its own geographic area and its own management area prescription. The standards and guidelines found in Land and Resource Management Plan, Chapter 1 are applicable to all grasslands, regardless of whether they are tall grass or mixed grass prairie. Land and Resource Management Plan, Chapter 2 provides the unique direction needed for the Sheyenne Geographic Area. Land and Resource Management Plan, Chapter 3 provides further distinctions for other unique areas on the Sheyenne. This unit is the only one with Management Area for Ecosystem Restoration and in that regard, provides the unique differences needed for the tall grass prairie.

Comment: Forest Service's intent to use forage allocation approach to setting stocking rate, estimating forage production and dividing by an animal unit equivalent of required forage per AUM. Such an approach is incapable of determining stocking rates with sufficient accuracy to be used for individual allotments and is not supported by the range management profession. Only be justified to estimate "initial" stocking rates. If the Forest Service does not have any sound information upon which to base stocking rates, why don't they? Instead of relying on an invalid modeling approach, why don't they proceed to obtain actual data specific to the various units that could be used to set reasonable stocking rates?

The plan projections for forage availability were based on the NRCS stocking formula and production

data from NRCS sources and from post-graduate thesis work (reference the administrative record "Memorandum, Subject: Clarification of the Analysis of Grasslands Plan S&Gs Relating to Livestock Grazing on the Dakota Prairie Grasslands," May 22, 2002). Documentation of these sources can be found in the administrative record. The methodology utilized for estimating forage availability is documented in the project record. The Land and Resource Management Plan does not reduce livestock. It projects the potential effect on livestock use based on landscape averages. The Forest Service will use the NRCS stocking formula and the best site-specific information available when revising allotment management plans. Subsequent monitoring will validate allotment management plan decisions, and final stocking rates will be based on results observed from implementing those decisions.

Comment: As shown in the analysis by Smith and Lacey, the Plan Revision does not change the original decision to impose significant reductions in livestock grazing but simply changes the factual basis. Lacey establishes that the Plan Revision and FEIS misused the NRCS recommendations and do not use correct NDSU. No agency has the discretion to misuse information and data, indeed that is the definition of arbitrary and capricious. The process is further colored by the misrepresentations made in the FEIS.

The Land and Resource Management Plan projections for forage availability were based on the NRCS stocking formula and production data from NRCS sources and from post-graduate thesis work. Documentation of these sources can be found in the administrative record. The methodology utilized for estimating forage availability is also documented in the administrative record. The Land and Resource Management Plan does not reduce livestock. It projects the potential effect on livestock use based on landscape averages. The Forest Service will use the NRCS stocking formula and the best site-specific information available when revising allotment management plans. It will be used to provide a starting point for stocking rates. Subsequent monitoring will validate allotment management plan decisions, and final stocking rates will be based on results observed after implementing those decisions.

The Land and Resource Management Plan for the Dakota Prairie Grasslands incorporates a delayed decision in regard to grazing. The Forest Service will not change allotment management plans until a scientific team reviews the Land and Resource Management Plan and verifies the estimated effects that will occur. If the effects are as estimated by the Forest Service, the plan will be implemented. If they are not, the plan will be changed to address the identified needs.

Comment: An independent range scientist studied the plan and found the following: An 8% reduction for riparian areas (creeks, streams, etc). A 5% reduction of rest. 5% reduction for upland game birds. 1% reduction for prairie dogs. 6% reduction for sensitive species. 19% reduction for cow size. There is a 14% difference between actual. 11% reduction for grass structure.

This report erred in its assumptions and calculation of total reductions. The report's projections are the result of incorrectly assuming that the effects of each standard and guide are **additive** with each requiring its own land base rather than one piece of land satisfying multiple goals and objectives (FEIS p 3, additional range analysis). Reference Administrative Record "Memorandum, Subject: Clarification of the Analysis of Grasslands Plan S&Gs Relating to Livestock Grazing on the Dakota Prairie Grasslands," May 22, 2002

Comment: Forest Service says that there will be only a 9% reduction in cow numbers over a 20-yr average is misleading. The plan will impose at least a 29% reduction in grazing from the 20-yr average and a 43% reduction from the grazing preference.

The Forest Service disagrees with this interpretation. The 29% and 43% figures are based on assumptions that each goal or objective requires a separate piece of land to obtain. Many of the Land and Resource Management Plan standards and guidelines are synergistic and multiple benefits can be obtained from a single acre such as one acre of rest can also be counted on to produce high structure if the vegetation is capable of producing it. High structure objectives are applied to herbaceous plant communities only (see vegetation standards and guidelines for all geographic areas in the Land and Resource Management Plan), not to the total acreage as this interpretation implies. The Land and Resource Management Plan does not set stocking levels or carrying capacity. Those allotments with systems in place may in fact already be meeting many of the Land and Resource Management Plan's goals and objectives. That determination will be made during analysis at the allotment management plan level (see FEIS, Chapter 3, p. 3-83, and administrative record memorandum, subject: *Clarification of the Analysis of Grasslands Plan S&G's Relating to Livestock Grazing on the Dakota Prairie Grasslands*).

Comment: Doing all the math states that several allotments will see no grazing until after September 15.

No standard requires rest of an entire allotment until September 15. Individual portions of, or entire pastures of allotments may not be grazed until Sept. 15 to meet prairie chicken and western prairie fringed orchid guidelines. These are allotment management plan decisions and will be based on the most current research and upon meeting the goals and objectives of the orchid recovery plan (see Appendix N of the Land and Resource Management Plan for the Dakota Prairie Grasslands). The Land and Resource Management Plan incorporates the orchid recovery plan as a part of the direction for the Sheyenne Geographic Area.

Comment: Not addressed in proposed plan are changes to current situation in which the grazing associations have extensive control of permits and compliance. This situation apparently occurs only in National Grasslands in ND and SD.

Permits issued to grazing associations are a legitimate administrative activity. Forest Service Handbook 2209.13 provides the regulatory requirements for issuing permits to grazing associations. They are utilized on most national grasslands and are not limited to North Dakota and South Dakota. Grazing associations have the responsibility to administer the permitting activities to their members. These are jobs the Forest Service would have to do if each member had a direct permit. They are accountable to the Forest Service for compliance with Land and Resource Management Plan direction, AMPs, and Annual Operating Instructions.

Comment: The Forest Service estimates forage production at 908 lbs/acre. Drs. Whitman and Brand proved the forage production is at 1,567 lbs/acre. But, when the AMPs are written, permittees will be required to use the 908 lbs/acre figure.

See comment responses at FEIS Appendix A, pp. A-30 and A-31. The 908 lbs/acre is an average production across all habitat types on the Little Missouri National Grassland. They reflect landscape values because the plan analyzes broad scale goals and objectives. The information in FEIS was used for comparison of effects between alternatives and is not to be used for setting stocking rates on individual allotments. Individual allotment management plan analysis will use the best site-specific

production data available.

Comment: Process to Determine Forage Outputs (p. B-104 to B-111): Also, as indicated in the review of Chapter 3, the process used to calculate "Available Forage" is not accepted by the range science profession and the Society for Range Management has a position statement that specifically states that the method used is not an acceptable one.

Forest Service professionals incorporated the methodology they felt would give a landscape perspective of effects. The method is acceptable for initial analysis of capacity. The SRM policy for livestock grazing indicates that they "support appropriately planned and monitored livestock grazing based on scientific principles that meet management goals and societal needs." The Land and Resource Management Plan presents management goals and objectives for water, wildlife, recreational, and livestock grazing within a balanced multiple use approach. The allocation of livestock incorporates consideration for all of those uses. Livestock grazing is an integral part of the plan and the analysis incorporates landscape level information to project the potential effects on stocking rates from implementing FEIS alternatives. At the allotment level, the best data available will be used, including all applicable monitoring information.

Comment: FPNG has only 25% of its riparian area meeting or moving toward good condition. There is no indication that reduced livestock grazing is the solution for correcting the situation on the areas not currently meeting or moving toward acceptable condition.

In the Land and Resource Management Plan, management direction for riparian areas did not limit improvement activities to reduced livestock grazing.

Comment: Prescription 6 is mis-named "rangeland management emphasized." This should be "livestock grazing management emphasized" because all of the prescriptions (except those specific to forest land) should properly be included under the term "Rangeland Management." This term rangeland management shows a very definite ignorance by the Forest Service of what really constitutes range management.

Effects from Range Management & Livestock Grazing (pp. 3-162, p. 3-166, and p. 3-170): The term "Range Management" should be dropped from these sub-titles and the definition of the term in the Glossary in the various plan needs to be brought into line with the accepted definition used by the Society for Range Management (1989).

The Forest Service assumes the commentor is speaking about Management Area 6.1. This management area allows many uses including livestock grazing, but does not place emphasis on any. It places emphasis on maintaining a variety of ecological conditions that benefit multiple species and multiple resource values. It does not focus on individual resources or resource values. It is a broad emphasis management area.

The use of Range Management in the sub-titles is appropriate. The definition of Range Management in Land and Resource Management Plan, Appendix G, p, G-41, is the same as the definition in the 1989 A Glossary of Terms Used in Range Management SRM.

Comment: The Forest Service Plan says that in very dry years that could affect the orchid, they could shut down the irrigation pivots in the area. I have three center pivots that are used to grow corn, alfalfa, and other crops for my cattle and livelihood. If these were shut down and my grazing rights taken away, I would have nothing to live on.

The Land and Resource Management Plan does not propose to shut down irrigation wells. This issue is beyond the scope of the plan revision process. The Forest Service has no jurisdiction over water rights on private land.

Comment: There must be at least 50% aftermath left on the grazing land. The orchid does not bloom when there is a large amount of aftermath and litter present. Not only does aftermath and litter affect orchid blooming, it also creates more of a fire hazard in the area. This is based on research done at North Dakota State University in Fargo, North Dakota, by Range Scientist, Dr. Wm. Barker.

There is no requirement within the Land and Resource Management Plan to leave 50% aftermath. The Forest Service is unaware of any western prairie fringed orchid research conducted by Dr. William Barker from NDSU. The Forest Service used all available research and monitoring data in developing management standards and guidelines for the western prairie fringed orchid.

Comment: We have private pasture with more orchids than anywhere else on the Sheyenne. We counted 120 acres of one pasture and had 2290 flowering orchids. I feel this is due to our management of grazing cattle without Forest Service restrictions! I have seen where orchids have been high in numbers and they die out because they cannot compete with forage buildup. The grass must be manipulated!

The orchid is found on the SNG because of past management practices. If the orchid is sensitive to areas of disturbance why did it flourish along Highway 27 after the ditches were rebuilt? And why does it bloom in areas where haying and burning have been done? Also, why does the orchid show up where goats (that eat forbs) were used extensively the year before.

As for the orchid in question, this is very simple. There [are] three important steps in establishing a healthy plant and these are mulching, weeding, and fertilizing. Cattle grazing on the land aid all three of these steps and there is no real evidence that shows the relationship to be a harmful one.

Maintaining a functional, dynamic, tallgrass prairie is key to orchid survival. The Forest Service recognizes that natural disturbances such as fire, flooding, and grazing occurred historically and may be important to orchid regenerations. These processes controlled litter accumulation and woody plant invasion.

Reference the Land and Resource Management Plan, Appendix N, p. N-6. Cattle may directly impact orchids through both grazing and trampling and indirectly through effects on orchid habitat (reference Appendix N, p.N-7). In preliminary analysis of seed set data collected, the number of viable pods per flowering orchid were lower on grazed sites when compared with ungrazed sites in most years.

Comment: Total forage production was multiplied by an "allowable forage factor" to determine the amount of forage "available" for livestock. The forage factors were taken from the assumed relationship of degree of livestock utilization to the desired vegetation structure class for each unit. No scientific basis was presented to establish that these very low utilization levels are necessary or sufficient to produce the desired vegetation structure levels. They appear to be arbitrary.

See FEIS Appendix B, p. B-105, Table B-19. Forage Allocation Under Continuous, Season-Long Grazing. If higher residual vegetation is desired (high structure), then the allocation to livestock use must be less; in other words, livestock must eat less. The opposite is true for low structure. Total utilization at the levels used in the plan were checked against height/weight curves to assess whether they were legitimate assumptions. The Forest Service determined that they were in fact legitimate for estimating effects of those utilization levels. The relationship of livestock forage use and structure class is made. The references used are Orr 1998; Nebraska Cooperative Extension 1986; and Holecheck, Pieper, Herbel 1989.

Comment: McNeill's description is confusing. He apparently adjusted feeding efficiencies. Froemke used a 0.35 forage efficiency factor, and this is what McNeill reportedly used in the EIS to obtain moderate structure. An efficiency of 0.40 is calculated by multiplying (0.35 x 1.15%), and perhaps was used to estimate usable forage where low structure was desired. However, the forage efficiency factor for low structure appears to be arbitrarily derived. Multiplying 0.35 (NRCS factor) by 45% (average feeding efficiency for high structure) yields an efficiency of 0.16. In contrast, the FS model uses a harvest efficiency of 0.10 in areas where high structure is desired. Therefore, the FEIS underestimates forage available for livestock in high structure areas (25-35% of the landscape).

See Table B-19 Forage Allocation Under Continuous, Season-Long Grazing (FEIS, Appendix B, p. B-105). If higher residual vegetation is desired (high structure) then the allocation to livestock use must be less; in other words, they must eat less. The opposite is true for low structure. Total utilization at the levels used in the plan were checked against height/weight curves to assess whether they were legitimate assumptions. The Forest Service determined that they were legitimate for estimating effects of those utilization levels. Appendix I provides documentation of how the NRCS efficiency factor was modified to account for structure classes (Land and Resource Management Plan for the Dakota Prairie Grasslands). Moderate structure can be multiplied by a factor of 30-60% to obtain high structure. This range was put in the appendix to account for the growth form of different plant species. The projections on FEIS p. B-105 were based on using the lower end of the range (30%). Like rest, this figure was used to approximate the most restrictive since actual application of the modifier will be at the allotment level.

Comment: Forage Allocation Profoundly Flawed. Drs. Smith and Lacey conclude that the FEIS forage allocation cannot withstand any kind of professional scrutiny. Dr. Lacey worked from the same data and memoranda used by the Forest Service and reached very different conclusions, because the Forest Service did not use the information and formula correctly. The FEIS fails to explain why it does not use historic stocking records, which are available. Instead, livestock carrying capacity for the various alternatives in the FEIS are based on one-time-inventory and the forage allocation procedures, which will not produce accurate results. The range

science profession recognizes that when other information on actual stocking, range condition and trend, utilization levels or similar data are available, they should be used. The FEIS states that the carrying capacity estimates presented in the FEIS are only for purposes of comparing alternatives, however, HAND understands that the DPG will use the forage allocation procedure to set stocking rates for individual pastures. Pers. comm. Mike McNeill has apparently used this formula to calculate the reductions throughout Little Missouri and Sheyenne River National Grasslands. The approach uses an undisclosed scale of GIS maps and a model to estimate vegetation, define capable range, and forage production. Capable range. The FEIS identifies the capable range based on GIS maps and assumptions regarding the effect of slope and distance from water on livestock use. This procedure is based on gross assumptions about the relationship of topography and water on livestock distribution, not actual quantification of utilization patterns on the various allotments. These results will change a great deal based on the scale of the GIS maps and the contour intervals. The error rate is high in rougher country, such as the Little Missouri badlands or where there are a lot of woody draws. Estimation of total "forage" production on capable rangeland. The FEIS estimates total forage, or more properly, herbage, production using these same GIS maps and models. The FEIS does not clearly describe the procedures or the assumptions used in the model. In contrast, the DEIS used "field plot data," but the FEIS uses a very different process without explaining the reasons. Instead the FEIS used stocking rates to estimate forage supply, which will then be used to estimate the stocking rates. Total forage production was multiplied by an "allowable forage factor" to determine the amount of forage "available" for livestock. The forage factors were taken from the assumed relationship of degree of livestock utilization to the desired vegetation structure class for each unit. No scientific basis was presented to establish that these very low utilization levels are necessary or sufficient to produce the desired vegetation structure levels. They appear to be arbitrary. Available forage was divided by animal unit month forage requirement of 780 pounds for result in estimated AUMs for each planning unit under each alternative. The Forest Service made an issue of the relationship of forage consumption to body size of cattle. This would not be an issue if proper methods of adjusting stocking rates were used. Lacey's analysis shows that the forage allocation process incorrectly applied the NRCS formula. Tab 6, Lacey. Again, the facts show that the Forest Service used only one piece of information, the amount of forage found on the badlands, and applied it throughout the National Grasslands. This does not reflect site variability or the more productive areas of the National Grasslands.

The Land and Resource Management Plan projections for forage availability were based on the NRCS stocking formula and production data from NRCS sources and from post-graduate thesis work. Documentation of these sources can be found in the administrative record as a May 22, 2002 memorandum, subject: "Clarification of the Analysis of Grasslands Plan S&Gs Relating to Livestock Grazing on the Dakota Prairie Grasslands". The methodology utilized for estimating forage availability is also documented in the administrative record. The Land and Resource Management Plan does not reduce livestock. It projects the potential effect on livestock use based on landscape averages. The NRCS stocking formula will use the best site-specific information available at the allotment

management planning level. The Forest Service will use the NRCS stocking formula and the best site-specific information available when revising allotment management plans. It will be used to provide a starting point for stocking rates. Subsequent monitoring will validate allotment management plan decisions, and final stocking rates will be based on results observed after implementing those decisions.

The Land and Resource Management Plan for the Dakota Prairie Grasslands incorporates a delayed decision in regard to grazing. The Forest Service will not change allotment management plans until a scientific team reviews the Land and Resource Management Plan and verifies the estimated effects that will occur. If the effects are as estimated by the Forest Service, the plan will be implemented. If they are not, the plan will be changed to address the identified needs.

Comment: Why are areas with coniferous trees/forest excluded even though they produce 400-600 pounds per acre?

FEIS Appendix B, p. B-53 are productivity classes used in development of range capability. Reference FEIS p. 3-81 for the description of criteria for capability. The Errata contains the following correction (in italics) for the Cedar River, Grand River, Little Missouri, and Sheyenne National Grasslands:

Cedar River, Grand River, Little Missouri, and Sheyenne National Grasslands

Ecological classification of potential site productivity was used to classify range capability.
Of the site-types listed above, those with 200 lbs. production/acre and water were considered not capable ...

Comment: It is obvious why water is excluded from capable range, but less obvious what the estimated 600-800 lbs production per acre refers to in this case. Production of what?

The 600-800 lbs. production is a range that was used in the analysis. The capability features on FEIS Appendix B, p. B-53 are just a continuous list. The Forest Service did not intend to relate 600-800 lbs production to water.

Comment: A GIS process was used to establish "capable acres" based on the criteria listed on p. 3-81. This methodology is not sufficiently accurate to be used to establishing grazing capacity.

GIS process was used to assess acreage and delineate topography. This technology is very appropriate for determining acreage based on the designated capability definitions. Capability of allotment specific areas will be confirmed during the AMP process. The plan does not set grazing capacity (stocking rates). That will be done during the AMP process using site specific data, including confirmation of capability analysis.

Comment: The plan calls for a very high percentage of high structure on the Sheyenne. There definitely is no provision in the plan to increase AUs if this provision is met.

Structure requirements for upland grouse are discussed in FEIS Appendix H and in the Land and Resource Management Plan Appendix pp. H-2 and H-3. With regard to increasing AUs, see comment in FEIS Appendix A, p. A30. Monitoring information and stocking rate guidelines will be used to help design management strategies for meeting plant species composition and vegetative structure. Monitoring will be accomplished. Chapter 4 of the Land and Resource Management Plan describes the general direction for monitoring. Short-term changes will be determined at the allotment management plan level and long-term adjustments, including increases in livestock use,

will be based, in part, on monitoring results.

Comment: Riparian areas not meeting objectives include 33% of riparian areas occurring in 525,400 acres of the Medora unit, and 47% of the riparian areas occurring in 500,900 acres of the McKenzie units (33% x 525,400 acres + 47% x 525,400 acres = 408,805 acres). I assume 86% of the acreage containing "unsatisfactory" riparian areas occurred within suitable range. Thus, management will be changed to shift structure from moderate to high on 351,572 acres (86% x 408,805 = 351,572 acres). I assumed 221,115 of these acres overlap the 221,115 acres managed for high structure in the structural standards. Therefore, an additional 130,457 acres need to be moved from moderate to high structure. Moderate structure: 130,457 acres/2.8 ac/AUM = 46,592 AUMs. High structure: (130,457 acres/2.8 ac/AUM) x (.45% of NRCS stocking rate) = 20,966 AUMs The loss of 25,626 AUMs is an 8% reduction from 315,903 AUMs.

The Forest Service disagrees with this interpretation. This assumes that each goal or objective requires a separate piece of land to obtain. Many of the Land and Resource Management Plan standards and guidelines are synergistic, and multiple benefits can be obtained from a single acre such as one acre of rest can also be counted on to produce high structure if the vegetation is capable of producing it. The data cited for riparian areas not meeting objectives is based on survey of stream miles. Relating miles to acres by simply using the percentage of stream miles in a certain condition is not accurate. High structure objectives are applied to herbaceous plant communities only (see vegetation standards and guidelines for all geographic areas in the Land and Resource Management Plan), not to the total acreage as this interpretation implies. The Land and Resource Management Plan does not set stocking levels or carrying capacity. Those allotments with systems in place may in fact already be meeting many of the plan's goals and objectives. That determination will be made during analysis at the allotment management plan level (see FEIS p. 3-83).

Comment: Assume the riparian summaries provided to the Grazing Association reflect riparian conditions. Therefore, 37% of the riparian areas are functioning at risk with a downward trend and another 35% are functioning at risk with no apparent trend. I believe livestock grazing will be restricted on riparian areas that are functioning at risk with a downward trend, or functioning at risk with no apparent trend (72% of the riparian acres). The Forest Service reports there are 3,800 acres of riparian habitat on the SNG (Appendices, page H-158). I assumed the permittees will be required to fence 2,736 acres = (3,800 acres x 0.72). Therefore, I estimate that livestock grazing will be reduced 2,487 AUMs = (2,736 acres/1.1 ac/AUM). This is a 4% reduction from 57,650 AUMs.

The Forest Service disagrees with this interpretation. Although they may very well require some fencing, there are options for dealing with riparian improvement that do not exclude livestock use, such as riparian pastures and early/late rotation schemes. Removal of livestock in riparian areas and reductions may or may not happen. The Land and Resource Management Plan (Chapter 1, p. 1-19) guidelines are established to manage livestock grazing to maintain or improve riparian/woody draws; e.g., avoid grazing activities such as feeding which concentrate livestock in riparian woody draw areas. Guidelines for grazing in riparian areas are on page 1-19 of the Land and Resource Management Plan.

Comment: Forest Service concluded that cow size has increased during the past 50 years. Because animal units are defined as a 1,000 pound cow with or without a calf up to 6 months of age, the Forest Service reasons that larger cows should be treated as more than 1 AU. The Forest Service cited a ND study where cows weighed an average of 1,231 lbs. This is a 19% increase over the traditional 1,000 pound cow. Therefore, I estimate the Forest Service will decrease current cow numbers by 19% to compensate for the increased cow size. This is a 19% reduction from 57,650 AUMs.

Reference the Land and Resource Management Plan, Appendix C, Determining Animal Unit Equivalent Based on Livestock Weight. In the example given from the University of Nebraska, a guide for planning and analyzing a year round forage program, a 1,200 lb cow would be a animal unit equivalent of 1.2. Because AUMs are based both on numbers and time, the 19% increase in cow size does not automatically equate to a 19% reduction in cow numbers and AUMs. If cow size is a concern in a particular allotment and the average weight is 1,231, as in the comment, the effect of the larger size could also be addressed by reducing the time from 30 days to 25 days (17%). The season of use must also be a factor. If Land and Resource Management Plan goals and objectives are being met, cow size will not be a concern. If there is a concern at the allotment management plan level, cow size will be just one of many factors that can be analyzed in developing management strategies.

Comment: Guideline No. 6, DPG Plan Revision 1-24 The FEIS requires adjustment of AMPs to adjust for animal size. Appendix C lists three different formulas to do such and adjustment and each one will give quite a different answer. It is unclear which formula is being proposed. The FEIS implies that 1.32 AUs will be used for a cow/calf. This is completely unnecessary. Proper resource objectives must be set on a site-specific basis and monitoring must be put into place to determine trend in range condition and annual utilization. Then, if trend correlated with utilization indicates a problem, stocking rates should be adjusted. It is completely unnecessary to worry about cow size if this type of monitoring is in place.

The 1.32 factor has been used by the Forest Service to account for the forage consumed by a cow and calf. It was based on a definition of an AUM being a 1000-lb. dry cow. Due to comments received during review of the DEIS, the Society for Range Management and NRCS definition of an AUM was adopted as a 1000-lb. cow with calf up to six months of age. The 1.32 factor was dropped in the FEIS. The FEIS and Land and Resource Management Plan do not set stocking rates. Stocking rates will be determined at the allotment level and monitoring identified to ensure that allotment management plan objectives are being met.

Comment: The FEIS misuses both the Natural Resource and Conservation Service ("NRCS") recommendations and the data and research from the ND State University, if the NRCS methodology were used correctly and the actual NDSU data, then the forage available for grazing would increase 23%.

The Land and Resource Management Plan projections for forage availability were based on the NRCS stocking formula and production data from NRCS sources and from post-graduate thesis work. Documentation of these sources can be found in the administrative record. It is unclear what data the commentor is referring to. Reference the FEIS, Appendix B, p. B-102 for an explanation of how forage availability was estimated.

Comment: Table B-19 shows the amount of livestock forage use and "total utilization level" considered appropriate for "high," "moderate," and "low" structure classes. The values shown have been substantially reduced compared to Table B-20 in the DEIS. No explanation was given. There is no basis in range science to describe 8-10% utilization as "light," 25-35% as "moderate," or 35-40% as "heavy." The same terms were used in the DEIS to apply to 10-20%, 20-30%, and 40-60% utilization and the same references were cited to support the table. There was no explanation of what was meant by "total utilization level" in this table. It is not stated whether "available forage" was calculated using "livestock forage use" or "total utilization level." If utilization values based on this table are used as guidelines to establish "proper" grazing levels for livestock grazing, as a basis for deciding whether livestock numbers are proper on a pasture or allotment, then the "total utilization level" values should be used, not the "livestock forage use" figures.

The terms of light, moderate, and heavy use are based on total vegetation disappearance or total utilization levels. In that regard, they are appropriate. Total utilization levels include forage loss due to livestock use, wildlife use, and maturation or mechanical damage. In determining proper grazing levels, it is appropriate to include all forage loss regardless of the mechanism. Forage allocated to livestock is a percentage of the total utilization and planning must consider that in allocating livestock forage. The differences between DEIS and FEIS tables reflect review by the Forest Service based on public comments to the DEIS.

Comment: Forest Service maps indicate that the total area of the TBNG is 30% federal, 64% private, and 6% state lands. By dictating stocking rate for all lands within an allotment, the Forest Service can essentially control the grazing use on 2.3 times the amount of additional land in other ownership. This multiplies the economic impact and the community and lifestyle relationships over what is displayed in the document. This means that the AUM cuts proposed under Alternative 3 for the Thunder Basin National Grassland are actually 3.3 times as great as is shown in the documents.

The FEIS (pp. 3-29 through 3-34) displays the economic impacts for grazing pastures with intermingled ownership.

Comment: Footnote #7 in Table 3-37 states that stocking rates estimated for the current situation may not match actual stocking. It further states that actual use figures are not available because it has not been reported. Isn't such a report mandatory?

Grazing associations are billed according to authorized use. Individual association members may or may not report actual use, such as delayed turn on or early off, to the Grazing Association. Although actual use reporting is encouraged, it is not currently required by the grazing associations.

Comment: In some areas of the Little Missouri National Grasslands, the permits may need to be cut 5-10% because of overgrazing or lack of moisture for two or three years in row, but if permits are less in some areas, they should not be lowered in all areas.

Each allotment will stand on its own merits. Reductions in one allotment do not necessarily mean reductions in the neighboring allotments. This would be an allotment level decision. The District planning of allotment management plans, as well as the Annual Operating Instructions, will address these issues.

Comment: Reductions in grazing for the Sheyenne Grazing District. A. Sensitive and Threatened Plants and Animals "which number about 46 listed." B. The riparian areas totaling a 66% reduction. C. Core orchid allotments subtract another 13%. D. For cow size reduce by another 19%. E. Some permittees now will have 0% grazing remaining. F. The average SNG grazer will have 85% reduction in grazing left to operate on.

Although this comment is missing context, it would appear to be directed at grazing reductions on the Sheyenne National Grassland. In that regard, the Forest Service disagrees with this interpretation. This assumes that each goal or objective requires a separate piece of land to obtain. Many of the Land and Resource Management Plan standards and guidelines are synergistic and multiple benefits can be obtained from a single acre such as one acre of rest can also be counted on to produce high structure if the vegetation is capable of producing it. The data cited for riparian areas not meeting objectives is based on survey of stream miles. Relating miles to acres by simply using the percentage of stream miles in a certain condition is not accurate. High structure objectives are applied only to herbaceous plant communities (see vegetation standards and guidelines for the Sheyenne Geographic Area in the Land and Resource Management Plan), not to the total acreage as this interpretation implies. The Land and Resource Management Plan does not set stocking rates. These will be made through the allotment management plan process. The Forest Service is committed to working with permittees to design grazing allotment management plans needed to achieve the vegetation objectives with minimum impact to permittees. The Grazing Associations also have management flexibility to help manage some of the needed changes and minimize impacts to local ranching operations.

Comment: If we have to rest 5% of a geographic area or watershed how are we supposed to keep the cows off this area?

I am concerned about the issue of 5% rest as stated in the plan. This could be an entire allotment. Imagine the hardship this could cause a ranching family. The Forest Service has stated they do not know at this time how 'rest' will be applied to an inventory permit. This will be determined later - how can I be asked to endorse or live with something that vague? After 20 years of trying several different grazing schedules and systems, I thought we were way past the old "rest" the pasture system. Our grass specialists have concrete data that it is not the best way to manage the grass.

Guideline No. 5, DPG Plan Revision 1-23. The guideline requires rest from grazing where ungrazed areas are desired for biological diversity. Resting a piece of range does nothing to contribute to biological diversity as defined. It can provide some heterogeneity on the landscape in terms of roughness after grazing because all grazing is patchy in nature, but it cannot, by itself contribute to diversity.

This would be an allotment level decision and could include several methods such as not entering a given unit within an allotment during the grazing year to the use of natural boundaries and additional fencing which would facilitate keeping cattle from using the area of rest. It could be that an that with inventory permits, the most logical way would be through rotation schedules such as early use followed by late use which allows 12 months of non-use although the unit may be used every year. The District planning of allotment management plans, as well as the Annual Operating Instructions, will address these issues following the standards and guidelines identified in the Land and Resource Management Plan. The rest objective applies to the entire geographic area; every allotment will not be required to have rest each year. The Forest Service is happy to review different published data concerning rest. Rest can be of benefit to shrubs and trees as well as providing the high structure. It does not relate solely to grass.

The Forest Service assumes the commenter is referring to page 1-19, Guideline #5. The Forest Service agrees that grazing is most generally "patchy" in nature creating mosaics of structure. Diversity, as it is mentioned in this guideline, refers to species composition (seral condition) and not on structure. The objective for rest is designed to help promote shifts in species composition toward a variety of desirable perennial plants, specifically grasses and forbs.

Comment: "Rest at least 5% of the suitable rangeland each year." FEIS (2-21) The FS says that this is 5% of the geographic area, therefore, an entire allotment could be required to be rested for an entire year. Running under preference numbers is not considered rest. This is not feasible, this statement needs to be clarified or removed.

FEIS, Chapter 2, p. 2-21 does not discuss to rest. The Forest Service assumes the commentator meant the Land and Resource Management Plan for the Dakota Prairie Grasslands, p. 2-21. The intent of the Land and Resource Management Plan is to spread "rest" across the different geographic areas identified in Chapter 2. This is an objective and would not be applied across an entire allotment unless called for in an allotment management plan developed in cooperation with the Grazing Association. Continuing to graze cattle, even if less than preference, doesn't meet the definition of rest as presented on page G-45 of the Land and Resource Management Plan for the Dakota Prairie Grasslands, Appendix G.

Comment: Forest Service expresses concern about factors that might limit the flexibility of managers to meet drought or other limitations on forage supply. "Requiring that some areas be rested." That might be true if the Forest Service is willing to allow managers to use those pastures in dry times or emergencies, but there is no indication that this will occur. Forest Service itself is probably the main impediment to flexibility in livestock operations. Red tape and inertia make it hard to alter plans in a timely or creative manner. Forest Service may support or dictate livestock reductions in times of drought, they do not allow increases in times of forage abundance. It is no wonder that permittees are often reluctant to reduce numbers during drought or to set aside "rest" acres because such actions are often used as a basis to rationalize reducing the authorized grazing use permanently.

The objective for rest is not to deal specifically with drought. Rest is a historic ecological process which can be employed to help attain vegetative (seral) objectives. The rest objective was designed to deal with restoration needs (such as riparian and woody draw improvement). Rest can also be used to meet high structure objectives, where appropriate. Allotment-specific decisions will consider all aspects in dealing with impacts such as drought. Increases in livestock use consistent with Land and Resource Management Plan goals and objectives can be considered on an annual basis and implemented through the Annual Operating Instructions and annual authorized use.

Comment: Goal 1, Ensure Sustainable Ecosystems: Objective #2 Will this be enforced by fencing and new water development in a "Suitable for Wilderness" area, or will we simply eliminate livestock in those areas?

The objective is to move woody draws and water dependent communities towards desired diversity and density of understory and overstory vegetation. In Management Area direction in Land and Resource Management Plan (p. 3-4), the direction is to allow livestock facilities that do not detract from the character of the area. The decision of how to meet the objective would be addressed at the time of allotment management plan development.

Comment: The Department's analysis of the Plan and FEIS suggests a potential reduction of stocking rates of -25% based on the 1998 VOR reading. This does not account for the reductions that would also be necessary to achieve the proposed changes in serial stage. There is no documented discussion of what would need to be done to achieve these serial stage and vegetation structure goals.

We suggest that parameters be established for the stocking rate reduction throughout the life of the Plan in order that the concern of potentially more severe stocking rate reductions are mitigated.

Reference FEIS Appendix B, p.B-49. The Land and Resource Management Plan does not make grazing reductions. Such decisions will be made at the allotment level. The Land and Resource Management Plan describes desired condition for vegetation within the context of rangeland health and multiple uses. The desired conditions are defined, in part, by composition and structure. VOR readings in themselves cannot be the sole basis for reduction of livestock use. There are other factors that can lead to attainment of structure objectives such as rotation and or timing of use. All technology must be analyzed in addressing achievement of structure objectives.

The Land and Resource Management Plan does not set stocking rates. They will be set during the allotment management plan process. The Forest Service is committed to working with permittees to design grazing allotment management plans needed to achieve the vegetation objectives with minimum impact to permittees. The Grazing Associations also have management flexibility to help manage some of the needed changes and minimize impacts to local ranching operations. Stocking rates will be one of several potential considerations for meeting seral and VOR objectives.

Reference Land and Resource Management Plan, Appendix I, p. I-1. Monitoring will be conducted to validate that the stocking rate guidelines are meeting or making measurable progress in meeting desired future condition objectives. Decisions on any reductions if needed in meeting desired future condition will be made in allotment management plans and implemented through the Annual Operating Instructions. The ultimate outcome of monitoring is to set long term parameters for dealing with stocking rates and carrying capacity.

Comment: As pointed out in Table 3-31, almost all allotments have some form of specialized grazing system that allow a higher stocking rate than continuous grazing. Yet stocking rates are listed for "continuous, season-long grazing." The explanation that the use of continuous season-long grazing was needed to compare alternatives is not valid. Comparisons could have been made using existing grazing systems.

Table 3-31 (FEIS, Chapter 3) was meant to characterize the existing conditions on the Dakota Prairie Grasslands. Alternative evaluation needs to be based on variables that are constant across all alternatives. The mix of systems or capable acres grazed at one time for all alternatives is not known, making their use inappropriate in analyzing effects.

Comment: The percentages of primary, secondary, and inaccessible range shown in Table 3-30 conflicts with the statement made on page 1-13 that "few planning units now have secondary range."

Agreed. Change wording in Errata for beginning of second paragraph on page 1-13 to "Because of extensive water development, few of the planning units now have secondary range that meets all the criteria. Although topography is still a factor, water development has converted much of the secondary range identified in the analysis to what essentially meets the definition for primary range."

Comment: Guideline to delay livestock grazing until after June 15th in areas being managed for upland gamebird nesting cover - This must change annually in a pasture rotation as part of an approved allotment plan. If not changed annually it could lead to overgrazing and mismanagement of private pastures. There would be no stimulation of the native plant community if grazing were withheld every year. There is no scientific basis in the FEIS for this change.

As stated in the Land and Resource Management Plan, Chapter 1, p. 1-14, this guideline applies to areas being managed to provide upland game bird nesting cover for the current year. The Land and Resource Management Plan (p. 1-13, #6) gives guidance on how to select areas to be managed as nesting cover but does not specify the period of rest. Such specificity must be addressed at the allotment management plan level. The Land and Resource Management Plan states (p. H-3) that "To provide quality nesting and brooding habitats, herbaceous vegetation and litter should be allowed to accumulate over a period of years. However, to maintain optimum breeding and foraging habitats over time requires periodic burning or intensive grazing once every 3 to 5 years to maintain vigor of native grasses and forbs". Scientific references addressing the benefits of providing nesting cover are listed on Land and Resource Management Plan, pp. H-6 to H-9, and in the FEIS

Comment: The standards and guidelines put into this new plan are unattainable. Lacey's studies and research total reduction from 20-year average (Little Missouri National Grasslands (McKenzie County Grazing Association and Medora Grazing Association.)) are 29% to 43% from original preference, on the Cheyenne National Grasslands cuts are more severe, 56% reduction from 20-year average or 66% reduction from original preference.

The Forest Service disagrees with this interpretation. This assumes that each goal or objective requires a separate piece of land to obtain. Many of the Land and Resource Management Plan standards and guidelines are synergistic and multiple benefits can be obtained from a single acre

such as one acre of rest can also be counted on to produce high structure if the vegetation is capable of producing it. The data cited for riparian areas not meeting objectives is based on survey of stream miles. Relating miles to acres by simply using the percentage of stream miles in a certain condition is not accurate. High structure objectives are applied only to herbaceous plant communities only (see vegetation standards and guidelines for the Sheyenne Geographic Area in the Land and Resource Management Plan), not to the total acreage as this interpretation implies. The Land and Resource Management Plan does not set stocking levels or carrying capacity. Those allotments with systems in place may in fact already be meeting many of the Land and Resource Management Plan's goals and objectives. That determination will be made during analysis at the allotment management plan level (see FEIS p. 3-83).

Comment: GSI [Grassland Stewardship Initiative] participants are concerned about the potential impact from the proposed guideline due to the large areas affected. Some ranchers have only native pastures in their allotments and lack the option of an early rotation on crested wheat or other non-native pasture. For these ranchers, the implementation of a June 15 turnout restriction without flexibility to accommodate a proper rotational grazing system will lead to overgrazing and mismanagement on private pastures or the need to feed hay to their cattle into June, something which is difficult and costly.

Participants also emphasize the importance of allowing periodic grazing disturbances before June 15 in order to promote native plant community diversity and keep invasive species in check. They believe that upland game bird habitat will be best assured by enhancing the diversity and health of the native plant community through the implementation of well-managed rotational grazing systems that promote an appropriate mix of rest and stimulation over time.

In consultation with the GSI, Forest Service personnel concurred with the management concerns raised by the GSI and feel that the current guideline is consistent with those concerns. According to the Forest Service, the important language to bear in mind in the original guideline is "in the current year." The specific areas managed for upland gamebird habitat will change each year in accordance with the overall objective of achieving 20 to 30 percent high structure. The exact grazing rotations and selection of areas to be rested until June 15 will be addressed in the allotment management plan (AMP). The GSI requests that the Forest Service formally clarify this understanding of the guideline through the proposed revision of the guideline and in formal comments.

Land and Resource Management Plan, Chapter 1, p.1-14 - The guideline states "Delay livestock grazing until after June 15 in areas being managed to provide upland gamebird nesting cover for the current year." This does not imply a delayed turn-in for entire allotments, but all or parts of pastures could be affected. The Forest Service agrees that delay of grazing should be a part of the development of any rotation scheme at the allotment-specific level (reference Land and Resource Management Plan, Appendix H, p. H-3).

Comment: The Grazing and Management Agreement between Sheyenne Valley Grazing Association and the United States Department of Agriculture Forest Service for the Period 1993-1996 lists the number of preference AUMs on the SNG as 63,128. The number listed in the FEIS for the new plan on page 3-91 is 47,490 AUMs

which is actually a 24% reduction!

The 20-year average was used because it provided a sense of the variability in authorized use due primarily to the effect of fluctuations in precipitation. It is reasonable to assume that similar patterns will occur over the next 20 years and the same average authorized use will occur. For further information on the 20-year average, reference the 5/22/2002 memorandum in the administrative record, subject: *Clarification of the Analysis of Grasslands Plan S&Gs Relating to Livestock Grazing on the Dakota Prairie Grasslands*.

Comment: Appendix N-16 (NMP) states that each year 1/3 of the acres historically occupied by orchids in core allotments will not be grazed from 6/1 to 9/15. Appendix N-18 (NMP) states that each year 1/10 of the acres historically occupied by orchids in satellite allotments will not be grazed from 6/1 to 9/15. Appendix H-153 (FEIS) limits activities within one mile of active greater prairie chicken display grounds from 3/1 to 6/15. The above appendices would make it very difficult for a permittee in a one mile square core orchid pasture with a display ground in the center to graze his livestock. He would not be allowed in at all during the first 1/6 of the season, and in only part of the pasture until the last 1/3 of the season. What does that do to his reduction percentage, especially since the orchid plan states that the AUs lost to orchids due to the no grazing provision of the recovery plan WILL NOT be allotted to the balance of the allotment?

Limiting activity within one mile of greater prairie chicken display grounds from 3/1 to 6/15 does not include cattle grazing. It is possible that livestock would be restricted from part of an grazing allotment until 9/15, if prairie fringed orchid habitat are in the same pasture (reference FEIS, Chapter 3, p. 3-83). Resting 1/3 of the acres historically occupied would effect mostly minor portions of most allotments. Allotment management plans are developed using goals, objectives, standards, and guidelines found in the Land and Resource Management Plan. More specific grazing prescriptions that are responsive to western prairie fringed orchid can be developed during the allotment management planning process. Temporary electric fencing can be utilized, or permanent fencing installed, to achieve the orchid rest objective.

Comment: High structure in the LMNG is decreased from 6 inches in the DEIS to 3.5 inches in the FEIS; and in the Cheyenne, the DEIS' 11 inches has decreased to 6 inches. Literature reviewed by the Dakota Grasslands Interdisciplinary Team does not back these changes.

The definition for high structure in the draft Land and Resource Management Plan and Draft EIS was not expressed in terms of VOR readings; instead it was considered "75 to 100% of biological potential." This was indeed changed in the final Land and Resource Management Plan and FEIS. See the Land and Resource Management Plan for the Dakota Prairie Grasslands, Appendix I, page I-1.

Objectives must be obtainable within the period in which they apply. Based on existing vegetative composition, it would be achievable to have more high structure vegetation if it was defined as 3.5", than it would be if high structure was defined as 6". The Forest Service believes this would better contribute to other goals and objectives. Furthermore, the Forest Service believes that the levels proposed would be sufficient, at the desired amounts, to improve habitat quality for greater prairie chicken, greater sage-grouse, and sharp-tailed grouse.

Comment: For example, 48% of the Medora Rolling Prairie Geographic Area is identified as being in an early seral composition (FEIS pages 3-228). Although the plan does not refer to these lands as "overgrazed," that is essentially what it means. In the Department's work in the LMNG, we have not observed that such a high percentage of the rolling prairie in the Medora Geographic area is "overgrazed."

Overgrazing is a relative term. The Land and Resource Management Plan objectives will lead to a landscape mosaic of varying grazing levels, none of which would be considered "overgrazing." Although livestock play a significant role, there are many factors which may influence seral expression. The Forest Service did not intend to leave the impression that early seral condition is attributable to heavy livestock use only. Assessment of specific allotments will occur during the allotment management planning process, and the seral percentage of each allotment confirmed at that time.

Comment: We believe the current numbers can be maintained utilizing advanced grazing systems, which not having a negative impact on the ecological health of the grasslands. In fact, sound science has repeatedly proven that livestock grazing is a beneficial method of improving both grassland health and improved habitat for wildlife.

The FEIS analysis estimated that current numbers could not be maintained and still meet Land and Resource Management Plan goals and objectives. That analysis was based on season-long grazing and did not incorporate the effect of grazing systems. There are varying levels of more intensive grazing systems currently being employed on the Dakota Prairie Grasslands. Recent monitoring would indicate that Land and Resource Management Plan goals and objectives are not being met with the array of current systems. The Forest Service does agree that livestock can perform a beneficial effect on maintaining grassland health and the subsequent improvement of habitat for wildlife. The Forest Service recognizes that there are some grazing systems currently in place which are meeting many of the plan goals and objectives. The allotment management plan process will recognize those situations, as well as the situations where grazing systems are not currently meeting desired conditions.

Comment: The following are listed as "key indicators" for livestock grazing: suitable acres, estimated AUMs, estimated forage production, average pasture size and average number of water development per square mile. None of these factors indicate anything about the effect of grazing on the environment, environmental conditions or the environmental consequences of livestock grazing. The reader is led to think that these are important indicators when all they represent are statistics.

The effects analysis of livestock grazing is documented in FEIS Chapter 3, p. 3-79-99, and FEIS Appendix B. The Forest Service disagrees that that they are merely statistics. All of the indicators identified are functionally tied to the effect of grazing on the environment. Suitable acres are the acres that the FEIS identified as being open to grazing. They represent the maximum landscape that can be allocated to livestock use and factor heavily into the development of carrying capacity and intensity of livestock use. Estimated AUMs and estimated forage production are vital measurements of how much forage can be removed by livestock while at the same time moving toward or meeting Land and Resource Management Plan goals and objectives such as structure. The average pasture size and average number of water developments are very important in assessing the impact of livestock grazing on wildlife habitat needs and the quality of experience for recreationists. All played a very strong role in evaluating effects of livestock grazing.

Comment: As they relate to the TBNG, please explain the difference between table 3-145 [Suitable Rangeland Acres Rested (%)] pg. 3-293 which lists 53, 200 acres (10%) and table H-11 [Ungrazed Habitats - Acres and % of area] pg. H-307 which lists 27,300 acres (5%). Are these two different things you are referring to, or what exactly is your preferred alternative's goals, and how do plan to go about it?

In Table H-11 (FEIS, Appendix H, p. H-307), a midpoint of 5% was used and on p. 3-293 (FEIS, Chapter 3), a limit of 10% was used for display purposes.

Comment: A-31 - AUM definition - 1000# animal and calf for one month. Do you plan to start weighing animals? B-106 - AUM = 780#/mo. (26#/day). - Which definition will be used?

An Animal Unit Month is defined as the amount of forage required to sustain an animal for one month. The definition is that it takes 780 lbs of forage intake for a 1,000-lb cow and calf.

Comment: Under Forage Available to Livestock on page 3-89 the Agency states that, "for the purpose of describing effects, a continuous grazing system was assumed." Yet Table 3-31 on page 3-85 shows that 90% of the TBNG is on a deferred rotation grazing system and only 7% is on a continuous grazing system. We find it difficult to see how the Agency can accurately describe conditions with those types of assumptions.

The information presented in FEIS, Chapter 3, Table 3-31 is for comparison purposes between alternatives and not for setting stocking rates for different site-specific grazing management strategies as discussed in FEIS, Chapter 3, p. 3-89 of the and FEIS Appendix B, p. B-104.

Comment: The management provision covering West I, most of D, Monteth, and Woodbury with its roadless provision accompanying the statement "manage as a wilderness" looks like a sure AUM reduction and later elimination from grazing consideration region.

The areas referred to will be in MA 1.31 Nonmotorized Backcountry Recreation (at least partially). The Land and Resource Management Plan for the Dakota Prairie Grasslands (Chapter 3, p. 3-7) identifies that livestock grazing will occur under grassland-wide and geographic area direction.

Comment: Guideline No. 9, DPG Plan Revision 1-24 Since water is not only important for livestock management it is also important for most wildlife species, this guideline needs to be removed. The standards and guidelines also call for larger pastures and less water, which will not improve management and not necessarily improve habitat.

Implementing this guideline does not necessarily mean that surface water would no longer be available for animals at the site, although that may be the case. FEIS, Chapter 3 (pp. 3-94, 3-98, and 3-99) addresses effects of water developments on livestock grazing and states that water developments will still be within 1 mile of each other on most units, and forage availability will not be affected by changes in water developments. There will still be adequate water for livestock and wildlife. FEIS, Chapter 3 (pp. 3-231, 3-236, 3-237, 3-278, 3-279) describes determined positive effects of larger pastures and fewer water developments.

Comment: Guideline 1-19-1. Minimize feed storage and routine feeding of domestic livestock on National Forest System land. Recommended GSI Alternative - The following sentence should be added to original guideline as a bullet point clarification: These uses shall be recognized, in the absence of reasonable alternatives, as part of an approved allotment management plan. GSI recognizes the desire to minimize winter feeding and feed storage impacts on public lands, but asks the Forest Service to consider adding the proposed clarification to the current guideline and to formally state its intentions for the implementation of this guideline.

The guideline uses the word "minimize" which indicates that the practices are not prohibited. Analysis of winter feeding on national grasslands will be accomplished at the allotment management planning level. Final determination of winter feeding on National Forest System land will be made at this level. If it is determined that it is needed, the local District Ranger can allow it.

Comment: The Eastern Boggy Biome Areas will have "no allotted Grazing Units" on the Sheyenne-meaning Olson/Pfingsten will be cut around 41 head - Evanson Allotment will be cut - twice (each pasture)- A Allotment will have a cut and the area probably added to the Sheyenne Springs RNA. This is definitely an undefined cut on the Sheyenne.

The eastern prairie boggy wetland areas contain a high density of sensitive plants, therefore these areas have been placed within MA 3.64 (Land and Resource Management Plan, Chapter 3, p. 3-30). MA 3.64 guidelines state these areas will not be included in grazing allotments. The guideline (see Land and Resource Management Plan p. 3-31) says that livestock may be used as a tool for management; it does not say livestock use will be eliminated. Specific grazing management decisions for MA 3.64 will be made at the site-specific level and not within this document.

Comment: Forage needs of an animal unit month: The forage needs of typical cow/calf pair are frequently underestimated. For example, the NRCS assumes a 1,000-lb. cow of greater than average milking ability with a calf less than six months of age requires only 780 lbs of dry forage a month. For greater consistency and accuracy we recommend that National Research Council publications be used to determine forage needs at the site specific level. Models developed by the NRCS are able to factor in different environmental conditions, average weaning weight of calves, average weaning age, peak milk production values, etc.

The Forest Service analysis utilized the forage requirements for the 1,000-lb cow, as used by the Natural Resources Conservation Service. Selection of this measure provided for great consistency and a measure that is more commonly used by livestock producers. If the commentor is more familiar with other measures, Forest Service data can easily be used to provide a measure more familiar to the commentor. Cow size will be a consideration at the allotment management plan level; if stocking rate is identified as a concern, it will be addressed then.

Comment: In my opinion, the most reasonable production data for the LMNG may be in Vader's (2000) thesis. Annual herbage production on ungrazed sites averaged 1,095 lbs./ac on shallow range sites, 1,402 lbs./ac on silty range sites, and 3,699 lbs./ac on overflow sites. Her herbage production estimates were measured in 1997 and 1998, during a period of "normal" precipitation.

Herbage production at the allotment specific level will be utilized in making allotment decisions. Normal precipitation is based on long-term averages. The most accurate production data includes data from a range in annual precipitation patterns. The Vader research, along with an independent review (located in the administrative record) were considered. The production information found in this thesis will be considered, as appropriate, during allotment management planning.

Comment: The FS also underestimated herbage production on the SNG. The Background Report for the Sheyenne Planning Unit (Sept. 1979) reports average current production on choppy sandhills, savannas, dry mixed grass prairie, wet mixed grass prairie, and river terraces. By multiplying each ecological land unit by average production, and dividing by total acreage, 2,494 lbs./ac production was estimated. Vader (2000) thesis indicates 1,021 lbs./ac on upland sites, 2,298 lbs./ac on midland sites, 3,496 lbs./ac on lowland sites. Because the mixed grass prairie--wet comprises over 50% of the sites on the SNG, a weighted average of Vader's production data is much higher than the 2,127 lbs./ac used in the FIES. The average production of 2,127 lbs./ac for all sites is based on Hopkins dissertation. Thus, the FEIS analyses are based on forage production estimates that are 17% below production estimates in the earlier FS report. McNeill should have upgraded the early FS study with Vader's research data, and calculated a weighted average (based on the relative amount of the three kinds of range sites occurring on the SNG.)

There was concern with the production values presented in the DEIS. In response to that concern, production values more closely reflecting landscape averages were used in the FEIS. Exact protocols and information sources are identified in the administrative record. Reference FEIS, Appendix B, p. B-102 for description of this process. Hopkins research included the precipitation differences occurring over a five-year period. The Forest Service felt it provided a good approximation of production over a longer period. The Forest Service research branch has reviewed the Vader thesis; this review is in the administrative record.

Comment: After 40 years of grazing treatments, Dr. Brand analyzed herbage production inside and outside of the exclosures. His data was summarized in Dr. Manske's report. Mean above-ground herbage production on grazed areas averaged 1,363 lbs./ac on the sandy range site, 1,112 lbs./ac on the shallow range site, 1,613 lbs./ac on the silty range site, and 2,179 lbs./ac on the overflow range site. The overall mean, 1,567 lbs./ac, is 659 lbs./ac higher than what is being used in the FEIS (908 lbs./ac.) Therefore the FS model (and EIS) underestimates herbage production on the LMNG by 73%. There underestimation makes it impossible to compare the alternatives (especially with the existing situation) and results in an unrealistic evaluation of impacts associated with implementation of the proposed alternative. Vader and Manske's herbage production data are similar. Therefore, I recommend the FS discard Froemke's herbage production estimates, and use NDSU research

data (combination of Vader and Manske (Brand) reports) to estimate production on the LMNG.

Forest Service estimates are an average "landscape" value, based on production values across the Little Missouri National Grassland. Planning at the allotment management plan level will use the best production information available for specific allotment areas. If correlations can be made with the referenced studies, they will be incorporated at that level.

Comment: The Forest Service has used an average production rate of 908 pounds. Other studies and production records are much higher than these figures. The overall means by studies through the years is 1,567 lbs/acre. Therefore the FS (and EIS) underestimates herbage production on the Little Missouri National Grasslands (LMNG) by 73%.

See comment responses in FEIS, Appendix A, pp. A-30 and A-31. The 908 lbs/acre is an average production across all habitat types on the Little Missouri National Grassland. They reflect landscape values because the plan analyzes broad scale goals and objectives. The information in FEIS was used for comparison of effects between alternatives and will not be used to set stocking rates on individual allotments. Individual allotment management plan analysis will use the best site-specific production data available. If production is actually higher, as suggested, than the estimate used in the projections, livestock reductions will be less and economic effects will be less.

Comment: Table B-17 also gives the "existing" production per acre for each of the Dakota Prairie units and the percentage of existing to potential production for each. Both the existing and the potential values for each Grassland have been changed (increased) compared to the DEIS (Table B-17). These figures are very confusing and raise doubts about their validity.

It is not clear the significance of the calculated percentage of "existing" production compared to "potential." No apparent use was made of this information. The figures generated for existing and potential production apparently are herbage or total production, not forage production.

See comment responses in FEIS, Appendix A, pp. A-30 and A-31. Questions about the production during review of the DEIS resulted in a change in the FEIS. Documentation of the values used in the FEIS can be found in the administrative record. The production values used are average values across all habitat types on the Dakota Prairie Grasslands. They reflect landscape values because the Land and Resource Management Plan analyzes broad scale goals and objectives. In all cases, the values were taken from university graduate thesis, NRCS range site production information, and professional judgment. All are appropriate for estimating landscape values. The information in the FEIS (Appendix B, p. B-104 and Chapter 3, p. 3-82) was used for comparison of effects between alternatives and is not to be used for setting stocking rates on individual allotments. Individual allotment management plan analysis will use the best site-specific production data available. The existing production was used on the Dakota Prairie to allow a meaningful comparison between alternatives.

The figures for existing and potential production are for total herbage production. Displaying both existing and potential provides a tool for analysis of effects.

Comment: Forage Available to Livestock (p. 3-89 to 3-90): For the method the FS used to determine stocking rates, it is not clear where the following herbage production presented in the documents (Table 3-36 and elsewhere) came from: 1) total herbage production estimates for each Grassland (Table 3-28, p. 3-82, FEIS and Tables in Appendix B), 2) the existing average pounds per acre and, 3) especially, the herbage production by structure class used in the model and formulas to determine "Available Forage". "Potential" production was also determined by using the same plots, although it is not clear how that was done. It is not really clear how the estimates of "existing" production used in the FEIS were obtained from NRCS data. In FEIS Table 3-28, the Forest Service used "NRCS estimates" of "existing" production as basis for estimating total production on the Dakota Prairie units. The NRCS-based figures for existing production are only 59% of those used in the DEIS. No explanation was offered for this difference.

There was concern with the production values presented in the DEIS. In response to that concern, production values more closely reflecting landscape averages were used in the FEIS. Exact protocols and information sources are identified in the administrative record.

Comment: Existing Production. It is not clear how existing production was determined "based on recommended stocking for those types" and the reference to Froemke 2000 is not in the literature cited. "Existing production" is presumably a departure from potential based on changes in plant composition and/or vigor, weather, or other factors such as weed invasions. It is difficult to see how "existing production" can be inferred from other areas without taking these factors into account.

The reference to Froemke is to a letter documenting his professional recommendation of stocking rates for western North Dakota and was used to portray existing production for the Little Missouri National Grassland only. Those rates were used to provide a landscape average in analyzing effects of implementing each FEIS alternative (see FEIS, Appendix B, p. B-102, Herbage Productivity). Factors such as weed invasions will be analyzed at the allotment level.

Comment: Table B-16 shows range of forage production for select "Dakota Counties." This data was taken from NRCS soil surveys although it was stated elsewhere that no "GIS compatible" soil survey was available for the ND units. There is no indication of how these averages were calculated.

The potential production for the LMNG (Table B-17) is identical with that for McKenzie County (Table B-16), even though it is indicated in the FEIS (page 1-2) that the LMNG is located in Billings, Dunn, Golden Valley, McKenzie and Slope Counties. It seems very unlikely that the average range productivity in all these counties is exactly the same as that for McKenzie County or that the land within the LMNG has exactly the same production per acre as the total rangeland within the county. Therefore these estimates seem to be based on questionable assumptions.

This data was taken from NRCS range site descriptions which are independent of GIS compatible soil surveys. Please see description pertaining to Table B-16 immediately preceding it in FEIS, Appendix B, p. B-102. It clearly states that this data was taken from soil survey data tables.

Addendum

Potential production for the Little Missouri National Grassland is the result of a weighted average between values for the Badlands and Rolling Prairie geographic areas. It was not intended to suggest that production is identical on every acre but rather to provide a sense of the average value of all acres. This was necessary to provide a constant variable for analyzing alternatives. Please see descriptions of how the data was obtained found immediately preceding Table B-17 in FEIS, Appendix B, p. B-102. The assumptions used in developing averages for production are documented in the administrative record.

Comment: The connection between the desired seral stages and the desired structural classes is not very evident. Also, the relationship of desired seral stages, existing seral stages, and livestock grazing is not apparent.

The connection between seral and structural objectives exists only in respect to the biological potential of plants in various seral expressions to produce high structure. Although there is that connection, these objectives are independent of each other in their intent. Analysis of the relationships with livestock grazing will occur at the allotment level (see objectives for each geographic area in the Land and Resource Management Plan, Chapter 2). Livestock grazing is discussed in the Land and Resource Management Plan Chapter 1, pp. 1-5, 1-19, and 1-20, and in Chapter 2, Geographic Area Direction.

Comment: The FS does not explain why "suitable acres" declined 18% (from 1,073,516 acres in the 1987 Plan to 884,460 acres in the Proposed Plan.) Experience and common sense suggests the GIS methods were inappropriately used to determine suitability.

Suitable acres must first be capable. Capability analysis did utilize GIS methodologies. It is based on steepness, forage production, and physical features such as roads, rock and water. Suitability is an administrative decision within the planning document where capable acres were determined to be non-suitable for livestock grazing because they reside in areas such as campgrounds and administrative sites. The capability and suitability analysis in the current FEIS was based on different objectives and criteria than those used the 1987 plan. Verification of capability and suitability will be done at the allotment level during the allotment management planning process. Suitable acres actually increased from 1,073,516 in the 1987 Custer plan to 1,112,970 in the FEIS. The 884,460 suitable acres are for the Little Missouri National Grassland only.

Comment: Grazing Levels (3-82) Table 3-29 (3-83) "current grazing use" There are some substantial discrepancies between the information contained in this table and the table in the DEIS [which] purports to show the same information (DEIS Table LG-3). No explanation was given for these differences.

The information in DEIS Table LG-3 was based on the definition of an AUM that used a factor of 1.32 for a cow and a calf. This was based on the premise that an AUM was based on a 1,000-lb dry cow. Responding to comments that this was not appropriate, the FEIS adopted the NRCS and Society for Range Management definition which is a 1,000-lb. cow with calf up to six months of age. The difference in numbers between the two cited tables is the 1.32 factor.

Comment: Grazing Distribution (3-84) The Forest Service is convinced that most of the suitable range receives "relatively uniform grazing" and they are concerned that their model results from Table 3-30 don't support that conclusion. Forest Service apparently has no data to support their conclusion.

The cited information in FEIS, Chapter 3 only characterizes "relatively uniform grazing" by the large amount of primary range and acknowledges that site-specific information will help to quantify the characterization.

Comment: Table 3-36 shows estimated pounds of forage available to livestock for the "existing condition." However, it is instructive to examine how arbitrary and speculative the values used in estimating total and available forage, and the AUMs based on them. It is not really clear how the estimates of "existing" production used in the FEIS were obtained from NRCS data. The estimates of existing production used in the FEIS are substantially higher than in the DEIS. DEIS the Forest Service used the estimates of "potential" production obtained from NRCS data as a basis for predicting total forage production. In FEIS Table 3-28 the Forest Service used "NRCS estimates" of "existing" production as basis for estimating total production on the Dakota Prairie units. No explanation was offered for this difference. Estimated AUMs from the 1987 Forest Plan was given as 663,000 in the DEIS, but only 502,270 in the FEIS (Table 3-29). There was no explanation for the difference. Permitted use in 1996 was shown as 653,000 AUMs in the DEIS but only 495,226 in the FEIS. Again, there was no explanation. The 1996 authorized use was 610,000 (DEIS) but the 20 year average authorized use was only 467,941. There is no explanation why the 20 year average is so much below that authorized in 1996. Estimate of stocking rates are based on NRCS recommended stocking rates derived from ecological site potential and range condition. The figures given in the FEIS are over twice those in the DEIS. One of them must be in error. It is interesting to note that the NRCS estimates presented in the FEIS (presumably the ones in the DEIS are wrong) Why estimated AUMs under the "existing condition" are so much lower than those based on NRCS estimates when the forage available under "existing conditions" was determined from information on NRCS recommended stocking rates?

See comment responses in FEIS, Appendix A, pp. A-30 and A-31. The production values used are average values across all habitat types on the Dakota Prairie Grasslands. They reflect landscape values because the Land and Resource Management Plan analyzes broad-scale goals and objectives. In all cases, the values were taken from university graduate thesis, NRCS range site production information, and professional judgment. All are appropriate for estimating landscape values.

The information in the FEIS (Appendix B, p. B-104, and Chapter 3, p. 3-82) was used to compare effects between alternatives and is not used for setting stocking rates on individual allotments. Individual allotment management plan analysis will use the best site-specific production data available. The existing production was used on the Dakota Prairie Grasslands to allow a meaningful comparison between alternatives.

With regard to the differences in Tables LG-3 (DEIS) and 3-29 (FEIS), the information in DEIS Table LG-3 was based on the definition of an AUM that used a factor of 1.32 for a cow and a calf. This was based on the premise that an AUM was based on a 1,000-lb dry cow. Responding to comments that

Addendum

this was not appropriate, the FEIS adopted the NRCS and Society for Range Management definition which is a 1,000-lb. cow with calf up to six months of age. The difference in numbers between the two cited tables is the 1.32 factor.

Comment: Tables B-20 to B-22. It is not clear where the average 20 year or 5 year use figures came from.

The 20-year average is based on what was authorized by the Forest Service from 1980 to 1999 on the Dakota Prairie Grasslands and from 1995 to 1999 on the Nebraska National Forest and Thunder Basin National Grassland. It was based on the final billings to each grazing association and permittee..

Comment: Guideline 1-14-22. Delay livestock grazing until after June 15th in areas being managed for upland gamebird nesting cover for the current year.

Recommended GSI Alternative - Livestock grazing will be withheld until after June 15 in a portion of areas within a given allotment to provide for upland bird nesting cover. The designation of areas to be reserved must change annually in a pasture rotation as part of an approved allotment management plan.

As stated in the Land and Resource Management Plan, p. 1-14, this guideline applies to areas being managed to provide upland gamebird nesting cover for the current year. The Land and Resource Management Plan (p. 1-13, #6) gives guidance on how to select areas to be managed as nesting cover, but does not specify which areas will be so managed. Such specificity must be addressed at the project level. The Land and Resource Management Plan recommends a minimal patch size of 160 acres (see Plan, Appendix H, pp. H-2 and H-3), but does not recommend or specify a maximum patch size. There may be several scenarios in which only a portion of an allotment would be managed for upland gamebird nesting cover. Conversely, there may be instances, such as in small allotments, or in rested, retired, or "swing" allotments, that the best fit-on-the-ground would be to manage an entire allotment for upland gamebird nesting cover. This flexibility would be lost if the commenter's suggestion was adopted.

Oil and Gas

Comment: We are concerned about the added acres of NO Surface Occupancy (NSO) being proposed but shown in the plan as a 0% change from current conditions. An explanation about how this is possible needs to be included in the narrative.

Reason for changes in the NSO and other stipulations are listed in the FEIS, Chapter 3, p. 3-115. There is actually a 2.5 % reduction in NSO acres from Alternative 1 to Alternative 3. See FEIS Chapter 3, Table 3-51, page 3-120.

Comment: The current standards and guidelines for MA 3.51A will have an adverse impact on the development of both the non-federal and currently leased federal minerals, and the currently unleased federal minerals within the management area. They will cause uncertainty and delay in the leasing and permitting process. They constitute impediments to federal oil and gas leasing which are not required by good environmental practices. The Oil and Gas Division estimates that the 80 wells that will not be drilled as a result of the 2001 Revision, that the number would be reduced to 23 wells if the impediments included in MA 3.51A were

eliminated.

The Oil and Gas Division never supplied its work to the Forest Service. However, the Forest Service had many discussions with them during consultations with the state in 2000 and 2001. Consequently, the Forest Service is familiar with some of their work.

MA 3.51 A direction was added between the draft and the final plans. The intent of this MA is to protect bighorn sheep while recognizing the existence of nonfederal minerals in these area and that these minerals can be developed independently of federal minerals (Land and Resource Management Plan for the Dakota Prairie Grasslands, Chapter 3, p. 3-25). MA 3.51 A provides flexibility to lease and develop federal minerals if there is no additional significant impact to bighorn sheep (see FEIS Appendix H pp. H-245 to H-248).

In reviewing comments on the final plan and FEIS, the Forest Service has decided to make an additional change to MA 3.51A. The Forest Service has created a new MA (3.51B); it includes four of the five areas that had been in 3.51A in the Land and Resource Management Plan. The primary change in this area will be that leasing will occur under strict Controlled Surface Use/Timing Limitations stipulations to protect bighorn sheep (reference the Record of Decision and its attachments). This will only add 33 wells that can be drilled under the Oil and Gas Commission's Reasonably Foreseeable Development. According to the Forest Service Reasonably Foreseeable Development (RFD) scenario, it only adds in one additional well that could be drilled. This change does narrow the difference in wells that can be drilled between the two RFDs.

Comment: We are concerned that the TBNG plan standards will have adverse effects on coal development. Will application of the Federal Land Managers' Air Quality Related Values Workgroup Phase 1 Report ("FLAG") have potential adverse impacts on mineral and economic development on the TBNG?

The TBNG Revised Plan (and errata) provides direction for air quality, requiring that all land management activities are to be conducted in such a manner as to comply with all applicable federal, interstate, state, and local standards, regulations, and requirements relating to the abatement of air pollution; that they meet the requirements of any Prevention of Significant Deterioration ("PSD") permits, State Implementation Plans ("SIPs"), Conformity Determinations, and applicable Smoke Management Plans.

Between Draft and Final EIS preferred alternatives, the Cow Creek Buttes area was changed from MA 1.2 Recommended Wilderness to MA 2.1 Special Interest Area. For either management area prescription, it remains designated as a Class II area. Air quality standards analyzed in the FEIS and included in the plan (Appendix A) are set forth at 40 C.F.R. 52.21 (c) and the Clean Air Act (as amended through December, 1990), 42 U.S.C. § 7473(b). Analysis of impacts of specific projects that propose mineral development on air quality is outside the scope of the Northern Great Plains analysis, but will be addressed at the project level.

As to application of the FLAG report, it must be pointed out that the FLAG report is neither a rule nor policy direction. It does however, provide a consistent guidance for the use of the Forest Service (and other federal land managers) so that it may fulfill its affirmative responsibility to provide comments and recommendations to the states, in order to protect air quality related values in Class I areas, during PSD process for proposed major emitting facilities (42 U.S.C. 7470 et seq.). Under the federal Clean Air Act, all new wilderness established after August 7, 1997 are designated by Congress as Class II and, as such, are not subject to the Class I protection procedures required by 42 U.S.C. § 7475 (d). The entire TBNG has been designated a Class II area and contains no management areas that would require Class I protections in the PSD process. Although the Forest Service may use the FLAG criteria to make Class II protection recommendations in the PSD permitting process, the state is under no legal obligation to accept these recommendations.

Addendum

The FLAG report, by itself, will not cause adverse impacts as it is only technical guidance upon which Forest Service managers may base their Class I protection recommendations in the statutory PSD permit application process. In addition, the entire TBNG is currently designated as a Class II area and remains a Class II area with the final preferred alternative. Air quality standards are set and monitored by the State of Wyoming. The final preferred alternative does not impose more stringent air quality standards than current management.

Comment: Table 3-42 states under the TBNG the federal government owns 1,158,760 acres of the mineral estate. Table 3-50 state the entire TBNG is open for leasing with 246,850 being withdrawn until such time as the BLM completes an EIS on coalbed methane development. Table 3-74 then shows the 911,910 acres are open to leasing in the preferred alternative, and Table 3-51 shows that 1,151,170 acres are under some kind of restriction or stipulation. The conclusion that only 7,590 acres of the 911,910 acres are open for leasing without restrictions or stipulations needs to be more explicitly explained. How will the findings of the Powder River Basin Oil and Gas EIS be incorporated into this LRMP?

The differences in tables shown results from consideration of Federal Mineral Ownership, National Forest System Surface, and areas with coalbed methane potential. In the center of Table 3-51, on p. 3-121, it states there are 911,910 acres open for leasing. Stipulations for these acres do exceed the area open to leasing because some acres have more than one type of stipulation applied (see explanation in the table).

The oil and gas leasing decision associated with this EIS will include only those TBNG lands east of the coal outcrop line. The new leasing decision for the TBNG lands west of the coal outcrop line will be covered by the Powder River Basin EIS. Until decisions associated with the Powder River Basin EIS are made, the area west of the coal outcrop line are covered by existing leasing decisions.

Comment: The FEIS' Reasonable Foreseeable Development projection does not adequately address the impacts to the national grasslands from coalbed methane production. Language should be included in ROD requiring a Biological Risk Analysis be conducted before leasing an area for coalbed methane production.

The development of coalbed methane (CBM) will have to go through the National Environmental Policy Act (NEPA) process. Biological evaluations are an integral part of the NEPA process.

Comment: Page (3-16) 3.63 Black Footed Ferret Reintroduction Habitat: Mineral and Energy Resources - We recommend rewording the related stipulation found in Appendix D-22 (second bulleted stipulation under BFF Habitat (CSU) to read: "Suitable BFF habitat lost as a result of new facilities within prairie dog colonies must be replaced prior to construction of new facilities."

In oil and gas exploration and development, the extent of long-term impacts to habitat is uncertain until the site is developed. Thus, the requirement to replace habitat within one year is more reasonable than tying it to prior construction of a facility.

Comment: Appendix D: Recreation - Application Methodology: Why does the 0.25-mile stipulation not apply to operation and maintenance of production facilities? We recommend that 0.25-mile stipulation apply since no analysis was provided to demonstrate a reason not to.

"Noise from oil and gas production facilities will not exceed 70 decibels" (Land and Resource Management Plan, Appendix D, p. D-4). The recreation stipulation applies to oil and gas production facilities; temporary facilities such as drilling and work-over rigs are not included.

Comment: Raptor buffers proposed in the Final Revised Plans appear to be more restrictive than those used by the BLM for current leasing decisions. Why is this necessary?

Raptor "buffers" for threatened, endangered, and sensitive species are intended to help prevent abandonment, reproductive failure or nest destruction. Some commentors stated concern about the spatial buffer distances stated in the plan; questioned the spatial distances being set when there are examples of raptors on the TBNG that nest in clear view of human activity; and questioned the phrase "line of sight" when defining activity restriction periods.

There is a range of spatial buffers recommended in the scientific literature. Romin and Muck (1999) and Lerczak (1992) were used as the primary references for the spatial buffers set in the plan. It is true that there are some raptors nesting in areas of regular human activity that have become habituated to human disturbance. However, there is no data to demonstrate how many pairs choose not to nest in areas of high human activity. The buffers are set to provide the least amount of disturbance to these birds during their critical nesting and roosting periods.

The proposed "buffer zones" for wildlife species listed in Plans, Chapter 1: Standards and Guidelines under Biological Resources: F. Fish, Wildlife and Rare Plants apply only to the National Forest System lands and federal mineral ownership. The plan clearly states in many areas that valid existing rights, including private property rights will be maintained. Spatial and temporal buffers for several raptor species have been modified to reflect new and updated biological information.

The Land and Resource Management plan direction, including those on raptor buffers, is less restrictive than BLM decisions made for coalbed methane development in the Powder River Basin. These decision were made in 1999 and 2001 (WYODAK). The Powder River Basin EIS incorporates the mitigation measures in the Land and Resource Management Plan for the Thunder Basin National Grassland, including mitigation measures for swift fox, raptors, and other wildlife species. The Forest Service has additional obligations for wildlife management, including Forest Service sensitive species and MIS, that do not apply to BLM. Therefore, the Forest Service may use different restrictions to protect wildlife.

Comment: Specifically, none of the recommended spatial buffers for nesting bald eagles summarized by Richardson and Miller (1997 full citation in Appendix H) exceeded 0.5 mile. Appendix D specifies a 1-mile NSO for active bald eagle nests and roosts (See Clayton report).

There is a range of spatial buffers recommended in the literature. The Forest Service used the U.S. Fish and Wildlife Service's 1999 recommendations for spatial buffers for raptor protection (Romin and Muck 1999). Lerczak (1992) was used as an additional reference. Since the bald eagle is a listed species, U.S. Fish and Wildlife Service recommendations determine raptor protection.

Comment: Also White and Thurow (1985 full citation in Appendix H) found that ferruginous hawks will rarely flush from the nest if not approached closer than 250 meters. Appendix D prohibits surface use within 0.5 mile (800 meters) of active ferruginous hawk nests from 1 March through 31 July.

There is a range of spatial buffers recommended in the literature (reference FEIS, Appendix H, p. H-179). The Forest Service used the U.S. Fish and Wildlife Service's 1999 recommendations for spatial buffers for raptor protection (Romin and Muck 1999).

Comment: Finally, there are numerous examples of raptors in the Thunder Basin region selecting nest sites and successfully fledging young within 0.25 mile, and in clear view, of regular human activity (annual wildlife reports of coal mines on file with the Wyoming Dept. of Environmental Quality).

This information is not in question. Stipulations are based on numerous information sources (see FEIS Appendix H). The Forest Service used the U.S. Fish and Wildlife Service's 1999 recommendations for spatial buffers for raptor protection (Romin and Muck 1999).

Comment: The phrase "line of sight" is used in defining the activity restriction periods (TLs) and spatial buffers (NSOs) for wildlife in Appendix D of the Plans. Unfortunately it is not entirely clear how that phrase should be interpreted.

For purposes of oil and gas leasing stipulations, a definition of "line of sight" is included in the Errata. "Line of sight" refers to the presence or absence of topographical features that visually screen oil and gas exploration and development or other activities from raptor nests and winter roosts of bald eagles. Line-of-sight is determined from the height and location of the feature (ground nest, nest burrow opening, tree nest, cliff nest or roost site) being protected. Line-of-sight does not apply for noise disturbances or when disturbance to raptors that are temporarily off a nest is likely to result in nest abandonment. An example of point of disturbance would be the site of a construction project.

Comment: There is too much area opened for gas & oil development. Please exclude oil & gas from all bighorn sheep areas, especially those in ND.

Alternatives 1-5 cover a variety of approaches to gas and oil development. Alternative 3 contains a mix of opportunities for oil and gas development, and protection measures for bighorn sheep. See the Land and Resource Management Plan for the Dakota Prairie Grasslands pp. 1-14, 3-23 to 3-26, and Appendix D for details.

However, the Forest Service realizes that private minerals or private surface may also be developed in the future because we are committed to honor existing rights. The Land and Resource Management Plan (Chapter 3, p. 3-25) contains management areas that account for this possibility and allow potential federal leasing if this private ownership is developed and if the federal leases can be developed without additional significant impact to the sheep (MA 3.51 A). The Forest Service has included direction in the MA that provides for land and mineral exchanges that contribute the bighorn sheep objectives.

In reviewing comments on the final plan and FEIS, the Forest Service has decided to make an additional change to MA 3.51A. The Forest Service has created a new MA (3.51B); it includes four of the five areas that had been in 3.51A in the Land and Resource Management Plan. The primary change in this area will be that leasing will occur under strict CSU/timing limitations to protect bighorn sheep (reference the Record of Decision and its attachments).

Comment: Forest Service must now consider the President's recent executive order (EO) 13211: Actions Concerning Regulations That Significantly Affect Energy Supply Distribution or Use and EO 13212 Actions to Expedite Energy Related Projects. It is the policy of the Bush Administration that executive departments and agencies shall take appropriate actions, to the extent consistent with applicable law, to expedite projects that will increase the production, transmission, or conservation of energy. The decisions contained in the FEIS/LRMP conflict with these Executive Orders and the National Energy Policy. BR recommends that the Forest Service revise the FEIS/LRMP to reflect the Administration's policy.

Presidential Executive Order 13211 addresses disclosing effects to energy resource production from promulgation of new regulations. Since land and resource management planning does not require the promulgation of rule-making, this EO does not apply to this plan revision effort.

The National Energy Policy and its direction did not come down to Federal agencies until after the release of the FEIS. In May 2001, the President's National Energy Policy Development Group issued recommendations for developing and implementing a comprehensive long-term strategy to promote dependable, affordable, and environmentally sound energy for the future. At the same time the President issued Executive Order 13212, "Actions to Expedite Energy-Related Projects", in which agencies are ordered to "expedite their review of permits or take other actions as necessary to accelerate the completion of such projects, while maintaining safety, public health, and environmental protections." In August 2001, the Forest Service developed a plan to implement the Executive order and Energy Policy Development Group recommendations that fall within the agency's jurisdiction and authority.

The Thunder Basin National Grassland covers a portion of the Powder River Basin, a fossil fuel rich basin that supplies a significant portion of the Nation's coal, natural gas (coalbed methane), and oil. In following the applicable recommendations of the Energy Policy Development Group and Executive Order 13212, this Land and Resource Management Plan allows for development of coal, gas, and oil resources. It also allows for whatever actions might be necessary, to the extent permitted by law and regulation and where appropriate, to expedite review of permits and accelerate completion of energy development and transmission (i.e., pipelines) projects while maintaining safety, public health, and environmental protection.

Under the Forest Service Energy Implementation Plan, land status and lease stipulation impediments to federal oil and gas leasing have been examined. The Forest Service has reviewed and modified them where opportunities exist (consistent with law, good environmental practices, and balanced use of other resources). The Forest Service has reviewed public land withdrawals and lease stipulations with full public consultation, especially with the people in the region, to consider modifications where appropriate. The Forest Service believes that the goals of the National Energy Policy Development Group and the Forest Service Energy Implementation Plan have been addressed to the extent appropriate in a land management plan.

Comment: Each and every leak on the Little Missouri National Grasslands must be reported immediately to the U.S. Forest Service as well as the North Dakota Department of Health and other agencies. There should also be a mechanism in place that provides for a fine for the oil companies by the Forest Service in addition to the possible fines imposed by the N.D. Health Department, N.D. Oil and Gas Division of the N.D. State Industrial Commission, and the Environmental Protection Agency.

A cooperative effort between the BLM, NDIC, and Forest Service to increase bonds on operators who do not comply with site standards is being implemented. Operators who continue to violate Forest Service site standards will be issued a Notice of Non-Compliance and be subject to legal action if the violation is not corrected in a reasonable amount of time.

Comment: The Forest Service increased land in bighorn sheep management to 76,060 acres from 57,269 acres. While about 26,200 acres are theoretically available, this is only if there is production on the adjacent non-federal mineral estate, which is unlikely to occur if the land is not under lease. FEIS 3-132. The difference between management area 3.51 and 3.51a begs the question of whether the surface owner can lawfully restrict access to the mineral estate. The increase in black-footed ferret reintroduction from 0 to 34,310 acres is similar. Due to the widespread application of NSO stipulations, prohibition on road construction, or timing limitations these areas are unlikely to be drilled or developed.

See Land and Resource Management Plan for the Dakota Prairie Grasslands, Chapter 3, p. 3-25. MA 3.51A is managed to benefit bighorn sheep. Bighorn sheep viability is the primary concern in this area. Conflicts will be resolved in favor of bighorn sheep habitat. This MA is distinguished from MA 3.51 by the inclusion of non-federal ownership. The Forest Service does not regulate private mineral ownerships. These can be developed at the mineral owner's discretion. The Forest Service has administrative authority over National Grasslands surface. In MA 3.51A, the Forest Service may decide to develop mineral interests if no additional significant adverse impacts to bighorn sheep would occur. This approach adds flexibility and opportunities for mineral development. The addition of MA 3.63 was necessary to fulfill Forest Service responsibilities under the Endangered Species Act.

In addition, the Forest Service has decided to make an additional change to MA 3.51A. The Forest Service has created a new MA (3.51B); it includes four of the five areas that had been in 3.51A in the Land and Resource Management Plan. The primary change in this area will be that leasing will occur under strict CSU/timing limitations to protect bighorn sheep (reference the Record of Decision and its attachments).

Comment: The Forest Service summary of acres available for mineral leasing, subject to NSO, CSU, timing limitations, or standard stipulations do not match the FEIS. For instance, the FEIS classifies 182,810 for scenic integrity or CSU but the Forest Service summary states that there are only 159,230 acres under CSU stipulations. The Plan Revision places significant areas off-limits to energy and mineral development. The Plan Revision reduces land subject to multiple use management by 27% in the LMNG, and removes the 200,000 acres originally managed for mineral development entirely.

In Table 3-51 (FEIS, Chapter 3, page 3-120), the acreage shows the overriding stipulation for that specific acre. Some areas have more than one stipulation applying to the same piece of land. An example would be having CSU, Timing, and NSO stipulations on the same acre of land. The NSO stipulation would be the overriding stipulation and would be the one counted in Table 3-51. If the NSO stipulation was not present, the CSU stipulation would be the overriding one and therefore counted in Table 3-51.

Tables 3-54 thru 3-69 (FEIS, Chapter 3, pages 3-124 to 3-149) identify the number of acres for each stipulation as it stands by itself. Because there can be multiple stipulations on a single acre, numbers in these tables can not be added together. Total acres by stipulation are displayed in FEIS, Chapter 2, Table 2-8, page 2-44.

Comment: The adoption of the Plan would severely impact Billings County. The FEIS eliminates development drilling on 32,057 more acres and 26,110 more acres for wildcat drilling than the existing plan. The FEIS delays development drilling on 149,076 more acres and 110,006 more acres of wildcat drilling than the existing plan currently does. This results in a gross minerals values loss of \$72,000,000 (\$24,000,000 state and local) and 53 full time jobs (source: Oil & Gas Division, ND Industrial Commission). The implementation of the Plan will certainly lead to cutbacks in new oil and gas production in Billings County. If the lease stipulations on surface lands over which the County has a royalty interest contains a No Surface Occupancy designation, surface development is disallowed over 100% of the lease area. This means Billing's County's royalty interests have been "taken" without compensation. The Northern Great Plains Plans Revision (NGPPR) FEIS fails to conform to the President's policy on energy or the Forest Service's plan to implement that policy. The Dakota Prairie Grasslands (DPG) Plans Revision and NGPPR FEIS need significant revisions to comply with the energy policy.

The Forest Service has done an oil and gas analysis that looks at a wide range of alternatives (FEIS pp. 3-101 to 3-155) Over all economic impacts have also been reviewed and are in the FEIS (pp. 3-61 to 3-66). No Surface Occupancy (NSO) decreased in Billings County by 8613 acres. NSO allows leasing with no surface disturbance and is not a "take" because development can occur. Controlled Surface Use (CSU) did increase by 47,390 acres, but CSU stipulations do not prohibit development. Not Administratively Available (NAA) acreage did increase by 19,274 acres. The Forest Service believes these acres are excellent areas for mineral exchange since they reside in predominantly MA 1.2A (Suitable For Wilderness). The Forest Service has not received the data referenced from the Oil and Gas Commission.

The Forest Service acknowledges that Billings, Golden Valley and McKenzie counties do have 6.25 % royalty interest in the oil and gas production of certain mineral estates. Some of the decisions made in this plan may defer mineral leasing production on some parcels of land for long periods of time. In some cases, this could result in the deferment of royalty payments to the counties.

In the event that oil and gas development is deferred for extended periods of time in areas where the counties have 6.25 % royalty interest, the counties can either wait until the oil and gas production is developed, or suggest mineral exchanges from the federal government to areas where the oil and gas will be developed sooner. If mineral exchanges are requested, such exchanges will be based on appraised values and will be exchanged on an equal value for equal value basis (FEIS Appendix A, page A-14). Also see FEIS Chapter 3, Community and Lifestyle Relationships for additional discussion.

The National Energy Policy and its direction did not come down to Federal agencies until after the

Addendum

release of the FEIS. In May 2001, the Presidents National Energy Policy Development Group issued recommendations for developing and implementing a comprehensive long-term strategy to promote dependable, affordable and environmentally sound energy for the future. At the same time the President issued Executive Order 13212, "Actions to Expedite Energy-Related Projects", in which agencies are ordered to "expedite their review of permits or take other actions as necessary to accelerate the completion of such projects, while maintaining safety, public health and environmental protections". In August 2001, the Forest Service developed a plan to implement the Executive Order and Energy Policy Development Group recommendations that fall within the agency's jurisdiction and authority.

Under the Forest Service Energy Implementation Plan, land status and lease stipulation impediments to federal oil and gas leasing have been examined. The Forest Service has reviewed and modified them where opportunities exist (consistent with law, good environmental practices and balanced use of other resources). The Forest Service has reviewed public land withdrawals and lease stipulations with full public consultation, especially with the people in the region, to consider modifications where appropriate. The Forest Service believes that the goals of the National Energy Policy Development Group and the Forest Service Energy Implementation Plan have been addressed to the extent appropriate in a land management plan.

Comment: The Forest Service summary of acres available for mineral leasing, subject to NSO, CSU, timing limitations or standard stipulations do not match the FEIS. For instance, the FEIS classifies 182,810 for scenic integrity or CSU but the Forest Service summary states that there are only 159,230 acres under CSU stipulations. The Plan Revision places significant areas off-limits to energy and mineral development. The Plan Revision reduces land subject to multiple use management by 27% in the LMNG, and removes the 200,000 acres originally managed for mineral development entirely

In Table 3-51, FEIS, Chapter 3, page 3-120, the acreage shows the overriding stipulation for that specific acre. An example would be having CSU, Timing, NSO and Scenic Integrity stipulations in the same acre of land. The NSO stipulation would be the overriding stipulation and would be the one counted in Table 3-51. If the NSO stipulation was not present, the CSU stipulation would be the overriding one and therefore counted in Table 3-51.

Tables 3-54 thru 3-69, FEIS, Chapter 3, pages 3-124 to 3-149 identify the number of acres for each stipulation as it stands by itself. Because there can be multiple stipulations in a single acre, they can not be added together.

Total acres by stipulation are displayed in FEIS, Chapter 2, Table 2-8, page 2-44.

A review of the Errata for the Dakota Prairie Grasslands Plan indicates that FEIS Alt 3 has 992,870 Acres contained in previous leasing decisions. Of that total 946,280 acres would be available for leasing through the ROD and 741,900 acres would be available for development with surface occupancy.

Comment: Appendix D: In addition, the Forest Service must evaluate a minimum footprint alternative for the Grasslands. The ecological advantages of clustered horizontal wells are well documented. By requiring cluster development (used in conjunction with horizontal or deviated directional drilling technology) the Forest Service can minimize the environmental damage oil and gas development on the Grasslands. Not only can directional drilling be more environmentally responsible than conventional methods, but it is also more effective at removing oil and gas

from geologic formations than conventional vertical wells. Directional drilling is a universally practical solution to oil and gas recovery. It is suitable for both exploration and full field development. The economic feasibility of directional drilling has been well demonstrated. Thus directional drilling is the most environmentally responsible way to develop oil and gas fields is practical from a geologic standpoint is economically feasible and produces equal or even superior results when compared to vertical drilling. For these reasons directional drilling constitutes a reasonable alternative that must be evaluated fully in a supplemental FEIS document.

Consideration of both horizontal and directional drilling was considered in the Reasonable Foreseeable Developments Scenario for each grassland. The technical, economic, and geologic feasibility of drilling technology are significant factors in determining the projected wells. Site-specific analysis at the Application for Permit to Drill (APD) stage of development will apply the Conditions of Approvals and may require alternate drilling techniques. See also Response to Comments FEIS, Appendix A, p. A-41.

Planning

Comment: The FEIS did not speak to the January 2001 Roads Management Rule. The FEIS should be supplemented before a decision is signed.

The Plan Revision and FEIS have been largely superseded by new regulations and policies and the effects of those policies and rules are not reflected in the Plan Revision or the FEIS. The inventoried roadless area conservation rule. ... Additional management restrictions on an estimated 268,000 acres in ND, including high energy potential lands in the Little Missouri National Grassland. New transportation rules and policy which call for decommissioning roads, and additional requirements for even temporary roads on January 12, 2001. Restrictions on off-highway vehicle travel for all of the federal lands in ND. The plan Revision made only minor changes in acres allocated to restrictive management area categories in response to comments and concerns. These changes resulted in little actual benefit, because the roadless rule, transportation rule and policy, and OHV plan amendments still restrict mineral leasing, new road construction, and reconstruction or maintenance of existing roads. The Plan Revision does not include those changes although the rules have been in effect since mid-2001.

The transportation rule and policy require the obliteration of all two-track roads, which will greatly reduce recreation access on the National Grasslands especially for hunting. The OHV policy prohibits most cross-country motor vehicle access, which will also limit recreation use and hunting. The decrease in hunting will likely have environmental effects by increasing game numbers, increasing the effects on habitat, and reducing the estimated economic benefits from recreation and hunting. There will certainly be a reduction in local revenues and state agency revenues. The NGPPR FEIS assumes no change or increases in recreation use and hunting. If the NGPPR FEIS had considered these related regulatory initiatives, which override the DPG Plans Revision regarding motor vehicle use and recreations

access, it would have to change its land management direction where it allows motor vehicle use and ii would have to change the assessment of Plans Revisions impacts on recreation use, hunting, and wildlife populations. By not disclosing the combined effects, the NGPPR FEIS overstates future recreation use and hunting and the related revenues to be gained.

The public expressed concern about the relationship of the Northern Great Plains planning effort and FEIS to other recent management directives and initiatives. The Northern Great Plains planning effort has appropriately evaluated these directives and initiatives and has considered the cumulative effects of these actions. The following is an abbreviated discussion of the recent regulations and policies.

Roadless Rule: The Roadless Rule is currently enjoined from implementation (FEIS, Appendix A, p. A-42). The roadless rule prohibited new road construction and timber harvest in inventoried roadless areas subject to a number of exceptions. However the roadless rule did not establish any direction for the use and management of existing roads, trails or travelways. Through the Northern Great Plains FEIS and analysis in Appendix C, the plan revision has considered a variety of management direction for roadless areas from management prescriptions that would preserve the character (prohibiting new road construction, etc) to management prescriptions that would allow development. If and when the roadless rule injunction is lifted and the agency implements a roadless rule resulting in a change in management direction from that adopted in the Land and Resource Management Plan, then the plan revision will be evaluated to determine the needed changes and their effects.

Planning Rule: On November 9, 2000, new planning rules were adopted (65FR 67514). However, the 2000 rules allowed the responsible official to elect to complete the plan revision process under the 1982 regulations. As such, the 2000 planning rules are not the basis for this plan revision.

Transportation Rule and Policy: The Transportation Rule and Policy were signed on January 12, 2001. The Transportation Rule and Policy provide guidance for transportation analysis in terms of determining a minimum road system and requiring a roads analysis process to inform road management decisions. The Transportation Rule and Policy did not dictate or adopt land management decisions. These decisions will only be made through subsequent NEPA analysis. The Land and Resource Management Plan does not make these decisions. The plan revision does include consistent goals and guidelines to accomplish the required transportation planning in the future.

OHV Decision: The OHV decision went into effect January 2001 and is the current management direction on the Dakota Prairie Grasslands in North and South Dakota. It is not the current management direction for the other units in the Northern Great Plains planning effort. However, because the OHV Decision/ FEIS was conducted concurrently with the analysis for the Northern Great Plains, the OHV Decision is not reflected in the acres displayed for the existing condition or Alternative 1 or 2 in the Northern Great Plains FEIS (see FEIS, Chapter 3, p. 3-338). However, the text does describe that the effects of the OHV decision would be similar to Alternatives 3, 4, and 5 with regard to cross-country travel on the Dakota Prairie Grasslands (FEIS, Chapter 3, pp. 3-68, 3-69, 3-71, 3-338). FEIS, Chapter 3, p. 3-338, displays alternatives reflecting the OHV decision to prohibit cross country travel (Alternative 1,2, and existing condition) and alternatives that reflect the OHV decision (Alternatives 3 (DEIS and FEIS), 4 and 5). The Northern Great Plains FEIS considered the cumulative effects of the OHV Decision along with other travel management decisions, including the cumulative effects on mineral development, hunting, recreation, access for fire suppression and noxious weed control (reference supplemental information added to the FEIS, June 02).

Comment: The FEIS did not address the National Fire Plan.

National Fire Plan direction came to the Forest Service in 2001. The key points of the plan are:

- ▶ Firefighting: Maintain a cost effective level of preparedness in firefighting and prevention.
- ▶ Rehabilitation and Restoration: Rehabilitate fire damaged wildlands and restore high-risk ecosystems.
- ▶ Hazardous Fuels Reduction: Invest in projects to reduce fire risk with focused effort in wildland urban interface areas.
- ▶ Community Assistance: Work with communities to reduce the risks of catastrophic fire.
- ▶ Accountability: Establish and maintain a high level of accountability including oversight reviews, progress tracking and performance monitoring.

The Forest Service is working with the appropriate federal and state agencies, and other fire agencies to jointly develop fire management plans and fuels reduction plans to address protection of these communities at risk. Additionally, Land and Resource Management Plan, Chapter 1, Section G. (Fire Suppression, Fuels Treatments, Prescribed Fire) addresses reducing the threat of wildfire to public and private developments and reducing fuel loadings to acceptable levels and participation in the "Firewise" community program.

Comment: Failure to Address Fire Management Strategy and Policy The Plan Revision and NGPPR FEIS do not address the environmental effects of the management direction on fuel loading, despite standard which will increase height an density of upland vegetation, including sagebrush. Given the land ownership patterns which require motorized access throughout the LMNG and Sheyenne River National Grasslands, the risk of accidental fire is very high. The NGPPR FEIS dismisses the risk as low and does not deal with the risk of a producing site becoming a part of a wildfire. NGPPR FEIS 3-425; 4-432. The NGPPR FEIS does not address the loss of private improvements, homes, or other structures, despite the need to do so. These are environmentally significant issues with the potential to cause great harm.

The Forest Service acknowledges that higher grass structure does increase fire intensity and rates of spread. However, fire behavior is influenced by a combination of fuels, weather, topography and season. All large fire occurrence over the past 20 years has been a result of prolonged drought or due to weather conditions producing strong gusty winds. Fuels are on of a number of components that need to be addressed in fire management planning.

The Land and Resource Management Plan for the Dakota Prairie Grasslands (Chapter 1, p. 1-18) calls for developing appropriate fire suppression response in the Fire Management Plan for the National Grasslands. Firewise" community programs and National Fire Protection Association (NFPA) guidelines for protection of life and property will be incorporated into the fire management planning process. The Forest Service is providing training and equipment to rural fire departments to improve their response, safety and effectiveness and has developed capability to supplement rural fire department initial attack. In addition, allotment management planning will take into consideration the location and dispersion of areas with higher residual grass structure to manage the overall impact of increased fuel loadings and their application to large fire spread.

Comment: Previous comments submitted by the ND Attorney General and the Heritage Alliance of ND detailed the statutory purposes that guide the National Grasslands and create significant conflicts with roadless or wilderness management. The Plan Revision and NGPPR FEIS do not address or try to resolve these conflicts. Roadless Evaluation Rule 219.17 does not apply to acquired lands.

This legal issue is outside the scope of plan revision.

Comment: Previous detailed comments in the review of the DEIS about range management, stocking rates, mis-use of ecological terms, and many other items were ignored in the revision and not commented on in the chapter on responses to public comments.

Comments were coded and summarized as described in Appendix A, Pg A-7 of the FEIS. Summarized comments were responded to in accordance with 40 CFR 1503.4. In addition, the detailed reviews of agency and public comments are maintained in the administrative record.

Comment: In the DEIS very little attention was given to wildlife and fish other than the MIS and endangered species. The FEIS approximately doubles the amount of space devoted to this topic without really adding any information. There is still no information on population trends or any other information that is very useful in the planning process.

CFR 219.19 requires that population trend for management indicator species be monitored. This information is presented in FEIS, Chapter 3, pp. 3-261 thru 3-263.

Comment: Nancy Curriden wrote: In this statement, range condition and trend were used in context of standard range condition terminology. This approach relies on comparisons of species composition of present vegetation compared to climax for the site. Therefore the former Supervisor understood the methodology and recognized its value. Her letter clearly reinforces the justification and necessity of incorporating the range condition and trend data into the EIS process. However, the Forest Service claims, in the Fiscal Year 1998 Monitoring and Evaluation Report the 1986 baseline information outlined in the Forest plan utilized livestock forage conditions rather than trend acreage information and/or information on similarity to potential. It appears to me that their reinterpretation of data insulted the integrity of Forest Service employees responsible for historical data collection and analyses was professionally unethical totally lacked scientific justification, and was precipitated by a public relations effort attempting to justify changes in resource uses on the National Grasslands.

The comment does not reference the context of the Curriden letter. The Forest Service assumes it was in conjunction with the Custer National Forest annual monitoring report. The 1998 Monitoring and Evaluation Report referenced by Nancy Curriden were based on goals and objectives in the existing Custer National Forest Land and Resource Management Plan. The FEIS is based on different goals and objectives. While it is true that condition and trend are vital in assessing whether management is obtaining long-term objectives, the one-point-in-time data used in the EIS process is adequate in estimating effects to evaluate alternatives. Chapter 4 of the Land and Resource Management Plan for

the Dakota Prairie Grasslands lists monitoring needs. Monitoring questions on p. 4-12 include one titled Vegetation 2. The question asks, “*To what extent are rangeland vegetation composition objectives being met?*” Additionally, monitoring questions on pp. 4-10, 11, and 13 deal with condition and trend of rangeland resources. Specific monitoring strategies that are responsive to long term objectives for seral expression found in the FEIS will be established at the allotment management planning level. Recognizing its value, condition (ecological status) and trend are but one part of the monitoring information that will be used to validate management strategy decisions.

Comment: In addition, at least on the TBNG blue grama is the climax or late seral species on many range sites. This was confirmed by contracting Dr Dan Uresk a Fs range scientist at Rapid City and referring to Thilenius et al. (1995) classification of the vegetation of the Powder River Basin (This excellent publication was never even referenced in the FEIS or the TBNG plan). Plant ecologists generally agree that the short grass plant communities are in equilibrium on these sites and no larger changes such as those projected in equilibrium on these sites and no large changes, such as those projected in Table 3-120 are likely to take place even over long period of time. Therefore the Forest Service has no basis for their robust projections of plant succession all of the units.

Even though Thilenius et al. (1995) was not used, the Natural Resource Conservation Service Technical Guide was used to determine dominance types given the biological site potential and normal moisture years. This guide also recognizes blue grama as a climax species.

Comment: Within 15 years, demonstrate positive trends in population viability, habitat availability, habitat quality, population distribution... Is the Forest Service planning on doing a complete survey of every population (Objective 7), then doing some kind of weighting to compare populations to decide whether in total there has been a demonstrated positive trend?

This objective refers to threatened, endangered, sensitive, MIS, species at risk and rare communities (see Land and Resource Management Plan for the Dakota Prairie Grasslands, Chapter 1, p. 1-3, #2 and #4). The Forest Service is planning to monitor our progress (through surveys) towards this objective. Chapter 4 of the Land and Resource Management Plan outlines planned monitoring. Specific questions and possible units of measure relevant to Objective 1.b #2 and #4 include: MIS 1, MIS 2 (plan p. 4-7), MIS 3-5 (plan p. 4-8), T&E 1-3 (plan P. 4-9 and 4-10), Viability 1-3 (plan p. 4-10 and 4-11), Wildlife 2 (plan p. 4-21), and MIS (plan p. 4-22). As noted in Chapter 4, these questions will involve surveys. Specific protocols vary by species, and by question. The Forest Service is currently developing these protocols in conjunction with researchers from universities and other agencies.

Comment: Under the Direct and Indirect Effects section on page 3-242, the FEIS lists Table 3-199 and Table 3-200 for data on the minimum acres of prescribed burning planned under each alternative. When we looked up these tables we found they pertain to undeveloped natural characteristics.

This has been addressed in the Errata. It should be Table 3-144 and not Table 3-199 and 3-200.

Comment: Table 3-29 pg 3-83 shows current grazing use on the DPG. Actually it also shows data for TBNG and NNF units as well. There are some substantial discrepancies between the information contained in the table and the table in the DEIS that purports to show the same information (DEIS Table LG-3).

The figures in Table LG-3, page 3-57 of the DEIS were not correct. This was changed in the FEIS to reflect the corrected values.

Comment: We find that, in the FEIS, there is not a proposed reduction in AUMs, at least on the surface. However, a closer review of the document indicates the 1987 Forest Plan for the TBNG shows 169,000 AUMs. Under the FEIS's preferred alternative, this would mean a reduction of 53,570 AUMs or a 31% reduction. The document indicates that there were 137,000 permitted AUMs in 1996, so using that number, a reduction of 21,570 or a 15% reduction in possible AUMs is proposed for the preferred alternative.

It is correct that the FEIS does not propose a reduction in AUMs. It displays the estimated effects of achieving a desired rangeland species composition and structure set of standards and guidelines. The Land and Resource Management Plan does not set stocking levels. This determination will be made during analysis at the allotment management plan level.

Comment: On page 3-232, under the Cumulative Effects section, the Agency states that the Northern Great Plains has had its plant community changed over the last 100 years and that this trend is expected to continue. Wyoming has seen very little conversion of grassland to cropland in the last 30 years and little evidence exists to show a change in this trend. Indeed, with the advent of Conservation Reserve Programs, we see many areas being reestablished as native grasslands. This evidence certainly would not support the conclusion reached by the Agency.

While the comment maybe true for the Thunder Basin National Grassland, the statement on page 3-232 is true for the entire Northern Great Plains as a whole.

Comment: We also question the applicability of the Holechek study on southwestern rangelands mentioned on page 3-237 to Northern Great Plains systems.

The study mentioned is used as a comparison to other studies mentioned in the same section.

Comment: H-95 - Different numbers between tables H-4 and H-5 for 3 NGs - Please explain.

This has been corrected in the Errata.

Comment: The Forest Service also states the primary cause of the degraded conditions of the livestock (pg 3-285). However the preliminary report by Jensen indicates that individual inspection indicates soil compaction and mechanical damage are the primary factor. In other words, there are no quantitative or even qualitative data to support the Forest Service contention. The soil scientists the reviewers have worked with have never reliably estimated soil compaction. More seriously, the inability to correctly interpret the green ash report and to misconstrue the data to perpetuate the myth that cattle are destroying the woody draws is inexcusable. It raises serious questions about Forest Service integrity and subsequent worth of the FEIS.

The report² states that the primary cause of the degraded conditions of the ash draws sampled appears to be (1) mechanical damage and (2) soil compaction from livestock. These are two separate causes.

Comment: Over 90% of the grasslands on the Sheyenne NG are potential habitat for sharp-tailed grouse. Current habitat suitability the percentage of the potential habitat that is estimated to be quality habitat averages 5%. Seventy percent (49,000 ac) of the SNG is also described as potential habitat for the prairie chicken. However, LRMP pg H-148, indicates over 50,000 ac of greater prairie chicken habitat on the SNG, which exceeds the potential acreage – a biological impossibility. Furthermore, habitat requirements of the sharp tailed grouse and the prairie chicken raise the issue of overlapping potential habitats. Can 91% of the SNG be rated as potential habitat for sharp tailed grouse while 70% of the SNG is rated as potential habitat for prairie chickens? The former and latter are used in the planning documents as MIS for the mixed and tall grass prairie, respectively. These kinds of fallacies in the FEIS indicate the planning documents are not based on science. Consequently, the LRMP can not be successfully implemented. Attempts at implementation of the LRMP would impose dire unintended consequences on natural resource communities permittees and other users.

The question is can an area of the Sheyenne National Grassland be classified as both potential sharp-tailed grouse and potential greater prairie chicken habitat? The answer is, yes, it can. These two species have broadly overlapping habitat requirements. They occur in the same habitats in several portions of their ranges. In order to clarify which species should be emphasized where, the Forest Service has proposed management direction (Dakota Prairie Grasslands Land and Resource Management Plan p. 2-31) that greater prairie chicken be emphasized in the southern and western portions of the Sheyenne Geographic Area, while sharp-tailed grouse should be emphasized in the northern and eastern portions.

² Jensen, Bill. 1997. A preliminary report: vegetative condition of ash draws on the Little Missouri National Grasslands. Memo to the U.S. Forest Service and North Dakota Game and Fish Department personnel attending interagency meeting, 11 June 1997. 9 pp.

Comment: There is no A in Cellers, as in Cellers Community Pastures. While there may have been a few root cellars in the area, Cellers refers to Albert Cellers, who sold much of the land in the area to the U.S. Government back in the late 1930s.

This has been corrected in the Errata.

Comment: EIS - 1-6:"socially desirable future conditions" Define socially desirable (politically correct?).

"Desired future condition" is defined in the glossary p. G-13 (Land and Resource Management Plan) and is discussed in many places throughout the Land and Resource Management Plan and FEIS. The term "socially desirable" reflects the public input into the determination of desired future conditions.

Comment: Page 1-13 (General #2) the term prairie grouse should be clarified.

Prairie grouse is defined in the Errata.

Comment: The Dakota, Minnesota and Eastern Railroad construction project should not be listed as being addressed at the "project level." This construction and operation of a new railroad would be so disruptive that it should require major revision or amendment to the management plan.

This item will be addressed in the Records of Decision for the Nebraska National Forest and the Thunder Basin National Grassland, if an amendment will be required.

Comment: The Forest Service states that "principles of conservation biology" were used in "several" of the alternatives. This should say "all" of the alternatives.

FEIS pp. 1-6 through 1-20 and 2-1 through 2-41 addresses the concepts upon which the Land and Resource Management Plan for the Dakota Prairie Grasslands is based.

Comment: Efforts to limit scope of comments unlawful and arbitrary. For the last several months, Forest Service officials have orally stated that they will limit the scope of public comment on the 2001 Plan Revision and NGPPR FEIS. This decision is not part of the official written public notices, but Forest Service officials have repeatedly stated that they will "read but not consider" any comments that the Forest Service determines were already addressed in the FEIS. This position contradicts the agreement pursuant to which this public comment period was provided and violates NEPA and the Administrative Procedure Act. ("APA"). As shown in these comments and the specialists reports, the Forest Service did not correct material deficiencies and errors and did not address the material comments in this Plan Revision and NGPPR FEIS. Thus, to the extent necessary, these comments, and no doubt the comments filed by other organizations and individuals, find it necessary to raise the same issues. Nor does the Forest Service have the discretion to selectively choose the comments that it will address and ignore others. Consequently, rather than picking and choosing which comments were previously addressed, the Forest Service must follow the established procedures in responding to comments. "Public scrutiny" is essential to implementing NEPA," 40 C.F.R. 1500.1 (b). The Planning Team must consider all substantive comments received

during the comment period as part of its legally enforceable responsibility to make informed decisions. If the Forest Service fails to do so, the ROD will be set aside, much like the court has enjoined the roadless rule for NEPA violations.

The Forest service did not limit public comment in any way. The Forest Service adheres to appropriate laws, regulations, and policies to solicit and address comments. All comments are read. If comments on the FEIS were already received during the DEIS comment period and were addressed in the FEIS, then the Forest Service will note that fact but not spend additional time reiterating a response to the same comment.

Comment: Effect of Post-Comment Processes. The planning rules do not provide for additional negotiations after the close of the comment period to modify the Plan Revision or NGPPR FEIS. The Forest Service did not follow a uniform process. The result is that the same Plan Revision and FEIS did not follow even similar public procedures during the post-comment process, which raises questions about the process and fairness.

The Forest Service adheres to appropriate laws, regulations, and policies to solicit and address comments.

Comment: NGPPR FEIS fails to conform the revised direction on the roadless rule. Recently, the Forest Service announced revisions in the transportation and road policy. The consistent theme is that these decisions should be allocated to the land use process. The FEIS makes one mention, 3-383, but as shown in these comments, proceeds to adopt direction that contradicts with the rules and, thus, any analysis is also incomplete. Even though the NGPPR FEIS addresses management of the roadless areas in Appendix C, the management direction does not conform to the roadless rule and is thus invalid. The plan revision cannot change the legal effect of the roadless rule because it was adopted under the APA, 5 USC 552(a) as a substantive rule. Such rules can only be amended or repealed in compliance with APA rule-making procedures. Consumer Energy Council v. FERC, 673 F. 2d 425, 446-447 (D.C. Cir. 1982) Finally, the discrepancies between what the rules require and what the plan revision and the NGPPR FEIS state will be allowed render the FEIS invalid under NEPA.

Comment: The omission of the regulatory actions in the scope of the FEIS means that a cumulative effect analysis is also flawed. It does not address the cumulative impacts on mineral development, hunting, recreation access, access for fire management and the relation to fuel loading, and access for noxious weed control. Any one of these impacts is significant but together they are fatal to the adequacy of the FEIS.

The public expressed concern about the relationship of the Northern Great Plains planning effort and FEIS to other recent management directives and initiatives. The Northern Great Plains planning effort has appropriately evaluated these directives and initiatives and has considered the cumulative effects of these actions. The following is an abbreviated discussion of the recent regulations and policies.

Roadless Rule: The Roadless Rule is currently enjoined from implementation (FEIS, Appendix A, p. A-42). The roadless rule prohibited new road construction and timber harvest in inventoried roadless areas subject to a number of exceptions. However the roadless rule did not establish any direction for the use and management of existing roads, trails or travelways. Through the Northern Great Plains FEIS and analysis in Appendix C, the plan revision has considered a variety of management direction for roadless areas from management prescriptions that would preserve the character (prohibiting new road construction, etc) to management prescriptions that would allow development. If and when the roadless rule injunction is lifted and the agency implements a roadless rule resulting in a change in management direction from that adopted in the Land and Resource Management Plan, then the plan revision will be evaluated to determine the needed changes and their effects.

Planning Rule: On November 9, 2000, new planning rules were adopted (65FR 67514). However, the 2000 rules allowed the responsible official to elect to complete the plan revision process under the 1982 regulations. As such, the 2000 planning rules are not the basis for this plan revision.

Transportation Rule and Policy: The Transportation Rule and Policy were signed on January 12, 2001. The Transportation Rule and Policy provide guidance for transportation analysis in terms of determining a minimum road system and requiring a roads analysis process to inform road management decisions. The Transportation Rule and Policy did not dictate or adopt land management decisions. These decisions will only be made through subsequent NEPA analysis. The Land and Resource Management Plan does not make these decisions. The plan revision does include consistent goals and guidelines to accomplish the required transportation planning in the future.

OHV Decision: The OHV decision went into effect January 2001 and is the current management direction on the Dakota Prairie Grasslands in North and South Dakota. It is not the current management direction for the other units in the Northern Great Plains planning effort. However, because the OHV Decision/ FEIS was conducted concurrently with the analysis for the Northern Great Plains, the OHV Decision is not reflected in the acres displayed for the existing condition or Alternative 1 or 2 in the Northern Great Plains FEIS (see FEIS, Chapter 3, p. 3-338). However, the text does describe that the effects of the OHV decision would be similar to Alternatives 3, 4, and 5 with regard to cross-country travel on the Dakota Prairie Grasslands (FEIS, Chapter 3, pp. 3-68, 3-69, 3-71, 3-338). FEIS, Chapter 3, p. 3-338, displays alternatives reflecting the OHV decision to prohibit cross country travel (Alternative 1,2, and existing condition) and alternatives that reflect the OHV decision (Alternatives 3 (DEIS and FEIS), 4 and 5). The Northern Great Plains FEIS considered the cumulative effects of the OHV Decision along with other travel management decisions, including the cumulative effects on mineral development, hunting, recreation, access for fire suppression and noxious weed control (reference supplemental information added to the FEIS, June 02).

Comment: Effects from Fish and Wildlife Management (p. 3-95, 96): The habitat requirements are presented in the FEIS. The standards and guidelines are in the respective Plans and are not in the DEIS. Therefore, the costs of implementing these standards and guidelines and their effects on resource use has not been subjected to analysis in the FEIS. Doesn't NEPA require such an analysis?

FEIS, Chapter 3, p. 3-95 states that considerations for wildlife habitat requirements and standards and guidelines have been taken into account in the predictive model for estimated available forage on a landscape basis. See FEIS, Chapter 3, pp. 3-89 and 3-90.

Comment: Important Points Concerning All the Alternatives (2-2) No reasonable comparison of alternatives is possible. All of the alternatives represent on major decision for management direction for which no alternatives were proposed or discussed. Forest Service has actually reverted to a narrow focus on a few Management Indicator Species presumed, but not proven, to represent all ecosystem processes.

FEIS, Chapter 2, p. 2-2 states "It was the intent to make all of the alternatives meet the purpose and need of this revision effort ...", which does indeed narrow the focus of alternatives. FEIS Chapter 1, (pp. 1-6 through 1-20) describes the purpose and need and resulting revision topics that the alternatives address. FEIS, Appendix A, p. A-67 address questions about MIS.

Comment: In the end, North Dakota wants a plan that has broad public support, and crafts a balance between conserving and utilizing our natural resources in a way that respects both the people and the resource itself.

All of the commentor's goals are addressed in the Land and Resource Management Plan for the Dakota Prairie Grasslands, Chapter 1, pp. 1-1 through 1-8. Appendix A (pp. A-1 through A-7) outlines the public involvement (including scientific peer review).

Comment: I encourage you to provide measurable benchmarks to endure the following: 1. Healthy grasslands. 2. Roadless areas. 3. Prevention of habitat fragmentation. 4. Regeneration of woody draws. 5. Wilderness areas. 6. Recovery of species specifically like the black-footed ferret, the black-tailed prairie dog, and prairie chickens. 7. Creating greater biodiversity of flora and fauna. 8. Reduction of erosion by wind and/or water. 9. Reduction of human impacts to the detriment of our native wildlife whether game or nongame. 10. Ensure special, sensitive, and/or unique areas are set aside for wildlife (consumptive and non-consumptive) and to prevent degradation. 11. Snag and dead trees are critical for cavity nesting birds and woodpeckers and necessary for other wildlife food and cover and nutrient recycling. 12. Recreation. 13. Low grazing impacts by: A. a 2" minimum stubble height for lotic spring seeps, lentic meadows, green line riparian areas, and upland terrestrial grasses and forbs. B. Fence special areas, springs, spring seeps, riparian zones and other areas if necessary. C. Salt livestock no closer than 1/4 mile of water. D. Graze according to the phenology of plants to maximize the seed source, develop root reserve nutrients, and leave residual plants for non-growing season food and cover. E. Don't headbox springs and seeps taking all water. F. Less than 50% utilization of riparian and upland shrubs and trees. G. Fence all fire rehabilitation areas to optimize fire rehabilitation efforts. H. No grazing of fire rehabilitation areas for a minimum of five years to ensure optimum seed germination, develop good plant stands, and let the shrub and tree species to grow above the height which livestock may impact them.

Chapter 4 of the Land and Resource Management Plan for the Dakota Prairie Grasslands, Monitoring and Evaluation, identifies how the Forest Service will monitor and evaluate the Plan. A general list of what drives monitoring is on p. 4-1. A comprehensive Monitoring Guide is being developed, as referred to on the top of p. 4-5. The Monitoring Strategy in Chapter 4 addresses this comment's

points in one way or another, although not with the same wording as in the comment. The subpoints under # 13 ("Low grazing impacts ...") in the comment are very specific and will be addressed at the allotment management plan level, which will include site-specific NEPA analysis.

Comment: Goal 4a: The "within 5 years" language should be deleted from Objectives #1-3 in the TBNG and NNF plans and Objective 1 from DPG Plan and replaced with "as soon as possible."

In the Land and Resource Management Plan, Chapter 1, p. 1-1, objectives are defined as concise, time-specific statements of measurable plan steps. As written, these objectives meet that intent. If the 5-year timeframe was removed, they would not.

Comment: Standards and guidelines are only tools with which to achieve goals and objectives and should not be seen as ends in and of themselves. The Forest Service should minimize use of "standards" except where absolutely essential. "Standards" tend to impede flexibility; "guidelines" tend to increase flexibility. Implementation of the Plan should provide for flexibility.

Yes, standards and guidelines are tools and not ends. The introductory paragraph on pp. 1-9 of the Land and Resource Management Plan, Chapter 1 explains the difference between standards and guidelines; it also mentions that both are designed to help achieve grassland goals and objectives. The Land and Resource Management Plan includes both standards and guidelines, thus incorporating flexibility (guidelines) while maintaining very important direction (standards) (see FEIS, Appendix A, p. A-59).

Comment: The FS did not consider the impacts of the standards and guidelines when alternatives were analyzed. Stocking rate calculations are a specific example. The FS spreadsheet considers the impact of imposing desired structural and rest guidelines. No other standards or guidelines were considered in the analyses of alternatives.

FEIS, Chapter 3, p. 3-95 states that considerations for wildlife habitat requirements and standards and guidelines have been taken into account in the predictive model for estimated available forage on a landscape basis. The standards and guidelines pertaining to livestock deal with meeting objectives for structure and ecological status (seral expression). The effects of those standards and guidelines can be addressed through management strategies such as rest (see the Land and Resource Management Plan, Appendix I, page I-19 for guidelines on where rest should be emphasized). Rest was considered as a part of the spreadsheet referenced in the comment. See FEIS, Chapter 3, pp. 3-89 and 3-90.

Comment: The projected composition and structural class matrices were not used in the current Forest Plans so how can Alternative 1 be "No Action" when these complex structural matrices are being put into place?

The FEIS, Chapter 3, p. 3-232 specifically addresses how the structural acreages are applied to Alternative 1 analysis.

Comment: A better solution would be to provide North Dakota State Universities with resources to do research on the new management scheme proposed in this plan and when the effects are known, then adopt the FEIS. The unintended consequence of the FEIS could very well be detrimental to the environment.

The FEIS was developed with scientific input, public input, and peer review. The Forest Service feels that the consequences of the Land and Resource Management Plan are well-enough understood to begin implementing it. Land and Resource Management Plan goals and objectives will be achieved over time, not all at once, and the Forest Service will monitor as the Plan is implemented. The Monitoring Strategy outlined in Chapter 4 of the Land and Resource Management Plan will be used to determine the plan effectiveness, and adjustments to implementation will be made based on monitoring. In addition, project decisions, such as allotment management plans, will be analyzed at a site-specific level and will likely include additional monitoring. NDSU or other universities or agencies would be welcomed to help the Forest Service monitor the Land and Resource Management Plan.

The Land and Resource Management Plan for the Dakota Prairie Grasslands incorporates a delayed decision in regard to grazing. The Forest Service will not change allotment management plans until a scientific team reviews the Land and Resource Management Plan and verifies the estimated effects that will occur. If the effects are as estimated by the Forest Service, the plan will be implemented. If they are not, the plan will be changed to address the identified needs.

Comment: In the introduction to Appendix A of the FEIS, it is stated that the range analysis on Page A-6 [was reviewed by the 12 individuals listed]. The implication is that this group of scientists approved of the procedures being used. That is certainly not the case. Some of us were highly critical of the process and recommended that it not be used. However, it was used with little or no modification as a result of this review.

The introduction states "This group reviewed the Documentation of Range Analysis that was incorporated into Appendix B-Documentation of Analysis. Members of the range review panel are listed below:" This section merely indicates the group who reviewed the documentation and does not make reference as to their opinion.

Comment: On p. 3-75, it states that Alternative 4 would provide the most diverse vegetation across the landscape. What is the basis for that statement? Nothing is presented which would indicate that Alternative 4 would produce a landscape which is any more or less diverse than the other Alternatives.

The focus of this alternative would feature natural processes and restoration of impaired native ecosystems (FEIS, Chapter 2, p. 2-10). Ecosystem restoration enhances native vegetation diversity. This alternative would also move more of the grasslands into a higher seral stage which would have more diverse vegetation because there would be more perennial forb and grass species. In addition, this alternative would provide the most acres of high grassland structure in all units. For more information see FEIS page 2-10 and 2-44.

Comment: Herbage Productivity, Dakota Prairie Grasslands, Existing Production (p. B-102) The reference to Froemke (2000) is not in the Literature Cited.

McCarthy et al. (1997) was cited on page 3-263 (Table 3-129) of the FEIS. The full citation could not be found in either list of references (FEIS or Appendix H).

This has been corrected in the Errata. The following reference has been added to the Revised Bibliography in the Addendum: Froemke, Dennis. 2001. Personal Communication.

Comment: We strongly suggest that the U.S. Forest System, in finalizing its Management Plan concerning the Dakota Prairie Grasslands, establish something similar to the NRCS operation. That is, the USFS has to develop a pictorial history of each section of land, each quarter of land, and each allotment of land that ranchers have the privilege to use. Aerial and ground pictures should be taken, annually, biennially, or even every five years that can be used a base for making comparisons on the grazing land. The photos, then, can be used when developing an annual management plan on each grazing allotment. If the photos show things that need to be changed for the next season, that can be worked into the management plan. Pictures will provide proof of what has happened on each allotment each year. With this management technique in place, the rancher knows what to expect. If the rancher has abused the land, that means he gets less cattle privileges the next year. If the rancher continues to abuse the land, the allotments continue to shrink.

Allotment management plans are site-specific decisions that will require additional analysis and development. The Land and Resource Management Plan for the Dakota Prairie Grasslands was not designed to address issues at such a site-specific levels as individual allotments (Preface pp. 4 and 5). Chapter 4, Monitoring and Evaluation, describes how the Forest Service plans to monitor. Adjustments will be made if monitoring indicates that the Forest Service is not meeting or moving toward the Land and Resource Management Plan goals and objectives. See Chapter 4, p. 4-3, for a description of how monitoring methods are chosen. Photographic records can be a useful analysis tool at the allotment level.

Comment: We further recommend that the Prairie Grouse Technical Council (Bob Sullivan, 512-389-7778) and the National Sage Grouse Conservation Framework Team (Terry Crawford 775-688-2500) be formally consulted regarding habitat management requirements for this species as well as monitoring protocols to ascertain its status on the units under the plan.

Individual members of both of these groups were contacted and numerous publications of these individuals and groups were used and cited. Reference the FEIS bibliography, FEIS Appendix H, and the Land and Resource Management Plans.

Comment: The Plan should include a formal process to evaluate the success of the plan and adjust provisions as necessary.

Presently the USFS seems unable to handle their management responsibilities. How would they monitor all these new proposed restrictions?

See the Land and Resource Management Plan for the Dakota Prairie Grasslands Plan, Chapter 4, Monitoring and Evaluation.

Comment: Monitoring of the grasslands should be conducted annually, and a status report should be provided to all interested parties.

The Land and Resource Management Plan, Chapter 4, Monitoring and Evaluation, outlines how monitoring will be conducted. Some monitoring occurs every year and is summarized in an annual monitoring report available to the public.

Comment: At the January 17, 2002, meeting with the Forest Service, we were assured that funding and support for monitoring was a high priority. Twenty-five additional people have been hired for this purpose, and we were assured that funds would be available to carry out monitoring for the Plan. This is encouraging because monitoring is essential to the successful implementation of any plan.

Monitoring is a priority for the Dakota Prairie Grasslands and the Forest Service agrees that monitoring is essential to the successful implementation of the Plan. However, the Forest Service did not make the statement that 25 additional people were hired for the purpose of monitoring.

Comment: Satellite pictures can and are enhanced providing pictures of minute details on the ground. I'm told by retired military personnel that the technology is so advanced that pictures can be enhanced to read license plates on vehicles. This technology should be used when monitoring allotments on the Little Missouri National Grasslands.

Satellite imagery is used by the Forest Service in various applications. It may be an appropriate tool for some monitoring, and its use will be considered.

Comment: The 2001 plan outlines an ambitious plan for monitoring will not be accomplished in any given year. We believe that grazing is the single most significant factor under control of the Forest Service impacting habitats and wildlife on the grasslands in the forest units. In order to determine the impacts that the grazing levels outlined in the plan have on meeting the goals and objectives of the plan, we recommend that monitoring questions Vegetation 1 through 4 be given a high priority.

The monitoring strategy (Land and Resource Management Plan Chapter 4) outlines a process to be used in the development of a monitoring guide and annual monitoring work plan. In the development of the annual monitoring work plan, monitoring items will be selected through an interdisciplinary team coordination process, budget constraints, and leadership direction.

Comment: The "validation monitoring" is a FS admission that assumptions regarding desired structural classes and management indicator species will be tested at the expense of natural resources, grazing permittees, other grassland users, and tax papers.

The Forest Service uses the best available information to develop management plans. As in most science, there are sometimes unknown factors involved for which professionals make assumptions. Validation monitoring allows the Forest Service to determine whether or not the assumptions were correct.

Comment: The implication that information on populations trends is not available is incorrect, at least for some management units. Didn't the FS summarize what data was available on population trends of MIS, since they are required by regulations to monitor such trends. For example, the 1985 Medicine Bow Forest Plan (Thunder Basin NG) had as one of its monitoring "requirements" that the Wildlife Staff Officer make annual population estimates for Management Indicator Species. Was this done?

Trend information for MIS is discussed in the narrative in FEIS Chapter 3, pp. 3-261 through 3-263. The Forest Service does not make annual population estimates for MIS. Existing habitat capability was reported annually per monitoring requirements in the 1985 Land and Resource Management Plan for the Medicine Bow National Forest and the Thunder Basin National Grassland..

Comment: "Step 10--Monitoring and Evaluation." This section states that "Monitoring and evaluation reports have been completed on all three units and were summarized in 1995 for Forest Plan revision. Essentially, this evaluation summarized monitoring data and reviewed the trends in forest plan implementation." Why wasn't any of this information presented in the FEIS and Plans?

Forest Service monitoring efforts are summarized each year in an Annual Monitoring Report. These reports are available in the administrative record and were considered in the development of the Land and Resource Management Plan and the FEIS.

Comment: The summary Table of Monitoring Strategy (pages 4-5 through 4-22) indicates the lack of scientifically-approved monitoring in the past, and an inability to understand and properly apply vegetation and soil sampling methodologies continues to plague future FS monitoring efforts. For example, the monitoring method to address the monitoring question regarding proper functioning condition of riparian areas is described as "A," which implies it is well accepted, and produces statistically valid results. Reliability, precision, and accuracy are very good. In the case of the proper functioning condition protocol, none of the above is true.

The Table of Monitoring Strategy (Land and Resource Management Plan, Chapter 4, pp. 4-5 through 4-22) lists proper functioning condition (PFC) under a heading of "Possible Units of Measure." The Forest Service recognizes that PFC is meant to assess whether a stream's functionality is at risk. It is accepted as a protocol in this regard. It provides the Forest Service with a means to prioritize further monitoring and or analysis. Riparian 1 also identifies monitoring that addresses the question of

regeneration (part of the PFC assessment). That monitoring will be based on protocols that are both well accepted and statistically valid.

Comment: VORs should not be described as a "Class A" monitoring method. Sedivec's and Vader's research clearly demonstrates the inability of VOR to provide data needed to evaluate Objectives 2, 4, and 6 (goal 1.b).

As stated in the Land and Resource Management Plan, Chapter 4, p. 4-3, Class A monitoring methods are those that are generally well accepted for modeling or measuring the resource. They produce repeatable results that are statistically valid. Reliability, precision and accuracy are very good. These methods are often quantitative in nature. The Forest Service's proposed use of VOR transects fits this definition. The Forest Service believes this data will be relevant for monitoring progress towards Goal 1.b.

Comment: VOR data for the SNG is not reported in the FEIS because of "data analysis problems." However, the Monitoring and Evaluation Report (Fiscal Years 1999 and 2000) summarizes VOR data for the SNG. In 1999 and 2000, 5.8 and 4.0% of the VORs were greater than 8 inches, respectively. The number of transects between 6 and 8 inches during the 2 years averaged 15%. "In 1998, 110 male greater prairie chickens were counted during systematic surveys, while approximately 106 were found in 1999, and 137 in 2000." The FS concludes, "data indicates that the long-term trend for the chickens is down due to a lack of residual cover." The data (VOR and # of birds) presented in the monitoring report and the subsequent interpretation of the data is a scientific concern. Based on the reported numbers, birds increased in 2000 and the percentage of VORs 8 inches decreased in 2000. The FS conclusion regarding birds and residual cover are scientifically unfounded.

To look for a relationship between bird numbers and VOR levels, it is most useful to compare a given year's lek numbers to the previous year's VOR levels. This is because the number of birds at a lek are the result of the previous years' reproductive success (the current year's reproductive success has yet to be determined). As noted in the Annual Monitoring Report referenced, the acres with >8 inch VOR was higher in 1999. However, as noted in the FEIS and in the commentor's letter, several other factors also influence prairie chicken numbers.

Comment: Table 3-104 shows VOR data after grazing from GRNG for 3 years. No information on soils or range sites was used and, thus, no information on potential values was given. Then it says that data for sites dominated by western wheatgrass and/or blue grama are presented in the table. Were these the only sites sampled or were some left out? What levels of VOR can be achieved by sites dominated by western wheatgrass and/or blue grama. Are these sites dominated by western wheatgrass and/or blue grama due to livestock grazing or does that represent the site potential? Were only those areas grazed (or grazed heaviest?) sampled or were areas in the 26% of this grassland estimated to be secondary or inaccessible range also included?

As indicated on page 3-188 (FEIS, Chapter 3), soils maps were not available to stratify sampling by soils or range sites. Transects were randomly selected across the entire national grassland, and those sites dominated by crested wheatgrass were excluded from analysis. It is likely that some sites were dominated by blue grama because of livestock grazing intensity, and on less productive sites, blue

grama was probably the potential dominant species.

Comment: The Final Environmental Impact Statement indicates Alternative 1 represents the current management plan (FEIS:2-6) and the FEIS states that no changes were made to this alternative from that provided by the Draft Environmental Impact Statement (FEIS: 2-6). However, comparison of acreage figures in the two documents suggest changes have been made.

These changes reflect the acre calculations based on changes made in response to DEIS comments and internal review.

Comment: The DEIS presents these estimates in Table B-24 and the FEIS in Table B-23. The figures in the FEIS are over twice those in the DEIS. One of them must be in error, since they were presumably based on the same information.

The FEIS changed in response to comments and subsequent review. Changes in values for total acres and existing production account for differences in these tables. Documentation of the data used for the FEIS is in the administrative record.

Comment: Science is improperly applied in the FEIS. The Forest Service claims to base the need for plan revisions on "new" scientific information and that their plans are "scientifically based." The FEIS did not present the results of new scientific information. In fact, a considerable percentage of the references cited in the Bibliography are neither new nor necessarily good science. The main deficiency however of the Forest Service's use of "science" is in the way scientific information is applied to the process. Published references cannot be used to justify the need to change management or to decide how to make such changes unless the published studies relate specifically to the planning area. Literature reviews and generalities offer no scientific basis for management decisions unless their relevance to the specific situation is demonstrated. The proper way to use the scientific literature is to suggest data needs, data collection methods, and data interpretation criteria for local monitoring and data collection. The focus should be to collect and analyze site-specific data on planning area and to support the methods used and interpretations made from the scientific literature. Changes in management required to reach objectives should also be supported from the scientific literature and professional experience.

The Forest Service used the best available data and scientific literature in the development of the Land and Resource Management Plan. The Forest Service used current conditions as cited in the 1999 Governor's report on the condition of the grasslands, Forest Service monitoring data for structural conditions, and reports on the condition of the woody draws, as well as other information. This data reflects the need for change. The Forest Service agrees that additional data would have been useful. The literature cited is extensive and most has been peer-reviewed. This literature is the basis for such things as species habitat requirements, production estimates, species viability, determination of vegetative responses to treatment, etc. Reference response to this issue in FEIS Appendix A, p. A-45.

Comment: The consensus council meetings may well violate the "open meetings" requirements of the Federal Advisory Committee Act ("FACA"), 10, 5 USC Associated Press 2. Calling the meetings "government to government" does not exempt them from FACA. If the Forest Service was accepting the advice of the participants, which was the participants' understanding, FACA applies.

These meetings were held by the ND Consensus Council. The Forest Service participated in these meetings as an observer. These meetings were neither organized or conducted by the Forest Service. There was a mix of interests involved and the intent was to broaden understanding of all issues. The discussions during those meetings were treated as any other comment to the planning process.

Comment: MUSYA requires that resources be "utilized in the combination that will best meet the present and future needs of the American people." The continued dominance of livestock production on federal lands is not a combination that best meets these needs. The FS must therefore define these needs and explain how the plan best meets them. In assessing which Plan alternative to implement the FS must therefore choose the best or optimal not a sub optimal "preferred" alternative that is usually driven by vested commercial interests. In selecting the optimal alternative, the FS must use an objective rational decision-making procedure such as the displaced ideal, by nominating in advance weighting factors for resource criteria, assigning ranks or realization scores to resource criteria expected under each alternative plan from best available science, and finally choosing the alternative from the highest sum of weighted scores across resource criteria.

The Preface and Chapter 1 describe the context under which the Land and Resource Management Plan was written, as well as applicable laws, regulations, and policies which pertain to the process.

Comment: The FEIS is unique from most other environmental impact analyses. Scientific information or data regarding range condition and trend is non-existent for all practical purposes.

Chapter 3 of the FEIS characterizes the existing condition of rangelands on the grasslands. The Land and Resource Management Plan establishes goals and objectives that are based on both range condition and on the habitat values. Specific range condition and desired outcome for conditions (seral condition) will be assessed at the allotment level. Monitoring strategies to address range condition will be identified in each allotment management plan. While it is true that condition and trend are vital in assessing whether management is obtaining long-term objectives, the one-point-in-time data used in the EIS process is adequate in estimating effects to evaluate alternatives. Chapter 4 of the Land and Resource Management Plan for the Dakota Prairie Grasslands lists monitoring needs. Monitoring questions on page 4-12 include one titled Vegetation 2. The question asks, "To what extent are rangeland vegetation composition objectives being met?" Additionally, monitoring questions on pp. 4-10, 4-11, and 4-13 deal with condition and trend of rangeland resources. Specific monitoring strategies that are responsive to long-term objectives for seral expression found in the FEIS will be established at the allotment management planning level. Condition (ecological status) and trend are but one part of the monitoring information that will be used to validate management strategy decisions.

Comment: Particularly disappointing is that standards (by definition— actions that must be followed) lack measurable benchmarks to inform management of progress toward a goal or objective. Unfortunately, most of the standards, as written, are neither time-measured nor establish benchmarks to measure progress.

Standards and guidelines provide direction to be followed. Standards must be followed in all cases unless the plan is amended and the standard changed or eliminated. Guidelines must be followed unless a site-specific exception is documented. The objectives are, by definition, time-specific statements of measurable planned results that respond to pre-established goals.. Monitoring identifies the measurable outcomes to inform management of progress toward achieving objectives (see Land and Resource Management Plan, Chapter 4, p. 4-1).

Comment: Many of the goals and objectives for the proposed Land and Resource Management Plans are not valid. As indicated above, the various subgoals and objectives established under the overall goal of "sustainable ecosystems" in the three Plans are not appropriate for that goal but rather relate to different outputs or legal requirements. For example, habitat conditions for sharp-tail grouse (or other species) or population levels of those species have nothing to do with and do not indicate ecosystem stability.

The goals and objectives presented in the Land and Resource Management Plan are tiered to the USDA Forest Service Government Performance and Results Act Strategic Plan: 2000 Revision (see the Land and Resource Management Plan for the Dakota Prairie Grasslands, Chapter 1, p. 1-1).

Comment: As indicated throughout the review, some terms in the Glossary need to be revised or clarified, and others need to be included. Deferred Rotation--use SRM Glossary definition. Ecological Diversity--what is the source of this term and the definition given? Imperiled Species--put in a definition. Niche--The definition given (ecological role of a species) is not the accepted ecological definition of this term. Range Management--use SRM Glossary definition. Sensitive Species--The usage in the text confuses this term with "Species of Concern" and "Imperiled Species." Clarify! Species of Concern--This term was properly deleted from the text and the glossary. However, confusion still exists in the document about the terms "Imperiled," "Sensitive" and "Species at Risk." Stream Health--is this the same as PFC as used by the FS? If not, what does it mean? Structure--The "Structural Stages" definition given for Silviculture is the accepted ecological definition of "structure." Vegetation Structure--The definition given does not make sense. What are the vertical characteristics of vegetation?

Deferred rotation, sensitive species, species at risk, and stream health are defined in the Land and Resource Management Plan, Appendix G. Imperiled species is a ranking given a species by The Nature Conservancy and Natural Heritage Programs. A sensitive species is one that has been so designated by the Regional Forester. Silvicultural definitions of structure are not the only valid definition; this is particularly true in this case, as the term is being used in context of herbaceous communities. Vertical characteristics refer to height and density.

Comment: The five alternatives do not provide realistic comparisons of the outputs to be expected under the objectives established for each alternative. Alternative #1 does not accurately reflect the current management situation. Alternative #2 claims to emphasize "commodity outputs" such as livestock production. However, the stocking rates are only slightly higher than those listed for Alternative #1 and thus are considerably lower than what was presented as "Authorized Use" in 1996 in the DEIS or the "Permitted Use" in both documents. This misclassification of Alternative #2 was not addressed in the FS response to public comment. If stocking rates are lower than present, the Alternative #2 is badly misrepresented as a "commodity output" alternative. Livestock production and other resource uses are so constrained under all Alternatives that any economic analysis of comparative costs and benefits is quite unrealistic and not meaningful.

Between the draft and the final EIS, an Existing Condition Alternative was added to reflect the current condition. Unlike Alternative 1, the Existing Condition Alternative reflects the 20-year average authorized livestock use and therefore, better reflects annual fluctuations in current use caused by weather and other factors.

Alternative 2 is the maximum commodity alternative. Its similarity with Alternative 1 only reflects that current management is directed toward maximum livestock production. Among the 5 alternatives, livestock use ranges from almost 289,000 AUMs to 450,000 AUMs (FEIS, Chapter 2, Table 2-8).

Comment: There is absolutely no indication in the FEIS of how well the current management plans are responding to the major revision topics.

The FEIS compares each alternative's projected outcomes with existing conditions. Although current management plans may not have been fully implemented, they do represent the existing condition.

Comment: Regulatory initiatives and sylvatic plague constitute significant new developments that support new draft of EIS.

Effects of plague are acknowledged in FEIS Appendix H, p. H-96; regulatory initiatives are acknowledged in FEIS, Chapter 3, p. 3-378. New developments in the outbreak of plague on the Thunder Basin National Grassland have been addressed in a supplemental information report.³

³ Supplemental Information Report to the Proposed Northern Great Plain Plans Revision Final Environmental Impact Statement and 2001 Revision Thunder Basin National Grassland Plan Disclosing Changes to Black-tailed Prairie Dog Habitat Within Proposed Management Area 3.63 of the Thunder Basin National Grassland Resulting From 2001 Sylvatic Plague Outbreak.

Comment: Goal 4: Effective Public Service - most of this Goal is to Restrict usage of the grasslands to limited areas. The taxpayers of the US should not have to subsidize recreation. This Plan leaves little for people with disabilities. Access to NFS lands should not be to the detriment of private landowners. There are plenty of access roads available without using private land. You will require landowners surrounded by NFS lands to have a special permit, at a cost usually, to have a special permit, at a cost usually, to access to their land. The reverse should apply for access to federal land.

This is not the case. The Forest Service is required to determine if the revised plan has a disproportionate effect on minority populations, low income populations, or American Indian Tribes. Our analysis indicates that no disproportional adverse impacts occur (FEIS p 3-77)

While there are many roads available to access NFS lands, other access may be needed on a case by case basis. Consistent with the requirement of a special use permit or easement to access private land when crossing NFS land, the Forest Service is required to acquire an easement or right of way to access NFS lands when crossing private lands.

Plant and Animal Damage Control

Comment: 3-169 - Permittees and landowners "Frequently request assistance" in treating grasshoppers. Perhaps occasionally would be a more appropriate word than frequently, unless you are trying to make permittees and landowners look bad, which I'm sure is not your intention.

This has been changed in the Errata.

Comment: Page 1-23 H.4. This has two distinct issues that need to be separated. What above-ground rodenticides are registered for prairie dogs anyway? The issue of birds eating falls under the registration and is not a Forest Service responsibility. The second issue, this essentially makes both rodenticides and fumigants unavailable, which may not be in the best interest of the Forest Service.

The only registered above-ground rodenticide for prairie dog control is 2% zinc phosphide bait. The label for this rodenticide allows use beginning in August of each year. The Forest Service has chosen to delay any use of this rodenticide until October 1 to further reduce risks to migratory birds. The rodenticide is still available for use during the months of October through December. You are correct that fumigants will not be used on the National Grasslands.

Comment: Page 1-23 H.1. This is a state issue and would prohibit the use of rodenticides for the control of prairie dogs entering un-wanted areas.

In the Errata, *prohibit* has been changed to *restrict* for the Thunder Basin National Grassland and Nebraska National Forest Land and Resource Management Plans.

Comment: The Forest Service should cooperate with the North Dakota Endangered Species Pesticide Management Program to minimize the impacts of pesticides on endangered or threatened species inventoried on the grasslands.

The Forest Service should cooperate with the North Dakota Water Protection Strategy for Pesticides to ensure that water resources will be adequately protected from impacts of pesticide applications on grasslands. Please contact Judy Carlson at 701-328-4997.

The Forest Service agrees that impacts to endangered and threatened species should be minimized and is proposing to work with the North Dakota Department of Agriculture and other agencies.

The Forest Service agrees that it is important to cooperate with other agencies to protect water resources. The appropriate agencies will be consulted as plans are developed (see Land and Resource Management Plan Goal 1.c. Objective #4 and Goal 4b. Public and Organizational Relations).

Comment: Effects from Plant and Animal Damage Control (p. 3-96, 97): This states that Alternative #2 would provide more opportunities for the establishment and spread of invasive and noxious species. No evidence is presented to support this and the statement implies that livestock grazing is the primary reason for the presence of these species, which is an absolutely incorrect generalization.

Alternative 2 would have the highest level of livestock use and construct the most developments to support livestock management, such would result in the most ground disturbance of any of the alternatives. Thus this alternative has the highest potential for noxious weeds (reference FEIS, Chapter 3, p. 3-162).

The Forest Service recognizes that noxious weeds are spread many different ways. The effects analysis considered that Alternative 2 would result in the greatest ground disturbance from increased oil and gas activity, increased motorized use, increased livestock use, etc. This projection of increased ground disturbance is the rationale for Alternative 2 having the greatest anticipated increase in noxious weeds. For a full discussion of the effects analysis for noxious weeds, see the FEIS, Chapter 3, beginning on page 3-157.

Comment: Plant and Animal Damage Control (p. 3-157 to 3-170) Why is crested wheatgrass tabulated (Table 3-76 and 3-78) for the Dakota Prairie and Nebraska NF units? It is not "noxious" and other species such as smooth brome and Kentucky bluegrass were excluded from this section. Also, why are other "invasive" species such as ring-necked pheasant and non-native trout species not covered in this chapter?

Crested wheatgrass can impact available forage and vegetative diversity (reference the paragraph immediately preceding Table 3-76 in FEIS Chapter 3, p. 3-159). Smooth brome and Kentucky bluegrass also have impacts, however the Forest Service has not mapped the location of these species. Crested wheatgrass has been mapped, therefore crested wheatgrass information is found in the FEIS. For additional discussion on crested wheatgrass, see page FEIS p. 3-159. Pastures which contain 70% or more crested wheatgrass will be managed as crested wheatgrass pastures; those with less than 70% will be managed for native species (reference the Land and Resource Management Plan for the Dakota Prairie Grasslands, Chapter 1, p. 1-19 Guideline #10).

Ring-necked pheasant and non-native fish species are usually considered "desired non-natives." The Forest Service is required to maintain viable populations of desired non-native species (36 CFR

219.19).

Comment: Combining Weed Control (Biotic Control Measures) and Fire Protection in the same category in Tables C-9-12, does not give the seriousness of weed control proper emphasis and these two categories should be separated.

The Forest Service agrees that biotic control measures and fire protection are both important issues. Tables C-9 through C-12 (FEIS Appendix C) display "availability criteria" which is a rating for the potential for conflicting values. For these two values, the potential for conflict was considered similar, thus they are displayed together. For more information, see FEIS Appendix C.

Comment: The real danger to the Sheyenne Grasslands is the spread of leafy spurge. Rather than worry about orchids which flourish better in grazed areas more thought should be given to leafy spurge control to improve the land.

There is be no spraying of areas where the orchid is found. The orchid is a monocotyledonous plant whereas the chemical used to control leafy spurge, such as Tordon, is developed for dicotyledonous (two seed leaves) will not affect the orchid. It seems somewhat strange that so little emphasis is placed on the leafy spurge problem plaguing almost half of the acres (30,000) of the total SNG acres (70,000) in the new plan. Is it because it would mean more grass for grazing? We feel all other problems on the National Grasslands are dwarfed by the rapid and persistent intrusion of leafy spurge.

Comment: Leafy spurge has become a plague because of mismanagement by the Feds. The T.R. National Park and surrounding Forest Service campgrounds are breeding grounds for diseased prairie dogs and leafy spurge. (Look at the campground at Buffalo Gap) Can't something be done?

Leafy spurge is recognized as a serious threat to the many values of the Sheyenne National Grassland. Appendix N outlines the recovery strategy for the western prairie fringed orchid and recognizes the roles of various management tools including grazing. Also, see Goal 1.c. #4, 6, and 7; Standards and Guides Section J; and Chapter 3, Management Area 3.66. In the FEIS, consult Appendix H. Standards for spraying leafy spurge in orchid areas vary, depending on whether the site is a core, satellite, or other allotment. Core orchid allotments are "priority areas for spraying leafy spurge with herbicides approved for use in wetlands, and leaving no soil residual, using fall treatments after the orchid has dispersed seeds." Thus, spraying of noxious weed can be done in orchid areas. See the Land and Resource Management Plan for the Dakota Prairie Grasslands, Appendix N, for more discussion on treatment of noxious weeds in orchid habitat.

Plant and animal damage control, including leafy spurge, is addressed in various places throughout the FEIS and Land and Resource Management Plan. For examples, see FEIS pp. 3-157 to 3-170; FEIS Appendix pp. A-60 and A-62; and pages 1-18 and 1-20 of the Land and Resource Management Plan. At the Buffalo Gap Campground, leafy spurge has all but been eliminated because of emphasis on biological control.

Comment: Page 1-20 #72 Does "predator control" mean both private and federal? Swift fox is not a federal protected species, this needs to fit within the conservation guidelines.

Land and Resource Management Plan, Chapter 1, p. 1-20, #72 specifies M-44s will not be used within

occupied swift fox habitat on the National Grasslands.

Comment: Include standards in your final selected alternative that Wildlife Services provides Forest Service with proof of compliance with Forest Service plan requirements.

The Forest Services believes the recommended standard is unnecessary. Under interagency agreements, Wildlife Services and the Forest Service meet annually within each state to discuss the effectiveness of damage control activities and Land and Resource Management Plan coordination and compliance.

Comment: Goal 1b: This goal is worded to include desired non native species. No exotic should be considered desirable and the potential threat that they pose to healthy ecosystems dictates that this language be deleted.

Pg 1-22 In Standards #2 and #4 we ask that the word 'undesirable' be struck from the language as management should attempt to prevent the spread of ANY non native, invasive, or noxious plant species, not just undesirable ones. We believe the National Grasslands should be reserved, as much as possible, for native plants.

This goal falls under the overall mission of the Forest Service – to sustain the health, productivity, and diversity of the land to meet the needs of present and future generations (Land and Resource Management Plan, Chapter 1, p. 1-1). It may be desirable, at times, to have non-native species. Such non-native species include the ring-necked pheasant and biological control agents for invasive plant species such as leafy spurge. These species meet the key word in Goal 1b of “desired” non native species. The National Forest Management Act also provides for the management of desirable non-native species on national grasslands and forests.

Comment: Noxious Weeds, Non native and Invasive Species S&Gs: Guideline #4 should include invasions within SIAs. Guideline #6 should be changed to encourage the use of biological controls over chemical and mechanical controls. Guideline #7 should be changed to require use of genetically local native plant species at all times, not simply when technically and economically feasible. This direction should also be made into a binding standard. Guideline #10 should also include the prohibition of pesticide use for grasshopper control where outbreaks are due to livestock management problems. This direction should also be made into a binding standard. Regarding insects and diseases, the plan focuses only on treatment (guideline #8). There is no direction for restoring insects or diseases as natural ecological processes on the National Grasslands. This needs to be corrected. Any scientifically defensible plan for managing an ecosystem must safeguard the integrity of all natural components and processes.

Guideline #4 does include SIAs (please see second bullet under this guideline which indicates that **special management areas (emphasis added)** which include SIAs. It is assumed the commenter is referring to Guideline #6 and not #7 concerning genetically local native plant species. The guideline, as written, is appropriate because of native plant species are not technically or economically feasible, they will not be used. Allotment management plan updates will consider grasshopper outbreaks and livestock management. Livestock management will include considerations for minimizing outbreaks, but it may be impossible to prohibit all infestations. Guidelines are advisable actions that should be followed to achieve goals and objectives. Deviations from guidelines must be analyzed during

Addendum

project-level analysis and documented in a project decision document, but do not require management plan amendments. The Forest Service review indicates there will be instances when project level analysis finds deviation from the guideline would better protect resources. If site-specific analysis indicates that natural insect and disease disturbances are needed to meet goals and objectives, they will be considered.

Comment: Pg 1-21 We urge the Forest Service to add additional language to "Consult with the U.S. Fish and Wildlife Service for guidance on the appropriate response where no Service approved plan is in place."

Since the DEIS, the Forest Service was informed that the U.S. Fish and Wildlife Service will not be approving or disapproving statewide prairie dog conservation plans. The reference to the U.S. Fish and Wildlife Service in this guideline has been removed in the Errata. The Forest Service may need to consult with the U.S. Fish and Wildlife Service at the project level about proposed modifications to the prairie dog management direction and guidance in Section H of the Land and Resource Management Plan.

Rangeland and Forest Health

Comment: Species at Risk (p. 3-199-3-204): "Imperiled" or "Vulnerable" Species are not defined in the Glossaries of the separate Plans. What do these terms mean?

The term "species at risk" includes those species for which viability concern has been noted. These would include threatened, endangered, and sensitive species, as well as state-listed species, and those ranked as G1-3 by The Nature Conservancy and Natural Heritage Program (see FEIS, Appendix H, p. H-5 for more information). "Imperiled" is a term used by The Nature Conservancy and Natural Heritage Program for conservation ranking (see FEIS, Appendix H, p. H-5 for more information).

Comment: The FS describes the eastern prairie boggy wetlands guild, tall grass prairie wetlands guild, tall grass prairie deciduous hardwoods guild, tall grass prairie choppy sandhills guild, western plains riparian guild, sandy guild, scoria hills guild, buttes guild, and western wooded draw guild. These "guilds" are not listed by the NDNHP. Descriptions of some guilds, with their associated species, make it difficult to identify or recognize them. I suggest the FS terminology and definitions be standardized with the NDNHP.

Guilds represent groups of sensitive species found within similar habitats (See FEIS, Chapter 3, p 3-203 and Appendix H, p H-248). They were developed in order to more efficiently analyze effects and develop conservation measures for sensitive species occupying the same habitats. The Forest Service has used NDNHP terminology and definitions for rare plant communities and rare species. However, the Forest Service is unaware of any need for NDNHP to identify guilds.

Comment: The activity restrictions periods and spatial buffers for wildlife species are not well documented either by facts or literature sources. Although Appendix H of both the FEIS and the Plan Revision lists references, they are not linked to the particular standard or guideline or stipulation. The activity restriction periods and spatial buffers for raptors listed in the Plans (mainly Chapter 1 and Appendix D) greatly exceed raptor tolerance levels found in the literature and documented experience. Recommended buffers for nesting bald eagles summarized by Richardson and Miller are not more than 1/2 mile. Appendix D specifies a 1-mile NSO for active

bald eagle nests and roosts, Tab 16, Clayton. White and Thurow (1985-full citation in Appendix H) found that ferruginous hawks will rarely flush from the nest, unless approached closer than 250 meters. Appendix D prohibits surface use within 0.5 mile (800 meters) of active ferruginous hawk nests from 1 March through 31 July. Documented experience of raptors in the Thunder Basin region show that they select nest sites and successfully fledge young within a 1/4 mile, and in clear view, of regular human activity. Coal mine annual wildlife reports, Wyoming Department of Environmental Quality. While Appendix D permits exceptions, the process is burdensome and subject to appeal and litigation. Lamb v. Thompson, 265 F. 3d 1038 (10th Cir. 2001) affirming waiver of raptor standard for timber sale). The standards and guidelines adopt a "line of sight" for the timing limitations ("TLs") and spatial buffers Controlled Surface Occupancy ("CSO") and No Surface Occupancy ("NSOs"), DPG Plan Revision, Appendix D. The Appendix does not explain how 'line of sight' will be assessed or applied.

As the commenter notes, references used are cited in the FEIS and the Land and Resource Management Plan. As noted on FEIS p. 3-485, key references included: U.S. Fish and Wildlife Service 1999, Richardson and Miller 1997, and Holmes et al. 1993. The recommendations referenced in the comment can be found in the following:

U.S. Fish and Wildlife Service. 1999. Utah field office guidelines for raptor protection from human and land use disturbances. Prepared by Laura A. Romin and James A Muck. USDI FWS, Utah Field Office, Salt Lake City. May 1999.

Comment: The Plan neglects to state where, by when, and how much high structure will be required. When percentage figures are used, they are never accompanied by statements of which type of range is cover such as available range vs. capable range and so on.

Chapter 2, of the Land and Resource Management Plan for the Dakota Prairie Grasslands identifies the amount of high structure by geographic area. The goal of the Land and Resource Management Plan is to establish the identified structure percentages across the geographic areas during the life of the plan. The location of high structure areas will be determined during the allotment management plan revision process.

Comment: The FEIS reduces Visual Obstruction Reading (VOR) readings for high structure from 6 inches in the DEIS to 3.5 inches in the LMNG and from 11 inches in the DEIS to 6 inches on the Cheyenne National Grasslands. This is not justified by the literature reviewed by the Dakota Grasslands Interdisciplinary Team. The VOR requirements in the FEIS should be replaced with those found in the DEIS.

The definition for high structure in the Draft Land and Resource Management Plan and Draft EIS was not expressed in terms of VOR readings; instead it was considered "75 to 100% of biological potential." This was changed in the final Land and Resource Management Plan and FEIS. See the Land and Resource Management Plan for the Dakota Prairie Grasslands, Appendix I, page I-1.

Objectives must be obtainable within the period in which they apply. Based on existing vegetative composition, it would be achievable to have more high structure vegetation if it was defined as 3.5", than it would be if high structure was defined as 6." The Forest Service believes this would better contribute to other goals and objectives. Furthermore, the Forest Service believes that the levels proposed would be sufficient, at the desired amounts, to improve habitat quality for greater prairie

chicken, greater sage-grouse, and sharp-tailed grouse. For additional information, see the following memo, available in the project file: Svingen, D. 2000. Memo from Dan Svingen Grassland Biologist, Mike McNeill Grassland Range Ecologist, and Darla Lenz Grassland Botanist to Larry Dawson Grassland Supervisor re: proposed definitions of vegetative structure categories. Dec. 5, 2000. 6 pp.

Comment: The FEIS, page 3-204 through 3-228 describe that 52% of the Badlands Geographic Area are currently in the early seral stages and that 48% of the Rolling Prairie Geographic area are in the very early seral stages. These descriptions are totally inaccurate. How can this be substantiated when the amount of low, moderate, and high structure are shown to be unknown. Seral stage and structural class have a certain amount of correlation. This portrayal of 48% early seral stage should give the public reason for concern with USFS management!!! Based on my knowledge of this area I would quickly predict that on those landscapes that are not basically barren badlands landscapes with no soil development that less than 5% of these areas are in the early seral stages. I would estimate that 25% are in the late seral stages while 70% are in the mid-mid to early late seral stages.

Pages 3-204 through 3-227 (FEIS, Chapter 3) are merely descriptors of the major plants that might occur in early, mid, and late seral conditions; they do not infer anything about existing conditions. The information on page 3-228 was based on the best information available to the Forest Service. The actual amount of each seral condition will be verified during analysis at the allotment level. The figures shown also would include consideration for leafy spurge infested sites as well as crested wheat and crested wheat/native pastures. The North Dakota Governor's review of range conditions on the Medora Ranger District also indicated that 70% of the transects were in fair condition, some of which would rate as low seral.

Comment: Heavy emphasis is placed on high structure even though the prairie grouse does better in a mix of short, medium, and high according to the scientific community. So, how much high structure? Where is it to be? When is an acceptable time frame for the achievement? Will changing climatic conditions be considered? How can you possibly know if you have hit the bull's-eye when the target isn't clearly defined?

Objectives for high structure are given in the Land and Resource Management Plan. For the Dakota Prairie Grasslands, see Chapter 2, pp. 2-6, 2-13, 2-21, and 2-29. Direction on where high structure should be emphasized is given on pp. 1-13, 1-14, 1-16, 2-7, 2-15, 2-22, and 2-31. As noted in the Land and Resource Management Plan, Chapter 1, p. 1-3, it is the Forest Service's objective to move landscapes toward the desired vegetation structure within 10 years.

Comment: The Dakota Prairie LRMP is largely based on FS assumptions: 1) most management indicator species require high structure, 2) high structure is an indicator of ecosystem sustainability, and 3) livestock grazing must be reduced to achieve high structure. The FS does not provide monitoring data or scientific research to validate the relationship of high structure to upland birds, high structure to ecosystem sustainability, or the relationship of livestock to structure. But livestock grazing will be reduced to allow about 1/3 on the landscape to be in high structure which should enhance habitat (but has not been quantified in relation to the MIS) and increase bird populations (which are not quantified but are believed

to be stable.) Rather than implementing a plan based on assumptions, land and resource management should be based on scientific principles. Grouse populations and habitat conditions should be quantified, and then monitored in terms of management objectives to determine future adjustments in resource management.

On the Dakota Prairie Grassland, proposed Management Indicator Species include western prairie fringed orchid, 3 species of prairie grouse (sharp-tailed, greater sage-, and greater prairie-chicken), and black-tailed prairie dog. The three prairie grouse would benefit from high structure. The other two species would not. The Forest Service did not assume that high structure was an indicator of ecosystem sustainability. The Forest Service did assume that livestock grazing would be limited in areas being managed for high structure. The NRCS in North Dakota uses a feeding efficiency of 0.35. This is assumed to result in moderate structure. The question then is "What feeding efficiency would result in high and low structure. If high structure is desired, a lower feeding efficiency would be used as less vegetation could be removed by livestock. The opposite holds true for low structure. Stocking rates will be monitored in order to assess their effectiveness in producing desired structure levels (see Land and Resource Management Plan, Chapter 4, p. 4-20).

Comment: Existing rangeland condition as reported in poor-to-low fair condition. Existing rangeland condition as reported in the FEIS, is dramatically lower than the condition reported in the 1997 monitoring report.

The FEIS includes information from a review of grassland conditions by a group commissioned by the North Dakota Governor. That report indicated that, on the Medora Ranger District portion of the Little Missouri National Grassland, 70% of the transects read by the Governor's team were in fair condition. This information was presented in the 2000 Monitoring Report.

Comment: The Forest Service used the Robel Pole to take VORs. This pole is to be used to measure residual cover for ground nesting birds, not livestock grazing.

The Forest Service agrees that the Robel pole is to be used as a way of quantifying the visual obstruction provided by vegetation and can be used to measure cover for ground nesting birds. It is not meant for measuring livestock utilization.

Visual obstruction readings and the use of the Robel pole are measurement tools to evaluate habitat suitability for many species of grassland wildlife. Results of monitoring the visual obstruction of grassland cover may result in the need to modify livestock grazing practices to provide suitable habitat for selected management indicator species or species at risk.

Comment: Vegetation Structure (p. 3-186): In other words, even the best VOR data is extremely difficult to interpret. Stratification by soil type and/or range site would make the data more meaningful and that apparently was not done anywhere. Grassland structure on the Grand River NG was sampled in the fall of 1995, 1996, and 1997. The FEIS claims (p. 3-188) that, "Soil maps were not available to stratify sampling by soils or range site" is erroneous. There is simply no excuse for the field crew failing to use the available resource material and stratify their sampling by soil type. Little Missouri National Grassland. The FEIS concludes that grassland structure is skewed downward. However, the VORs on a given range site are influenced by plant composition, growing conditions, rainfall, past and current grazing use, and the date the VORs were taken. Because the FS did not consider any of these factors, and also because of the inadequate level of sampling, these VOR

data are meaningless. Tables 3-103 and 3-104. (Table 3-121) Differences between the estimates in the tables need to be reconciled with structural estimates reported in the former tables. Table 3-104 shows VOR data after grazing from Grand River NG for 3 years. Then it says that data for sites dominated by western wheatgrass and/or blue grama are presented in the table. Were these the only sites sampled or were some left out? What levels of VOR can be achieved by sites dominated by western wheatgrass and/or blue grama due to livestock grazing or does that represent the site potential? Were only those areas grazed (or grazed heaviest?) sampled or were areas in the 26% of this grassland estimated to be secondary or inaccessible range also included? Table 3-105 presents VOR data "after livestock grazing" for the Ft. Pierre NG for 1992-1996. Again, no indication of potential VORs for the range sites and condition classes present was given. Although the acres sampled was given there is no indication of the sampling intensity, thus no estimate of sampling intensity, thus no estimate of sampling precision was given. When the table states that 13,600 acres were sampled what does that mean? The statement is made that "This (sic) data suggests that during this period of average to favorable precipitation, livestock grazing management across this unit resulted in most structure (sic) occurring in the intermediate levels." Do the data suggest why? Tables 3-106 to 3-111 fail to explain how the data reported relate to site potential, grazing distribution, or other grazing management employed in the specific units.

As noted in FEIS, Chapter 3, p. 3-188, sample sites were randomly chosen. Stratification was used where existing base maps were available. On pp. 3-188, in regards to the Little Missouri National Grassland, the FEIS states, "Samples included clayey, silty, and sandy ranges sites." The Forest Service agrees that VOR is affected by many factors and states that on p. 3-187: "Grassland structure is largely determined by site characteristics, precipitation patterns, and livestock grazing intensity." That certainly does not mean that VOR data are meaningless. Additional detail on data collection and analysis is available in the administrative record.

Comment: It appears the community classification system described for the Sheyenne National Grasslands confuses degraded plant communities (e.g. those dominated by invasive exotics) with early seral communities. More thought should be given this classification system. Alternate plant classification systems are readily available or on the horizon.

The community classification for the Sheyenne National Grasslands is in draft form, thus information on early, mid, and late seral communities is also draft. The Forest Service agrees that a better classification is needed; this will be completed in order for the Forest Service to meet management objectives.

Comment: In the Sheyenne National Grasslands, it has been my experience to find a low incidence of native host plants for butterflies, prairie birds, and habitat for declining species residing there. Encroaching trees, leafy spurge and poor grazing management have dramatically changed what is touted as "remaining tall grass prairie." Restoration and aggressive management changes are needed, and lesser alternative strategies won't achieve what is needed management changes are needed, and lesser alternative strategies won't achieve what is needed.

The Forest Service recognizes the importance of restoring the ecological health of this unit. The majority of the Shyenenne National Grassland will be managed for ecosystem restoration (Management Area 3.66).

Comment: A thorough inventory of all flora and fauna in the undisturbed grasslands should be created, funded, and completed with periodic revisits authorized over the decades for purposes of comparison.

The Forest Service conducts flora and fauna inventories as part of our monitoring. For more information on monitoring, refer to Land and Resource Management Plan, Chapter 4.

Comment: Plan Revision assumes that ("TES") and ("MIS") represent the full array of species present in the planning area. Assumption needs to be validated to the extent possible by listing all species present in the planning area and discussing how these species are ecologically represented by the various TES and MIS species.

The Forest Service did not assume that TES and MIS represent the full array of species present in the planning area. By definition, TES are fine-filter species and receive special management attention due to known or suspected declines in habitat or populations. MIS were selected for major biological communities. While the selected MIS do have some associated species, they do not, and cannot, represent all taxa present within the analysis area. For more detail, see FEIS, Chapter 3. pp. 3-258 to 3-265 and Appendix B, B-34 to B-35.

Comment: To date, the FS has not provided maps showing the location and extent of threatened, endangered, and sensitive species. They also have not provided the conservation strategies for each species and guild.

Maps showing known locations of threatened, endangered, and sensitive species are available in the administrative record, and were used during the analysis. Few conservation strategies have been completed. That is why the Forest Service has established an objective to address this (see Land and Resource Management Plan Goal 1.b - #8 on p. 1-3). Implementation of management guidance in these strategies will generally require additional NEPA analysis.

Comment: Page 2-23 Smoothbark cottonwood and limber pine do not occur in the Rolling Prairie GA. There should be no need to conduct target surveys or baseline assessment on these species. Alkali sacaton is on the extreme edge of its adaptation zone and should not be a high priority species in the Rolling Prairie or Badlands Geographic Area.

Surveys or assessments are conducted for sensitive species to update status and distribution information. Surveys will focus on potential habitat, regardless of geographic area. Alkali sacaton is a sensitive species. The Forest Service is directed to identify and manage for sensitive species (FSM 2672). For more information on how sensitive species are selected, see FEIS Appendix H.

Comment: In comparison to the prairie fringed orchid, I believe one of the native, tall grass species would be more appropriate management indicator species of the tall grass prairie wetlands. Rather than resting 1/3 of the historical occupied acreage annually and managing for 35% high structure in the SNG, maintaining the site as suitable habitat should be the primary focus. Management known to be beneficial for various habitat types should be used to manage known sites of fringed orchid. Therefore, the Forest Service strategies for managing the tall grass prairie are not based on ecological principles.

The western prairie fringed orchid is a native tallgrass prairie species associated with wetlands. It was selected as an MIS for tallgrass prairie wetlands. For discussion of how and why MIS are selected, see FEIS, Chapter 3, pp. 3-258. The Forest Service agrees that maintaining these sites as suitable habitat should be a primary focus.

Comment: The Forest Service goals, objectives, standards and guidelines to get high structure on 25-35% of the landscape, and to rest and "protect" other sites and communities from compaction and grazing are ecologically invalid. The tall grass prairie evolved with grazing. The Forest Service should be applying management practices beneficial for various habitat types, and not micro-managing for a single species.

The Forest Service agrees that grazing (as well as rest and fire) was, and is, an important ecological process in the tallgrass prairie ecosystem. Under the proposed Land and Resource Management Plan, livestock grazing would continue in the tallgrass prairie. Management direction in the Land and Resource Management Plan will benefit a wide variety of species and the ecosystem as a whole. The Forest Service is required to apply fine-scale management to species such as the western prairie fringed orchid, because it is protected by the Endangered Species Act.

Comment: The management alternatives for the FEIS and the LRMPs are completely predicated on the assumption that certain mixes of "vegetation structure" are sufficient to predict the achievement of management objectives. No real evidence is presented that would validate this assumption.

High structure, as defined by the Forest Service, is biologically unachievable on many sites. The scientific community's recommendations opposing the use of VORs to monitor natural resource conditions were ignored. It appears VORs will be used to measure structure for upland birds. When VORs indicate the desired structure goals are not being met, livestock reductions are implicit throughout the planning documents.

It is inaccurate to state that "The management alternatives for the FEIS and the LRMPs are completely predicated on the assumption that certain mixes of "vegetation structure" are sufficient to predict the achievement of management objectives." Many of the stated goals and objectives do not relate to vegetative structure. Furthermore, the mix of desired vegetative structure is itself an objective. See Land and Resource Management Plan pp. 1-1 to 1-8, 2-6, 2-13, 2-21, and 2-29 for more details.

The scientific community does not oppose the use of VORs. This is illustrated by the fact that numerous, peer-reviewed, scientific research papers use VORs as a monitoring tool (see FEIS, Appendix B, p. B-129 to B-130 for a list of references). Additional information is available in the

administrative record. Management indicator species and their habitat will be monitored throughout the life of the Land and Resource Management Plan (see Chapter 4, pp. 4-7, 4-8, 4-12, 4-20, 4-21, and 4-22). This will be done, in part, by using VORs. If a given area is not making sufficient progress towards Land and Resource Management Plan objectives, management will be revised. This is the basis of "adaptive management". Check points and subsequent adjustments will vary from place-to-place, as existing and potential conditions also vary place-to-place. Specifics will be addressed at the allotment management plan level

Comment: The criteria used to rate habitat for MIS for most of the planning area (sharp-tailed grouse and prairie chickens) are based on invalid and/or unproven assumptions about relationships between measures of vegetation "structure" and habitat quality for the MIS.

Vegetation "Structure" as used in these documents is an invalid concept: As management objectives, these desired structure classes suffer from several shortcomings: a) the actual quantitative relationships between structural class and the expected populations of management indicator species (MIS) or other resource outputs have not been established by scientific studies or monitoring, b) these structural class objectives do not take into account other attributes of wildlife cover (such a patchiness) or factors influencing rangeland diversity and productivity, c) the Forest Service does not have data to establish expected or potential values for any of the management areas and thus, is setting objectives that may not be achievable

The usefulness of VORs in shortgrass and some other vegetation types is open to question. More importantly, this use of the HSI model is demonstrably invalid because only the "nesting cover" part of the model is used, the type of data used to establish "optimum" nesting habitat and "minimum" nesting habitat are not the same, and there are no data to establish the functional relationship of VORs to actual density of nests over range of conditions. No evidence was presented in the FEIS to substantiate the validity of the assumed relationship of VOR measurements to habitat suitability for the MIS, yet the entire planning process is predicated on this relationship.

This brings into question the Final Grasslands Plan's ability to maintain viable populations of a number sensitive and watch species, especially to maintain viable populations of a number sensitive and watch species, especially neo-tropical and grasslands bird species. The FEIS reduces Visual Obstruction Reading (VOR) reading for high structure from 6 inches in the DEIS to 3.5 inches on LMNG and from 11 inches in the DEIS to 6 inches on the Sheyenne National Grasslands. This is not by the literature reviewed by the Dakota Grasslands Interdisciplinary Team. The VOR requirements in FEIS should be replaced with those found in the DEIS.

The Forest Service is required to use the best scientific information available in its analyses. Existing scientific knowledge does not provide an answer to many of the questions raised during analysis. In such cases, the Forest Service used reasonable assumptions and documented them as such. Based on available scientific literature, it is reasonable to assume that vegetative structure and MIS populations

on the grassland units are linked.⁴ The actual quantitative relationship between these variables will be monitored (see Land and Resource Management Plan, Chapter 4, pp. 4-7, 4-8, 4-12, 4-20, 4-21, 4-22). The Land and Resource Management Plan does provide guidance on patch size (see Appendix H, pp. H-2, H-3). All objectives proposed in the Land and Resource Management Plan are believed to be achievable.

One of the Habitat Suitability Index (HSI) models used in the Forest Service analysis was Prose's habitat suitability index models for plains sharp-tailed grouse.⁵ This model considers numerous factors, including interspersed cropland. Based on Forest Service monitoring data, field review, and professional judgment, the variable most likely to be impacted by management is nesting cover. That is why the Forest Service analysis focused on that factor. For additional detail, see FEIS pp. 3-274 to 3-280.

The definition for high structure in the draft Land and Resource Management Plan and Draft EIS was not expressed in terms of VOR readings, instead it was considered "75 to 100% of biological potential." See Draft Land and Resource Management Plan for the Dakota Prairie Grasslands, Appendix I, page I-1. This was indeed changed in the final Land and Resource Management Plan and FEIS. This change was made to simplify monitoring vegetative structure objectives through the life of the Grassland Plan.

Comment: Habitat Suitability Index (HSI) models that purport to relate VORs to quality of nesting habitat for these birds. The HSI used for prairie chickens is identical to the one used for sharp-tailed grouse. The HSI for sharp-tailed grouse was developed by the US Fish and Wildlife Service and has been modified in some cases by the Forest Service. Only the portion of the HSI referring to nesting habitat is used by the Forest Service. This HSI is not scientifically valid and is incapable of measuring habitat suitability for either sharp-tailed grouse or prairie chickens. The HSI model is not valid for the following reasons: 1. The upper value used (100% at 8 inches) was based on studies that recorded VORs at nesting sites, not as pasture average values. 2. The lower value used (0% at 2 inches) was, according to the publication by Prose, based on one study in ND that found no sharp-tailed grouse nests in an area with a pasture average VOR of 2 inches. In fact, the study cited did not examine any pastures with a VOR of less than 2 inches, thus, one cannot conclude that no nests can be found if the pasture average VOR is less than 2 inches. 3. The upper and lower values used in the HSI model are based on different criteria. The upper value is based on average VOR at nest sites, while the lower is based on average VOR in a pasture that presumably offers no vegetation adequate for grouse nesting. These are 2 quite different things and thus using them as data for defining a relationship with quality of nesting habitat is improper. 4. To properly establish a relationship between pasture average VOR and quality of nesting habitat would require studies that document the actual occurrence (density) of nests in situations having differing pasture average VOR values. No such data were used to develop the model, and none have yet been presented to validate the model. The HSI models

⁴ See the literature review in Prose, B. 1987. Habitat suitability index models: plains sharp-tailed grouse. U.S. Fish and Wildlife Service Biological Report 82(10:142). 31 pp.

⁵ Prose, B. L. 1987. Habitat suitability index models: plains sharp-tailed grouse. U.S. Fish Wildl. Serv. Biol. Rep. 82(10:142). 31 pp.

used for sharp-tailed grouse and prairie chickens are not presented or described in the FEIS although they are the basis for decisions regarding the desired "structure" for the grassland areas where sharp-tailed grouse and/or prairie chickens are the MIS. Thus, all management activities in the planning area are based on unproven assumptions and faulty models.

The Forest Service believes use of these HSI models is appropriate for the analysis conducted. It represents the best scientific information available. The rationale for the model's use of various VOR levels is presented in the model itself. The model is available in the administrative record. As noted in Land and Resource Management Plan, Appendix H, nesting hens often select sites that contain cover denser and higher than is average in a given pasture. The definition that the Forest Service will be using for high cover is 3.5-inch VOR on the Little Missouri, Cedar, and Grand River National Grasslands, and 6-inch VOR on the Sheyenne National Grassland (see Land and Resource Management Plan, Appendix H).

Comment: The FS prioritized uplands for VOR monitoring (page B-57). This is a biased sampling plan. Sedivec (1994) reported over 84% of all sharp-tailed grouse nests in central ND (between 1987 and 1992) was associated with overflow range sites. Furthermore, Sedivec found that sharp-tailed grouse selects for western snowberry cover for nesting habitat. Therefore, the FS used an inadequate sampling method (VORs). They measured structure only on upland sites, while avoiding areas of higher structure (snowberry, crested wheatgrass, and overflow sites) which are selected for by nesting birds. Therefore, the FS monitoring plan has not, and will not provide information needed to properly evaluate the impacts of resource management on upland bird habitat.

Stratifying sampling design by the habitat of interest is entirely appropriate. It would be inappropriate to take a stratified sample and extrapolate to non-sampled habitats. Small inclusions of western snowberry within a VOR transect will be sampled.

Comment: The FS continues to confound "nesting success" with "nest recruitment." If the FS has data correlating sharp-tailed nesting success with VOR, it should have been included in the analysis and reported in the DEIS.

The Forest Service used the best scientific information available. This data indicated that nesting sharp-tailed grouse prefer to nest in high structure vegetation. These references are available in the project file. Much of the relevant data from these sources has been summarized in the following memo, which is also available in the project file: Svingen, D. 2000. Memo from Dan Svingen Grassland Biologist, Mike McNeill Grassland Range Ecologist, and Darla Lenz Grassland Botanist to Larry Dawson Grassland Supervisor re: proposed definitions of vegetative structure categories. Dec. 5, 2000. 6 pp

Comment: According to the Forest Service, average pasture size in LMNG is about 850 acres. By dividing 1,026,300 acres by 850 acres, there are 1,207 pastures. By assuming the "sensitive" species and communities are dispersed throughout the LMNG, one or more may occur in 145 pastures (1,207 pastures x 12%). The affected pastures contain 123,250 acres (145 pastures x 850 acres). By assuming that the sensitive species are dispersed across the Grassland, 25% of them may occur (overlap) within the 25% of acreage previously managed for high structure. The remaining 92,438 acres (75% of 123,250 acres) will need to be protected.

Your assumption that sensitive species and communities are dispersed throughout the LMNG is valid, but this does not mean that they are evenly distributed. The origin of the 12% figure is unclear. These calculations assume that all sensitive species and communities require high structure vegetation. This is not the case. Several species, including prairie dogs and long-billed curlew benefit from low and moderate structure vegetation. Site-specific measures necessary to manage for sensitive species and communities will be developed at the project level, and will be specific to the species and communities which occur there.

Comment: It is inappropriate to include discussion of desired vegetation composition or structure, endangered species, or management indicator species under this topic unless there is a demonstrated link between these attributes and health from either published scientific literature or very elaborate monitoring.

Major revision topics were broadly defined in order to capture the wide variety of issues raised during public scoping. The definition of Rangeland and Forest Health used during this analysis is given in FEIS, Chapter 1, pp. 1-15 to 1-17. The definition includes the issues of vegetation composition, structure, and species diversity, among others. Additional details are given in FEIS, Chapter 3, pp. 3-171 to 3-294.

Comment: On p. 3-71, it states that, "All alternatives have goals to protect, conserve and restore important terrestrial and aquatic habitats, and ecosystem integrity, and provide sufficient habitat to support stable or increasing populations for Management Indicator Species." Since Alternative 1 presumably involves a continuation of current management, doesn't this statement mean that current management is already appropriate for these goals and thus, it should be the Preferred Alternative?

The various alternatives would make different progress towards meeting these goals. The different effects of the alternatives are presented in the FEIS, Chapter 3 "Environmental Consequences" sections. Based on the effects of the alternatives, Alternative 1 was not selected as the preferred alternative. See FEIS Chapter 1, p. 1-7 for a discussion of the reasons for revising existing plans.

Comment: Current land cover classes and changes (p. 3-172 to 3-174): The information presented is irrelevant to establishing condition, trend, or needed management direction for the forest and grassland units under consideration. This small difference in erosion between bare ground (cropland) and vegetation cover (rangeland) does not seem to be possible or accurate. This seemingly apparent discrepancy was commented on in the review of the DEIS but not acknowledged by the Forest Service in its revision.

The information presented in the FEIS, Chapter 3, pp. 3-172 to 3-174 is relevant. It helps provide an ecological context in which these National Grassland units fit. All comments received between draft and final were reviewed and are available in the administrative record.

Comment: Their [species at risk] presence or absence does not necessarily relate to integrity of the soil or sustainability of ecological processes. If and where there is such a relationship, it should be clearly pointed out.

Major revision topics were broadly defined in order to capture the wide variety of issues raised during public scoping. The definition of Rangeland and Forest Health used during this analysis is given in FEIS, Chapter 1, pp. 1-15 to 1-17. The definition includes the issues of vegetation composition, structure, and species diversity, among others. Therefore, presence or absence of species at risk is an appropriate measure. Additional details are given in FEIS, Chapter 3, pp. 3-171 to 3-294.

Comment: To date, the Forest Service has not provided maps showing the location and extent of threatened, endangered, and sensitive species. They also have not provided the conservation strategies for each species and guild. Therefore, it is impossible to evaluate the impact of the Forest Service's proposed management (or lack of management) for these species and guilds on livestock grazing.

Maps showing known locations of threatened, endangered, and sensitive species are available in the administrative record and were used during analysis. Few formal conservation strategies have been completed. That is why the Forest Service has established an objective to address this (see Land and Resource Management Plan, Chapter 1, Goal 1.b - #8 on p. 1-3). See also conservation measures in FEIS Appendix H.

Comment: Guideline to emphasize nesting and brooding habitat of active greater prairie chicken, sharp-tailed grouse and sage grouse - This has potential for impacts on the plant community because of the extensive area affected.

These three species are management indicator species (MIS). MIS are plant or animal species selected because their population changes are believed to indicate the effects of management activities on other species of selected major biological communities or on water quality. Therefore, they were selected because management for their habitat will influence the plant community. See further MIS discussion in FEIS, Appendix A, pp. A-67 and A-68.

Comment: Plans for reintroduction of threatened or endangered species should only be completed in consultation with appropriate state and local agencies and appropriate partners.

The only threatened or endangered species proposed for reintroduction on the Dakota Prairie Grasslands is black-footed ferret. Details are given on Land and Resource Management Plan pp. 3-27 to 3-29. In the Land and Resource Management Plan, Chapter 1, p. 1-15, is a standard which reads "Coordinate with state and federal wildlife agencies regarding black-footed ferret reintroduction as soon as prairie dog complexes reach sufficient size."

Comment: Acknowledgement within the plan needs to be made that weather fluctuation (i.e. drought, wet/cold-nesting periods) may have uncontrollable effects on reproduction and species population. It must also be acknowledged that protected raptor species such as kestrels, various hawk species, and golden eagles will negatively effect MIS population (sharp-tailed grouse). It is also highly likely that sharp-tailed grouse populations are cyclical and its downward cycle may hit when monitored within the fifteen-year period.

Item 22 - Delaying grazing until June 15 is not a sound resource management guideline. Research in Eastern ND indicates greater nest survival in pastures that were grazed.

The Forest Service recognizes that weather has a very important impact on nesting success for most species. This fact has been addressed repeatedly in the Land and Resource Management Plan (example: Goal 1.b-#7, p. 1-3, Standard F-#1 on p. 1-13). By providing greater habitat diversity, wildlife populations can be buffered to some degree, from typical environmental fluctuations. The comment that raptors negatively effect MIS populations is true in some cases but untrue in others. In general, wildlife biologists point to the overriding importance of habitat quantity and quality as the most important limiting factor for species such as sharp-tailed grouse. In some cases however, raptors can have a significant local impact on grouse populations, such as at a reintroduction site. If sharp-tailed grouse are assumed to be cyclical, then a cycle peak or nadir might occur within the 15 year monitoring period. Annual sharp-tailed grouse population fluctuations, whether or not they are cyclical, can be dramatic. Annual monitoring of these populations, as called for in Land and Resource Management Plan, Chapter 4, will help quantify these changes over time.

If an area is being managed to provide spring nesting cover, it would be illogical and ineffective to remove the nesting cover before it could be used by nesting birds. Guideline 22 in the Land and Resource Management Plan (Chapter 1, p. 1-14) is intended to prevent such an occurrence. This does not direct that the same areas will be managed year after year for high structure.

Comment: Wildlife and Fish (p. 3-457): In the DEIS, very little attention was given to wildlife and fish other than the MIS and endangered species. There is still no information on population trends or any other information that is very useful in the planning process. On page 3-460 is a long list of references consulted to "help evaluate the effects of each alternative on wildlife and fish." Almost none of the references are given in the Literature Cited. References since there is no indication of the predicted effects of the alternatives on these species.

These references were used in several of the Forest Service analyses, including the one conducted on general wildlife and fish. This analysis is documented in FEIS, Chapter 3, p. 3-462 to 3-487. Additional details are available in the administrative file. In most cases, population trends were not

available for these species.

Comment: Mountain Plover (p. H-45 to H-53): The management direction for greatly increasing areas with "high structure" will be counter-productive for increasing nesting habitat for this bird.

As explained on FEIS, Appendix H, p H-45 to H-53, mountain plover will benefit from increasing areas of "low structure." Areas with high structure are unsuitable to this species (just as areas of low structure are unsuitable to species such as dickcissel). This illustrates the importance of providing diverse vegetative structure. FEIS Chapter 3, p. 3-458 discusses the diverse mosaic of vegetation for wildlife.

Comment: The United States Forest Service plan for management of the western prairie fringed orchid is based primarily on theory and not on scientific fact. As Dr. Lee Manske, Range Land Researcher from North Dakota State University, Fargo, North Dakota, stated in 1995, "No scientific data exists at present that shows the most beneficial practices for the prairie fringed orchid." He further stated that, "Many questions need to be answered through research before the best management techniques are known." The six years that have passed since 1995 has not been a sufficient time period to adequately research and replicate findings with any validity especially given all the variables to be considered. What is especially troubling is that observations made during the 1970s and early 1980s by the late Dr. Ardell Bjugstad of the United States Forest Service appeared to point to chomping, stomping, and dumping along with moisture to be the most beneficial ingredients for healthy orchid populations. Dr. Bjugstad's observations have been borne out on Mr. Larry Woodbury's private pasture adjacent to the SNG. He grazed it severely with a large number of animals for a very short period before moving them. The concentration and number of orchids on that piece of property exceeds that of any other property in the area. Those are very obvious positive observable results, however, are rejected. Why??

Although the impacts of grazing on orchids are complex, data show grazed orchids have reduced seed set rates, and consequently reduced fecundity, in comparison to ungrazed orchids. Based on these data, a portion of orchid habitat will be deferred from grazing from June 1-Sept 15. The Forest Service reviewed Dr. Manske's statements and used Dr. Bjugstad's research results in this document (see Land and Resource Management Plan for the Dakota Prairie Grasslands, Appendix N). The Forest Service is unaware of any grazing research conducted on the orchid on Mr. Larry Woodbury's land.

Comment: You have ignored the scientific studies of one of our range scientists at NDSU and have made your decisions based on theory and not fact. You are restricting grazing on western fringed prairie orchid habitat based on erroneous theory. You also restrict spraying on orchid sites. Orchids are monocotyledonous, & sprays used to control weeds like leafy spurge affect only dicotyledonous plants.

Although the impacts of grazing on orchids are complex, data show grazed orchids have reduced seed set rates, and consequently reduced fecundity, in comparison to ungrazed orchids. Spraying is not prohibited on orchid areas. Herbicides applied in the fall when the orchids are not actively growing is considered the best alternative for leafy spurge control in orchid habitat. Additional

information is found in the Land and Resource Management Plan, Appendix N.

Comment: Several studies and reports have indicated that cattle grazing in the grasslands where the western prairie fringed orchid grows is beneficial to the orchids existence. Moisture is the main ingredient determining how the orchid will grow on any given year. In my opinion, the survival of the orchid would be better helped by controlling the "woody brush" that is invading the orchid habitat.

The years from 1999 through 2001 have been years of very abundant moisture which is conducive to orchid growth. The Forest Service could not even get an accurate count of the numbers. There are some new areas of orchids that have shown up and are not being counted.

The Forest Service has consulted all scientific literature available in determining orchid management. Although the impacts of grazing on orchids are complex, data show grazed orchids have reduced seed set rates, and consequently reduced fecundity, in comparison to ungrazed orchids. Grazing will continue in orchid areas. The Forest Service agrees that moisture is important in determining western prairie fringed orchid population numbers and that woody brush should be controlled. Therefore, orchid habitat is a priority for prescribed burns. Orchid surveys are not conducted in each allotment each year. See Appendix N in the Land and Resource Management Plan for the Dakota Prairie Grasslands.

Comment: The proposed guidelines for management of the prairie fringed orchid seem to be a tool to advance an anti-grazing agenda. The actual history of the orchid with respect to the grazing management practices and construction projects in its midst suggest the population is not in danger.

The biggest reasons for the cuts are to increase prairie chicken numbers and preserve the western prairie fringed orchid. Both of these have co-existed with present cattle numbers for about half a century and are surviving very well. No scientific data shows that cutting cattle will enhance the orchid.

The orchid is listed as a threatened species under the Endangered Species Act and is managed to meet recovery plan objectives. The Forest Service has consulted all scientific literature available in determining orchid management. Although the impacts of grazing on orchids are complex, data show grazed orchids have reduced seed set rates, and consequently reduced fecundity, in comparison to ungrazed orchids. Therefore, some orchid habitat will be deferred from grazing during a portion of the growing season. Greater prairie chicken populations have declined. See Appendix N in the Land and Resource Management Plan (Dakota Prairie Grasslands) for more information on orchids and the FEIS Appendix H for more information on greater prairie chickens.

Comment: No clear plan is in place on what the one third area is or how it will be managed from 6-1 to 9-15 of each year.

Decisions regarding which areas will be deferred from grazing for orchid management will be made at the site-specific level.

Comment: The Forest Service did not provide maps showing the location of historical acres within the core or satellite allotments. To estimate the impact of implementing the S & G regarding orchids, I assume no grazing on 1/3 of historical occupied acreage from 6/1-9/15, and stocking rates in other orchid habitats within core allotments could not be increased to offset the acres rested. I also assumed permittees would fence historical orchid acres separately from other portions of pastures. (This assumption minimizes the potential acreage affected by the S & G). Therefore, livestock grazing will be restricted on 2,218 acres (6,722 acres x 33% = 2,218). At 1.1 ac/AUM, 2,016 AUMs would be unavailable to the Association. This is a 3% reduction from 57,650 AUMs.

Maps of historic orchid areas are available in Forest Service administrative files. Decisions regarding which areas will be deferred from grazing for orchid management have not been made in this plan; they will be made at the site-specific level.

Comment: A casual look at the list of "rare" plant communities shown in Table 3-117 will indicate that almost all of the species mentioned as dominants in these communities are in fact very common species. The 2 or 3 species listed as dominants may not commonly occur together, at least not as co-dominants. But it may be that they happen to occur together in relative abundance in limited cases due to unusual environmental conditions or chance. Does that have any real environmental significance or any other significance that would justify an effort to "preserve" such communities?

Plant community status is assessed and ranked on a state, national, and global basis by state Heritage Programs and NatureServe. Plant communities considered rare are identified through this process. The Forest Service is required to maintain diverse plant and animal communities (CFR 219.27). Therefore, it is appropriate to consider management needs of rare plant communities. For more information on rare plant communities and their ecological significance, see the FEIS and literature sources cited, Chapter 3, p. 3-195.

Comment: It is interesting to note that only 1 plant species in the area have been listed as endangered, the blowout penstemon, and 1 as endangered, the western prairie fringed orchid.

The western prairie fringed orchid is listed as a threatened species under the Endangered Species Act.

Comment: Dr. Lee Manske prepared a comprehensive literature review and "Evaluation of Proposed Management for the Western Prairie Fringed Orchid." None of this information was included in the FEIS revision and Dr. Manske's paper, like a great many other pertinent publications, is not cited in the FEIS.

Dr. Manske has indeed written a paper on the western prairie fringed orchid, and the Forest Service reviewed it. No data were presented in the document; therefore, it is not cited in the FEIS or Land and Resource Management Plan.

Comment: The sage grouse population in the western part of the state has declined in recent years. We believe that has happened because of the overgrazing that has taken place in their habitat. The sagebrush just is not there to provide the habitat they need to survive. Finally, the pronghorn antelope population in western North Dakota has declined in recent years. The sage grouse and pronghorn antelope rely on sagebrush for a large part of their survival. Wild sage is just not there in abundance and cattle have trampled the sagebrush to the ground.

Sage grouse were selected as a MIS in sagebrush habitats. Several management standards and guidelines address specific management for sage grouse and do address the need to manage for late seral sagebrush habitat. For further discussion, see the Land and Resource Management Plan, Chapter 1, p. 1-14.

Comment: Many of the small draws had choke cherry trees which provided a mast crop for game and non-game alike. I expect these cherries were very important to neotropical and other birds migrating through the area. Sometimes the small things when taken cumulatively are crucial to wildlife species and to the health of the habitat in general.

The Forest Service has developed a guideline to maintain and improve woody draw areas. For further discussion, see the Land and Resource Management Plan, Chapter 1, p. 1-19.

Comment: Management Indicator Species Habitat descriptions: The habitat description in the Dakota Prairie Grasslands Final LRMP for the sharp-tailed grouse appears to be lacking pertinent information and key concepts now found in other Final LRMPs. For example the habitat description in the Nebraska Final LRMP for sharp-tailed grouse contains statements such as: "Hens on northern mixed grass prairie tend to select areas with the tallest and densest cover available for their nests in spring", " Quality nesting cover on mixed grasslands occurs where mid and/or tall grass species are dominant, and ungrazed or lightly grazed cover has accumulated over a few years", and " to provide quality nesting and brooding habitats, herbaceous vegetation and litter should be allowed to accumulate over a period of years." Parallel statements are completely lacking in the DPG Final LRMP.

This information was considered in the Forest Service analysis. Similar statements to those quoted above can be found in the extensive scientific literature that was reviewed and placed in the administrative record. Similar comments are also made in the Dakota Prairie Grassland Land and Resource Management Plan. Land and Resource Management Plan page H-2 states "...hens frequently select clumps of herbaceous cover taller than the surrounding vegetation for their nest sites, emphasizing the importance of maintaining diverse grassland structure." Land and Resource Management Plan page H-3 also states (in regards to Greater Prairie Chicken), "To provide quality nesting and brooding habitats, herbaceous vegetation and litter should be allowed to accumulate over a period of years." The Forest Service has also incorporated these facts into management direction. For example, the Land and Resource Management Plan, p. I-13, states "Use the following criteria at the project level to help determine where to manage for high structure habitat ...: Dominance of mid to tallgrass species." Similar statements are made in Land and Resource Management Plan p. 2-15, 2-22, 2-31.

Comment: Provisions relating to the Sheyenne National Grasslands In order to supply high quality nesting to upland birds such as the prairie chicken, the LRMP must make it clear that upland areas will supply substantial amounts of nesting cover. It is not sufficient to simply identify a high grassland structure objective at the grassland level.

The Forest Service recognizes that greater prairie chickens typically do not build their nests in lowland areas. The Land and Resource Management Plan, p. H-3, states, "The midland sites provide the tallest and densest cover that is not subject to regular flooding. The amount of use of upland sites and other habitat types for nesting that might occur if quality nesting cover was available on those sites is unknown." The Forest Service has incorporated the importance of useable nesting cover into management direction. For example, the Land and Resource Management Plan, p. 2-31, states, "Manage for high vegetative structure in areas where it would enhance greater prairie chicken nesting habitat quality. Guideline."

Comment: No studies or monitoring data are presented that establish a definite link between the mix of structural classes projected for the various alternatives, and the expected population levels of prairie chickens. Without such information, the statement that: "Habitat suitability for greater prairie chickens are expected to be enhanced over that occurring under Alternative 1 due to lighter livestock grazing intensities and more high structure grasslands under Alternatives 3, 4 and 5" is questionable.

Where scientific data is lacking, the Forest Service uses professional judgment to predict the effects of proposed activities. Since prairie chickens prefer to nest in higher structure grassland, it was reasonable to assume that lighter grazing intensities would benefit this species. This assumption is also consistent with the existing literature and management recommendations from prairie chicken researchers.

As shown on FEIS Tables 2-8, 2-10, and 2-12 (see FEIS pp. 2-44, 2-49, and 2-53 respectively) alternatives would result in differing mixes of vegetative structure. Alternatives 3-5 would result in greater amounts of high structure than would Alternatives 1 and 2. Increasing the extent and interspersed of high structure would benefit greater prairie chickens by providing more nesting cover, which is believed to be an important limiting factor for the species on the National Grasslands (see FEIS pp. H-147 to H-157 and the administrative record for more information).

Comment: With respect to the standards for upland range habitat, the measure of sharp-tailed grouse habitat is not designed to measure or to evaluate rangeland health or ecosystem process.

Rangeland health is a broadly defined term in the Forest Service analysis. There is no one measure of rangeland health. The discussion of sharp-tailed grouse is not intended to be a surrogate for either rangeland health, as a whole, or ecosystem processes.

Comment: Guideline 1-14-17 - Emphasize quality nesting and brooding habitat, consistent with Geographic Area objectives within one mile of active greater prairie chicken and sharp-tailed grouse display grounds and three miles of active sage grouse display grounds. Similar to Guideline 1-14-22 regarding upland gamebird habitat, GSI participants have reservations about the potential impacts of the implementation of this guideline because of the extensive area affected. Furthermore, participants are concerned about potential linkages between this guideline and 1-14-22, and how visual obstruction readings (VOR) might be used in the implementation of this guideline. Forest Service personnel explained that the one and three mile radius designations are to be interpreted within the overall plan objective of maintaining 20-30 percent high structure in the area. This guideline does not mandate that the entire area be maintained as high structure, but that some high structure be available within these distances (e.g. grouse hens nest within one mile of where they mate). Accordingly, this guideline and 1-14-22 are linked according to Forest Service personnel, but not to create a blanket restriction on grazing. Neither guideline is to be understood outside the context of the larger 20-30 percent high structure objective, which itself will be flexible.

The commentor's observation is correct. The overall objective for high structure vegetation is at the geographic area scale.

Comment: The prairie chicken is not native to this region. Under the present conditions, it does not like it here, yet you insist on using it as an "indicator" species. Even though the prairie chicken is non-native it is forced to remain here while in the far Western states one of the arguments used in an attempt remove cattle is that they are non-native! When this region was strictly grasslands, the prairie chicken was not here. It wasn't until the type of agriculture practiced in the 1920s and 1930s with its essential activities that the prairie chicken found an environment to its liking. So much so that their numbers were incredulous. As agricultural practices changed and some of the land reverted to native grassland, the prairie chicken disappeared once more.

The greater prairie chicken expanded into North Dakota in the 1890s. It was not introduced. See FEIS, Appendix H, p. H-148 for more details.

Comment: The history of the grasslands in this region tells us that when it was strictly grassland wildlife was not abundant. So you want to return it to its original grassland state so there will be abundant wildlife???

The desired condition for the Sheyenne Geographic Area is given in the Land and Resource Management Plan, Chapter 2, p. 2-24. It does not include returning the grasslands to their original state.

Comment: Over 90% of the grasslands on the SNG are potential habitat for sharp-tailed grouse. "Current habitat suitability" (the percentage of the potential habitat that is estimated to be quality habitat) averages 5%. Seventy percent (49,000 acres) of the SNG is also described as potential habitat for prairie chicken. (However, LRMP page H-148, indicates over 50,000 acres of greater prairie chicken habitat on the SNG, which exceeds the potential acreage). In my experiment, this is a bit unusual in the biological world. Furthermore, habitat requirements of the sharp-tailed grouse and prairie chicken raise the issue of overlapping potential habitats. Can 91% of the SNG be rated as potential habitat for sharp-tailed grouse, while 70% of the SNG is rated as potential habitat for prairie chickens? The former and latter are used in the planning documents as MIS for the mixed and tall grass prairie, respectively. These kinds of fallacies in the FEIS indicate the planning documents are not based on science. Consequently, the LRMP can not be successfully implemented. Implementation of the LRMP would impose dire unintended consequences on natural resource communities, permittees, and other users.

The question is, can an area of the Sheyenne National Grassland be classified as both potential sharp-tailed grouse and greater prairie chicken habitat? The answer is yes, it can. These species have broadly overlapping habitat requirements. They occur in the same habitats in several areas throughout the sympatric portions of their range. In order to clarify which species should be emphasized where, the Forest Service proposed that greater prairie chicken be emphasized in the southern and western portions of the geographic area, while sharp-tailed grouse is emphasized in the northern and eastern portions (Land and Resource Management Plan, Chapter 2, p. 2-31).

Comment: There will be 22,400 acres (64,000 acres x 35% = 22,400) of nesting habitat for sharp-tailed grouse and 17,150 acres (49,000 acres x 35%) of nesting habitat for prairie chickens, for a total of 39,550 acres. Suitable nesting implies VOR greater than 6 inches. I assumed the 24,325 acres managed for high structure to meet structural standards directly overlap with 24,325 acres of nesting habitat. Therefore, an additional 15,225 acres (39,550 acres of nesting habitat - 24,325 acres of high structure = 15,225 acres) will be managed for high structure. At moderate structure the acreage would provide 13,841 AUMs (15,225 acres/1.1 ac/AUM = 13,841). Management for high structure reduces AUMs to 6,228. The lost of 7,613 AUMs (13,841 - 6,228 = 7,613) is a 13% reduction from 57,650 AUMs.

The Land and Resource Management Plan (Chapter 1, p. 1-14) states "Emphasize quality nesting and brooding habitat, consistent with Geographic Area objectives, ..." This guideline is intended to clarify that the area managed for high structure should not exceed the overall Geographic Area objective. For the Sheyenne Geographic Area, this objective is 30-40% of the herbaceous community types (see Land and Resource Management Plan, Chapter 2, pp. 2-29 and 2-30). For information on how projected livestock reductions were calculated in the analysis, see FEIS, Chapter 3, pp. 3-88 to 3-99 and the administrative record.

Comment: For example, the EIS states that both sharp-tailed grouse and prairie chicken population trends are upward since 1988 on the FPNG. What is not stated is that populations of both species crashed in 1988-89 due to drought and have recovered since then in a period of generally above-average rainfall. They could have also pointed out that the population increases since the drought are not the same for sharp-tailed grouse and prairie chickens even though the Habitat Suitability Index for both species is the same. That would seem to question whether the HSI should be the same for both, or whether the HSI really is predictive of populations of either.

The Forest Service recognizes that populations of sharp-tailed grouse and greater prairie chicken are sensitive to weather patterns. This fact has been addressed repeatedly in the Land and Resource Management Plan (see Goal 1.b-#7, p. 1-3, Standard F-#1, p. 1-13). By providing greater habitat diversity, wildlife populations can be buffered, to some degree, from typical environmental fluctuations. Detailed information on grouse population trends at Fort Pierre National Grassland is available in the administrative record.

Comment: Almost none of the references are given in the Literature Cited. Apparently, little of value was obtained from these references since there is no indication of the predicted effects of the alternatives on these species.

As noted in the commentor's letter, the FEIS does contain discussion on general wildlife groups such as deer. Not all wildlife groups were discussed, as not all wildlife groups were identified as issues for detailed study during public scoping and alternative development and analysis. Extensive detail is available on sensitive species. See FEIS Appendix H for details.

Comment: The State Land Department is still concerned that if the current structure of the LMNG is not known (page 3-188), then the current nesting habitat suitability for sharp-tailed grouse also cannot be known even though it is listed.

VOR transect readings provide the best available data on structure for the Little Missouri National Grassland (Table 3-103, p. 3-188). These data were incorporated into a habitat suitability model (Prose 1987) to determine current habitat suitability for sharp-tailed grouse.

Comment: The selected management indicator species ("MIS") of prairie chickens and sharp-tailed grouse and prairie dogs are not shown to have habitat requirements which are representative of ecosystem processes and actually have contradictory habitat requirements.

Management indicator species were selected for different major biological communities, so it is not surprising that they have different habitat requirements. For more detail, see FEIS, Chapter 3, pp. 3-258 to 3-265, and Appendix B, pp. B-34 to B-35. FEIS Chapter 3, p. 3-458 discusses the diverse mosaic of vegetation for wildlife.

Comment: The Management Indicator Species (MIS) concept is invalid as used in the documents. The assumption that populations of MIS species are indicative of the effectiveness of management in reaching goals for other species and/or ecosystem properties is not based on any published scientific information or monitoring data establishing these links. Further, the Forest Service says they do not have valid information on the trends of MIS under the current plan, and there is no indication that they intend to obtain such data under the proposed Plans. Without data on population trends of MIS, no valid conclusions can be drawn on the effects of implementation of the plan. The Fiscal Year 1998 Monitoring and Evaluation Report for the Nebraska National Forest and Associated Units states (p. 21) that "Data for population trends of management indicator species are currently being compiled and will be available in the EIS for the management plan revision." (emphasis added) No such data appeared in the FEIS or the Management Plan. Why was this information not summarized and presented in the FEIS, as required by federal law? Failure to do this virtually requires that these documents be withdrawn.

Population and trend data for MIS are presented in FEIS, Chapter 3, pp. 3-261 through 3-263. The Forest Service is required to select, evaluate, and monitor MIS and their habitat (36 CFR 219.19 and 219.20). See FEIS, Appendix B, p. B-34.

Comment: Populations of MIS and/or suitability of habitat for MIS do not indicate the general "health" of the ecosystem, only conditions favorable or unfavorable for that species or others with similar requirements.

The western prairie fringed orchid is obviously an ill-conceived choice as a MIS on the SNG. Its population does not accurately reflect effects of land management or resource use activities. Furthermore, the fringed orchid apparently shows no response to livestock grazing (LRMP, page N-6). "Monitoring data collected between 1987 and 1994 on 16 transects that encompassed five management regimes on the SNG have not documented consistent, significant differences in orchid densities among the 5 sites (Sieg and King 1995). Based on these monitoring studies and conclusions, how can the Forest Service justify resting orchid areas from livestock grazing during the June 1-Sept. 15 period?"

MIS populations are not intended to be an indicator of general ecosystem "health." Rather, they are intended to reflect the impact of Forest Service management on specific variables of major biological communities. For more detail, see FEIS, Chapter 3, pp. 3-258 to 3-265, and Appendix B, pp. B-34 to B-35.

For discussion of how and why MIS are selected, see FEIS, Chapter 3, p. 3-258. Research and monitoring have shown that land management activities influence orchids. See Land and Resource Management Plan for the Dakota Prairie Grasslands, Appendix N, and literature cited.

Comment: It would seem that, to be a useful concept, the MIS concept would have to be tied to specific areas of land managed under a specific set of objectives. Objectives set at the entire National Grassland level simply do not make sense. Whether a specific change is good or bad depends on which MIS is considered. This should be a local decision made by local managers and permittees, not one made in the FEIS.

MIS objectives have been set at the geographic level, not grassland-wide level (see Land and Resource Management Plan for the Dakota Prairie Grasslands pp. 2-7, 2-14, 2-21/2-22, and 2-30 for details). In some cases, site-specific goals and objectives for MIS may be considered at the project level.

Comment: Fire Suppression, Fuels Treatments, Prescribed Fire S&Gs: The agency should develop more direction concerning the restoration of fire as a natural disturbance process. Natural fires should be allowed to proceed where there is no threat to public safety, structures, protected species, or other significant resources. In addition, in Guideline #2 of the TBNG Plan (1-22), Guideline #3 of the NNF Plan (1-20), and Guideline #3 of the DPG Plan (1-18), the application of fire retardant chemicals over riparian areas, wetlands, and open water should be prohibited, not just discouraged.

Reference Pg 1-3 of the Land and Resource Management Plan, Goal 1c, Objective 1. The Forest Service reviewed the guideline and it is worded appropriately. The ability to use retardant may be necessary in certain wildland fire situations.

Comment: Federal agencies have taken an extreme position and are not "leaving room" to allow prescribed natural fire to occur in appropriate management units. If natural fire is to return to the ecosystem, agency prescribed fire alone won't do it. Thus the language in Guideline #1 must be changed to allow more flexibility for fire management over the next 15 years. We suggest this guideline might read: "Control all wildland fires (natural-and-human-caused) consistent with geographic and management area direction. Aggressively suppress wildland fire when life and property are at risk, or when fire is inconsistent with management objectives. Conversely, actively control wildland fire spread and behavior when fire is constant or achieves management or geographic area objectives."

Reference FEIS, Chapter 3, 3-422 for the discussion of control of fire. Appropriate management response direction will be developed for each management area.

Comment: Your solution of perimeter management is not practical because we may not be able to control a fire if it is allowed to grow to a large size before we can suppress it. This would present additional risk of catastrophic wildfire spreading to other parts of our district.

Perimeter management is a strategy to control fires by using natural fire barriers. Advantages include improved firefighter safety and less damage from creating fire lines. It is just one of the firefighting strategies available to the Forest Service. Other strategies, such as direct attack, will be used when appropriate to the situation. The Forest Service commitment to fire control is shown in the management direction on Land and Resource Management Plan, Chapter 1, p. 1-18 #1

("...aggressive initial attack.").

Comment: The NGPPR FEIS requires increased vegetation for wildlife habitat, which increases fuel loading on the National Grasslands. The FEIS does not address the related impacts of road obliteration and restrictions on cross country vehicle use that might interfere with fire suppression and control.

The Land and Resource Management Plan standards and guidelines for wilderness and nonmotorized use areas allow motorized use for fire suppression purposes. This would include engines, water tenders, and support vehicles. Use of heavy equipment for fire line construction must be approved by the Grassland Supervisor or District Ranger (Land and Resource Management Plan, Chapter 3, pp. 3-4, 3-6).

Comment: Fire- there is no creditable research done on the short grass prairie to support claims of burning.

References on the effects of fire on short grass prairie are listed in the bibliography (Higgins, et al. 1989; Uresk, et al. 1996; Wright, et al. 1980).

Comment: Page3-424 of Chapter 3 of the FEIS states there will be a risk of larger fires with this plan due to a greater fuel load. These fires would not only be large but extremely hot. Lessons should be learned from the fires of recent years, some of which were started as "controlled burns," where the buildup of fuel on range and timber land was a major contributor to the uncontrollable wildfires that damaged both federal and private property. These fires could cause much damage to the grasslands and adjacent ranches which in turn would limit grazing quite possibly for a very long time.

Prescribed Burning Targets - The draft final Plan establishes a 2,000 acre/year target for prescribed burning in the LMNG. GSI participants propose that non-prescribed fires - naturally occurring or otherwise - be considered as counting toward the yearly target. GSI participants request that the Forest Service consider whether grasslands fires that occur apart from prescribed burning activities can be included toward achievement of the prescribed burning target for the LMNG and, if not, that the Forest Service explain why they would not be included.

Acres burned by prescribed fire and wildfire will be reported in the Annual Monitoring Report. Both types of acres can be credited toward achieving the objective for burn acres.

The Forest Service agrees that wildfire severity may increase with increased vegetative structure. In response to this, the Forest Service is increasing Forest Service and Volunteer Fire Department capabilities. Use of prescribed fire will aid in reducing excessive fuel buildup. In general, management aimed at increasing vegetative structure will be implemented through new allotment management plans. Site-specific analysis and public involvement will be conducted on these plans. Increased wildfire risk can be addressed in detail during that process. Additional information is available in the administrative record.

Comment: Tables show the acreage in each area to be burned (Table 3-144, p. 3-291) or rested (Table 3-145, p. 3-292, 293). The relationship of these treatments to ecological processes or "rangeland health" or management objectives is clearly lacking.

Fire was an important ecological process affecting the evolution and development of these grasslands. Fire served to reduce vegetative litter, enhance the biological diversity of vegetation and specific organisms, and reduce encroachment of woody plants. The historic reoccurrence of fire in the tall grass prairie is estimated to be 3-5 years and 15-20 years in the mixed-grass prairie. Historically fires would have affected far greater acreages than is being proposed in the Land and Resource Management Plan, but safe application of prescribed fire is limited by season, weather conditions, fuel conditions, and firefighter and public safety.

Comment: The plan calls for 37% of the Little Missouri Grassland to be in high structure grassland. This is defined as showing a Robel Pole reading in excess of 3.5 inches. That is equivalent to the vegetation found in a CRP field. The Forest Service is proposing to have more than 400,000 acres of the grassland in the condition.

The Land and Resource Management Plan for the Dakota Prairie Grasslands defines two geographic areas (GAs) for the Little Missouri National Grasslands: the Rolling Prairie GA (pp. 2-17 to 2-23) and Badlands GA (pp. 2-9 to 2-16). The objective for high structure in these areas is 20-30% (pp. 2-21 and 2-13). It is possible to obtain visual obstruction readings above 3.5 inches on the Little Missouri National Grassland.

Comment: Fire and Fuels Management. Predicting the effects of wildfire on a particular species or group of animals is admittedly difficult. However, a general comparison of those potential impacts among the alternatives is warranted in the FEIS.

In FEIS, Chapter 3, pp. 3-424 to 3-426 is a discussion on how range management/livestock grazing, recreation management, timber management and travel management/motorized use would affect fire and fuels management. For a discussion on how fire and fuel management would affect wildlife, see FEIS, Chapter 3, p. 3-277 and Appendix H.

Comment: We also have prairie dogs which are known carriers of Bubonic Plague, which can pose a serious health risk. The plan wants to increase dog colonies to 37,000 acres with no control till this is reached.

The full extent of the outbreak of sylvatic plague requires reconsideration of prairie dog management in light of research concerning the duration of plague in prairie dog towns and the risk of new outbreaks where towns still have remnants of the virus.

Compounding the continuous poisoning scheme, plague has reduced prairie dog numbers recently on portions of Thunder Basin National Grassland. Although the preferred alternative would reduce poisoning significantly the future threat of plague affecting these National Grasslands justifies an end to all anthropogenic threats such as poisoning. Prairie dog viability on these planning units is already a concern as a viability standard in light of plague has eluded researchers to date. Therefore we request that in order to comply with the viability standards of NFMA,

the Forest Service consider full poisoning restrictions under all alternatives.

The Land and Resource Management Plan for Dakota Prairie Grasslands does not propose increasing prairie dogs to 37,000 acres. Prairie dog fleas can transmit bubonic plague, as can fleas from many other mammalian species. Sylvatic plague has not been found in prairie dogs on the Dakota Prairie Grassland. Under the Land and Resource Management Plan, prairie dogs could be poisoned in response to public health risk (see Land and Resource Management Plan, Chapter 1, p. 1-18).

The biological determination for prairie dogs on the Thunder Basin National Grassland did not indicate a significant viability risk, with or without plague over the next 10 to 15 years (reference FEIS, Appendix H, p. H-99). In addition, restrictions on prairie dog poisoning have been significantly increased (reference Section F of the Land and Resource Management Plan).

Comment: The number of prairie dog colonies listed in Tables H-4 and H-5 are different for several of the grasslands. Also the statement after Table H-4 "These acreages presented above have undoubtedly increased on most of the planning units since these surveys were conducted" needs to be revised in light of the recent outbreak of sylvatic plague.

The numbers presented in Table H-5 (Appendix H, p. H-95) are correct. The incorrect numbers in Table H-4 (Appendix H, p. H-95) have been deleted in the Errata. The effects of recent plague outbreak on the Thunder Basin National Grassland are discussed in the supplemental information report.⁶

Comment: Chapter 1, page 1-16 Standard of managing for high structure to limit prairie dog expansion is a totally unrealistic standard. Observations in Theodore Roosevelt National Park will quickly reveal that high structure plant communities have not curtailed the expansion of prairie dog towns. They will destroy buckbrush, skunkbrush, sumac, plum, and chokecherry. They will convert high structure western wheatgrass communities to low structure, early seral stage plant communities.

One of the planning units referred to at the bottom of FEIS p. 3-164 is the Buffalo Gap National Grassland. Use of high structure areas to limit or redirect prairie dog expansion has been a successful technique there. See also FEIS, Chapter 3, p. 3-166 and Appendix H, pp. H-93 to H-100.

Comment: Table 3-85 (p. 3-177): For shortgrass prairie, what does optimize prairie dog colonies mean? How do you optimize a prairie dog colony? For Badland, why reduce the number of water developments for livestock? This makes no sense and there is no reason given.

As explained on FEIS, Chapter 3, pp. 3-176 to 3-177, Table 3-85 summarizes the conservation recommendations from the Northern Great Plains Terrestrial Assessment. In this context, "optimize" means to manage for more prairie dogs.

The Land and Resource Management Plan for the Dakota Prairie Grasslands does not reduce the number of water developments for livestock in the Badlands. It allows the use of structural

⁶ Supplemental Information Report to the Proposed Northern Great Plain Plans Revision Final Environmental Impact Statement and 2001 Revision Thunder Basin National Grassland Plan Disclosing Changes to Black-tailed Prairie Dog Habitat Within Proposed Management Area 3.63 of the Thunder Basin National Grassland Resulting From 2001 Sylvatic Plague Outbreak.

Addendum

improvements, including water developments, in meeting plan goals and objectives. The specific guideline for Badlands is found on p. 2-15 of the Land and Resource Management Plan for the Dakota Prairie Grasslands, Chapter 2. That guideline states, in part, "If nonstructural management methods are not successful, then new structural developments may be used to achieve desired conditions."

Comment: As prairie dog acres increase, less forage will be available for livestock. The loss of forage for livestock on 4,540 acres would require a proportional adjustment in livestock grazing (4,540 acres/2.8 ac/AUM = 1,621 AUMs). This is a 1% reduction from 315,903 AUMs.

Prairie dog/livestock forage competition is addressed on FEIS, Chapter 3, pp. 3-164 to 3-167.

Comment: Alternative 3a, presented for the Fall River Nebraska District as the result of "collaborative" efforts involving a local, Fall River working group. This group did not propose decreasing the acres of prairie dogs poisoned, as is presented in DEIS Table 2-7 but rather recommended the prairie dog town treatment would continue as under the current management plan. As presented, Alternative #3a also seriously misrepresents the group's recommendations, one can only wonder about the sincerity of the Forest Service's wish that local publics provide input into the planning effort.

The Forest Service considered the information you presented on the submitted management area direction map. Some of your responses to revision topics were incorporated into other alternatives.

Comment: Black-tailed Prairie Dog (p. H-93 to H-100): The management direction for greatly increasing areas with "high structure" is in direct opposition to the direction to increase acreage covered by prairie dog towns (which have "low structure".) The very recent drastic decline in prairie dog populations in some area due to plague were known by the Forest Service before this document was released. Yet, there is no mention of this and how it affects the black-tailed prairie dog plans and the plans for introduction of black-footed ferrets.

The commentor is apparently referring to a plague outbreak in the Cheyenne River area of the Thunder Basin National Grassland. The FEIS is dated May 2001. The Wyoming State Veterinary Lab confirmed plague presence at this site on June 9, 2001. The Forest Service prepared a supplemental information report⁷ addressing this issue. The effects of plague on prairie dogs and the black-footed ferret recovery effort are discussed in that document. Regarding your comments on high structure and prairie dog towns, areas designated for high structure will not be in prairie dog colony areas.

⁷ Supplemental Information Report to the Proposed Northern Great Plain Plans Revision Final Environmental Impact Statement and 2001 Revision Thunder Basin National Grassland Plan Disclosing Changes to Black-tailed Prairie Dog Habitat Within Proposed Management Area 3.63 of the Thunder Basin National Grassland Resulting From 2001 Sylvatic Plague Outbreak.

Comment: Ecological havoc is being wrought throughout the hardwood draws of western North Dakota on the American elm trees by Dutch elm disease, yet not one word was written about this mega-problem in your revised Grasslands Plan, despite the fact that the situation has become critical on the National Grasslands. On several occasions, I have brought this situation to the attention of District staff, obviously to no avail; will you please address this issue at once?

The Forest Service agrees that the loss of the American elm is a significant ecological concern in hardwood draws in western North Dakota. Solutions to this problem are complex and are beyond the scope of this plan.

Comment: Woody Draws (p. 3-284 to 3-285): The Forest Service fails to correctly interpret woody draw data and is deviously promoting the misconception that "no regeneration has occurred in degraded ash draws for 35 years" (page 3-284). The Forest Service writes, "it appears, based on tree size and core sampling, no regeneration has occurred in degraded ash draws for 35 years" (page 3-284). However, Jensen's report (Fig. 5) clearly shows 25% of the green ash trees in woody draws classified as low seral stage are in the 1-2 inch size distribution (measured at dbh). The presence of small trees indicates regeneration is occurring and many individuals have successfully established during the last few years. I believe the green ash data are misinterpreted. Furthermore, Jensen's report indicates there is green ash regeneration in the woody draws (regardless of seral stage).

The Forest Service also states, "the primary cause of the degraded conditions of the ash draws sampled appears to be mechanical damage and soil compaction from livestock" (page 3-285). However, the preliminary report by Jensen indicates that "visual inspection" indicates soil compaction and mechanical damage are the primary factor.

Figures 2 through 5 in this report show the varying size distribution of live ash trees in woody draws classified as being in high seral stage (Figure 2), high-intermediate seral stage (Figure 3), low-intermediate seral stage (Figure 4), and low seral stage (Figure 5). Jensen's report also says "These data would suggest that about half of the woody draws classified as Low-intermediate seral stage are not self-perpetuating and have been in that condition for about 35 years. The youngest trees within these woody draws will be dead in approximately 30 years."

The quote from Jensen's report is as reported in the FEIS. It states "Based on visual inspection of the sample plots and fence line contrasts, as well as notes made by Forest Service and Department personnel, the primary factor limiting tree growth and survival is mechanical damage and soil compaction resulting from livestock grazing."

Comment: Western North Dakota is not a (high structure) vegetation area. Why don't you have some forest service ranger, range specialists, agronomists, or someone who knows that, since the Cretaceous Age, this area is not a tall grass prairie ecosystem.

The Forest Service agrees that western North Dakota is not a tallgrass prairie ecosystem and has not stated otherwise. The Forest Service definition of high structure (VOR equal to or above 3.5 inches) in western North Dakota is different than our definition of high structure (VOR >6 inches) in southeastern North Dakota (which is referred to as a tallgrass prairie ecosystem). See Land and Resource Management Plan, Appendix H pp. H-1 to H-9 for more detail.

Comment: On page 2-20, big bluestem is not a species adapted to sandy soil sites. It is mentioned in the mid-seral stage, however is not mentioned in the late seral stage. Hairy grama is not adapted to clay sites as described in mid seral stage. This species is adapted to coarse textured sandy soils. I have never seen hairy grama in the Rolling Prairie GA or Badlands Geographic Area. The shallow soil site description is also inaccurate in mid seral and late seral stage. Little bluestem and prairie sandreed are higher successional species on shallow sites. Western wheatgrass is not a dominant species.

As explained on p. 2-19, the species lists referred to are based on NRCS Range Site descriptions and Rangeland Cover types of the United States. These are intended for descriptive purposes only. They were added to the final Land and Resource Management Plan in response to public comments on the draft Land and Resource Management Plan. These descriptions are not meant to be quantitative or definitive.

Comment: Appendix H, page H-2 - High structure readings of 3.5 inches over minimum patch sizes of 160 acres is unattainable. This is attainable only if there is a uniform range site of this size. This is not realistic. Utilization of the Robel pole was not designed for utilization for use in shortgrass or midgrass prairie plant communities. This statement is based on review of Forest Service employee Kimberly Vader's Master thesis that was recently completed at North Dakota State University. Soil productive capacity and plant density potential within the Badlands and Rolling Prairie Geographic Area is not compatible with this type of monitoring technique.

The Forest Service believes that VOR readings greater than 3.5 inches can be obtained on the Little Missouri National Grassland. For example, between 1996 and 2000, 3% of the 352 fall VOR transects on grazed areas of the Little Missouri National Grassland had transect means greater than 3.5 inches. The reference to 160 acres in the Land and Resource Management Plan on p. H-2 is in regards to the patch size that should be managed to provide nesting cover. This does not necessarily mean that only one range site can be involved. The Forest Service will be using VOR readings to estimate herbaceous vegetation structure (not biomass). This is consistent with current, widely used scientific methodologies.

Comment: There are no definite acres stated for protection regarding mature big bluestem stands as part of the protection for the Dakota skipper butterfly population. The areas protected for the Dakota skipper are to be multi-year, non-grazed areas.

Management direction for the Dakota skipper butterfly is located in Chapter 2, p. 2-31, of the Land and Resource Management Plan for the Dakota Prairie Grasslands. Additional information is located in FEIS Appendix H, pp. H-69 through H-73.

The commentor is correct in stating that no management area has been designated solely for Dakota skipper, nor is there any acre objective aimed at protecting big bluestem stands for the skipper. The greatest threat to Dakota skipper is the poor quality and low quantity of prairie left on the Sheyenne National Grassland and across the species' range as a whole. Much of the Sheyenne National Grassland will be designated Management Area 3.66 Ecosystem Restoration (Sheyenne Tall Grass Prairie). The desired condition, objectives, and standards and guidelines under this Management Area will benefit Dakota skipper. As noted in FEIS, Appendix H, p. H-72, this and supporting management direction (see p. H-72 for list) "may adversely impact individuals, but [is] not likely to result in a loss of viability on the planning area, nor cause a trend to federal listing or a loss of species viability rangewide."

Comment: Short grasses (blue grama and buffalo grass) and annual weeds dominate early seral stages on mixed grass. Fifty nine percent and 40% of the Medora unit were classified as primary and secondary range, respectively (FEIS, Table 3-30, page 3-84). By definition, secondary range is lightly used or unused by livestock. Since all of the early seral stage conditions must occur on primary range, 85% of the primary range is in early seral stage (50% of range in poor condition/59% primary range=85%

For purposes of the FEIS analysis, secondary range included slopes of 11% to 40% (See FEIS, Appendix B, pp. B-50 and B-51). This was done in part to facilitate modeling of prairie dog habitat. Secondary range on the Little Missouri National Grassland was due to slope and not water. Given the existence of water, slopes greater than 10% but less than 40% are used fairly extensively by domestic livestock. In that regard, much of what was identified as secondary range would have in fact seen heavier livestock use and a high potential for early seral conditions. Although livestock grazing is undoubtedly a major factor affecting seral expression, early seral conditions can result from factors other than livestock grazing, such as roads, oil and gas activities, and prairie dog colonies

Comment: "Desired vegetation structure" levels. These objectives only apply to areas accessible for livestock grazing, not "inaccessible" areas. Why? Is MIS habitat not important on those areas?

Desired vegetation structure levels do not just apply to areas accessible by livestock. These objectives apply to all herbaceous communities (see Land and Resource Management Plan, Chapter 2, pp. 2-7, 2-14, 2-22, 2-30).

Comment: Thunder Basin National Grassland (p. 3-184, 185): Table 3-96 (p. 3-185) for the Thunder Basin NG shows that shrubs (probably mostly sagebrush) occur on 31% of the land but will occupy 40% in the "Potential" mix of vegetation. This increase does not make sense from an ecological perspective. With a "historic" fire return interval, probably only 10-15% of the land would have been covered with middle-aged to old stands of sagebrush.

Table 3-96 (FEIS, Chapter 3, p. 3-184) shows the current acres occupied by sagebrush compared to the potential. This does not take into account historic fire intervals that are not human-caused. The potential composition utilized the NRCS technical guide which describes the potential vegetation composition dominance type given the biological site potential.

Comment: Increase of the green needlegrass/western wheatgrass type from 4% to 30% probably makes little or no sense. This magnitude of change in species composition is highly unlikely to occur.

The potential composition utilized the NRCS technical guide which describes the potential vegetation composition dominance type given the biological site potential.

Comment: No relationship has been established between most of the desired values or outputs and specific vegetation attributes. Rather there is an unsubstantiated assumption that "high" seral stages and "high" structure (low livestock utilization) will be best for all resource values and outputs except livestock grazing and prairie dogs.

The Forest Service did not assume that high seral stage and high structure would be best for all resource values other than grazing and prairie dogs. For example, FEIS p. 3-473 indicates that mountain plover, burrowing owl, ferruginous hawk, and McCown's longspur all benefit from low structure grassland. The potential benefits of diversifying vegetative structure to other taxa groups are also discussed (see FEIS p. 3-474 to 3-484). Additional detail on species associated with lower structure or late seral vegetation is given in FEIS Appendix H (for example, see discussions on Dakota buckwheat and smooth goosefoot). Other resource values, such as fossils, will be largely unaffected by various proposed mixes of vegetative structure and composition (though they may be impacted by associated livestock grazing; see FEIS p. 3-431 for details).

Comment: Table 3-119 (p. 3-228) shows the "desired mix of dominant vegetation types by alternative." This fails to consider that they differ in site potential and management objectives. Table 3-119 (p. 3-228) shows dominant vegetation types for early and mid/late seral stages. Lumping of the mid and late seral stages really makes this table meaningless, especially when most of the areas in the Table 3-120 show four seral stages, not just three.

The Forest Service recognizes that vegetative types vary by site potential (see FEIS, Chapter 3, pp. 3-204 through 3-228 for further descriptions of seral expression). Table 3-119 illustrates the seral objectives found in the DEIS as a comparison to Table 3-120 which illustrates the seral objective as it was changed for the FEIS.

Comment: H-54, 89 - If the "candidate status of swift fox was dropped in Jan. 2001," why are you still listing them?

The swift fox is still a sensitive species.

Comment: 3-459 - "Loss of late successional rangelands after range improvements" How much late successional rangelands do we really want or need, as these areas (relic areas) are often quite unproductive.

Desired seral stage objectives are defined in the geographic area direction of the Land and Resource Management Plan.

Comment: For the Buffalo Gap NG, the percentages of high seral and high structure do not correspond and the amount of high structure sagebrush desired is far in excess of recommended levels.

The high seral stage objectives for plant composition is the same as the high structure objective on pp. 2-35 and 2-36 of the Nebraska Land and Resource Management Plan. The plant composition within sagebrush canopy falls within the range of vegetative composition structure (Land and Resource Management Plan, Chapter 2, p. 2-39).

Comment: Utilizing Sage Grouse as an MIS is equally as problematic. While theories abound as to the reason for Sage Grouse declines in Wyoming, no firm scientific evidence exists as to causes. ... We would point out that the information presented on page 3-262 [FEIS] indicates that some of the resource uses are "thought" to have an impact. ... Given the level of uncertainty in sage grouse needs, the Agency should select a MIS to monitor that they at least understand well enough to know when a decline is caused by management or resource use.

Sage grouse were selected based on the criteria used as described in Appendix B of the FEIS and as stated in FEIS, Chapter 3, pp. 3-258 and 3-262.

Comment: 1-8: How can an ecosystem "develop new constituencies"? New constituencies may have adopted the prairie ecosystem.

You are correct. The Forest Service can't develop new constituencies but new constituencies have adopted the prairie ecosystem.

Comment: Data are presented in Table 3-120 pgs 3-230; what were the data in Table 3-101 used for? Another aspect of the data presented in these tables relates to the Forest Service statement that diversity of native plants and animals on National Grasslands and Forests is largely determined by the ability of the Forest Service and other cooperators (sic) to manage vegetation for a variety of successional and structural stages (p1-15). It appears that current management has already produced vegetation types more diverse than would be the case under natural conditions.

The information presented in Table 3-101 compares existing species composition on range or ecological site to the potential climax plant community for the same range or ecological site. The Land and Resource Management Plan, Chapter 2, establishes what percentage of the grasslands will be managed toward a climax community.

Comment: Documentation of the transition from wildlife habitat conditions to desired future conditions of vegetation is weak. Also weak is the explanation of how standards and guidelines will help achieve desired vegetation conditions.

Reference FEIS Appendix H which lists the conservation measures and mitigation for each of the species that ties unit-wide direction, geographic area direction and management area direction to desired future conditions and desired vegetative conditions.

Comment: The objectives for management of Special Plant and Wildlife Habitat (3.64) were only defined loosely in Chapter 3. Consequently, it was not clear which species of plants and animals were targeted by those designations or how the standards and guidelines listed in the Plans would enhance habitat for or protect certain plant and animal populations.

There is a wide variety of plant and animal species found in MA 3.64 units. Information on which species are found in which unit is available in the administrative record. The intent of this MA is to focus management on maintaining and enhancing plant and wildlife communities and species at risk. Conflicts that cannot be mitigated will be resolved in favor of plant and wildlife species or communities in this MA.

Comment: In the event the Forest Service fails to recognize Sheyenne's importance and does not designate this entire Geographic Area as MA 2.2., we offer the following comments: a) Page (2-30): #5 - How can the objective of conservation of rare plant communities be accomplished if only a guideline? We recommend this guideline be made a standard. This would provide consistency with FSM 2670 objectives.

The Forest Service did recognize the Sheyenne's importance in its management area allocation . It will be managed for ecosystem restoration (Land and Resource Management Plan, Chapter 2, p. 2-26). The Forest Service will be able to meet FSM 2670 objectives and conserve rare plant communities with the proposed guideline language. Any deviation from these guidelines must be analyzed during project-level analysis, and mitigation to conserve rare plant communities may be proposed at that time.

Comment: I have two specific criticisms of the management direction for Big Game Range (3.68) in the Thunder Basin Plan. On pg 3-20, the one standard listed under Wildlife refers to maintaining "big game habitat effectiveness at 85%." No explanation of or even reference to a procedure for quantifying habitat effectiveness for big game species was found in either the FEIS or the Plans. Standard #1 under Livestock Grazing (pg 3-20) refers to modifying forage allocations for livestock where big game forage and cover conditions are limiting. Defining limiting factors for a big game population requires quantitative data on the fecundity and survival of that population, and on many external factors (human disturbances, predators, forage, cover, etc) affecting those animals. Unless detailed studies are conducted, Forest Service managers will probably not be able to adequately determine if forage or cover are limiting big game populations. Therefore, that standard (#1) needs to be either eliminated or edited.

Standard #1 under Wildlife pg 3-20 states: Maintain big game habitat effectiveness

at 85%. The definition of this in the glossary didn't shed much light. What is effectiveness and especially how is it measured or monitored? For whatever monitoring method is used are the measurements repeatable and what kind of statistical reliability do you get?

Reference Appendix G, p. G-24 of the Land and Resource Management Plan for a definition of habitat effectiveness. It is also addressed on p. 4-21 in the Nebraska Land and Resource Management Plan and on p. 4-18 in the Thunder Basin Land and Resource Management Plan. The decision concerning forage allocation will be made at the site-specific allotment management plan level. Monitoring protocols will be described in the development of monitoring guides as referenced in Chapter 4, p. 4-7, of the Land and Resource Management Plan.

Comment: Environmental Consequences section of Chapter 3 in the FEIS (pgs 3-238 through 3-240) focused on big sagebrush communities; there was no analysis of how each alternative would affect the acreage or health of other shrubland communities. Furthermore, few of the standards and guidelines in the Dakota Plan specifically address management of upland shrub communities, other than big sagebrush. Guideline #8 on pg 1-13 of that plan gives guidance for management of woody thickets but it was not clear if that includes other shrublands such as snowberry or greasewood.

Sagebrush was the major upland shrub community on the planning units. Woody thickets is a broad term and includes various shrubland communities.

Comment: Given the importance of those shrublands to wildlife, additional consideration is warranted, including a breakdown of the acreage of each shrubland community, an analysis of the importance of those communities to different taxa of wildlife, standards and guidelines that will maintain healthy and diverse shrublands, and an analysis of how each alternative will affect the acreage and health of those communities.

In Chapter 1 and in the desired conditions described in Chapter 2, the Land and Resource Management Plan provides broad direction for native shrub communities.

Comment: You propose to prohibit training of hunting dogs within 1.0 mile of active display grounds from March 1 to June 15 to reduce disturbance to breeding and nesting sharp tailed grouse. This should be reworded to training of bird hunting dogs. State or federal agencies may request predator damage management to protect sharp tailed or sage grouse and decoy dogs could play a vital role in those efforts. Therefore, if requested, WS may deem the use of decoy dogs effective to protect these game bird species or other species of special concern.

The word "bird" has been added in the Errata.

Comment: Standard No 50 (p. 1-18) states that pastures with 5% cover of sagebrush will be managed for sage grouse habitat. It takes a lot more than 5% cover to provide grouse, except for brood habitat. This needs to be re-written to specify that such low sagebrush cover is only valuable for brood habitat. (See Laycock Reports.)

With the exception of possible brood habitat management, the Forest Service will increase to 10% cover. This has been done in the Errata.

Comment: The percentages of high structure sagebrush summarized above are far in excess of the percentages in recommended in a rough draft of the Wyoming Sage Grouse Conservation Plan initiated by the Wyoming Game and Fish Department with a broad membership (the final plan is not out).

The Wyoming Sage Grouse Conservation Plan has not been finalized. The standards and guidelines in the Land and Resource Management Plan can always be reviewed when additional information becomes available.

Comment: Also, Table 3-122 p 3-239 in the FEIS has a table of Vegetation Structure Objectives for Sagebrush Understories of the TBNG. While the averages in the table generally are within the ranges shown for each Geographic Area, what is the relationship between the figures in Table 3-122 and the figures for each area? They do not seem to have much relationship to each other.

FEIS Table 3-122 provides directions for structure on sagebrush understories. The structure objectives identified for each geographic area provides direction specific to that geographic area.

Comment: The descriptions of the grassland communities for each Geographic Area seem to ignore site differences. These discussions badly mix up range sites with different potential and seral stage. The statement "management changes may be necessary to move some existing seral conditions toward a higher seral condition to meet structure objectives" p 2-17 will not be true of a low structure situation is because of the limited potential of the range site on which it is growing, and not due to seral stage. These discussions for all areas are too generalized and not ecologically correct.

The descriptions of grassland communities for geographic areas refer to ecological types. The Forest Service acknowledges that some sites only have potential for low structure.

Comment: Increasing the percentage of sagebrush when the existing amount undoubtedly is significantly higher than the historic coverage and pattern simply does not make any ecological sense. Also in Table 3-96 FEIS, the proposed increase of the green needlegrass/western wheatgrass type from 4% to 30% makes little sense and probably is unattainable. Based on all of this discussion, these large shifts in vegetation are completely unrealistic, even when listed as potential because they cannot be achieved. If these goals are unattainable, then the fundamental premise of the plan is badly flawed.

FEIS Table 3-96 compares existing species composition of an ecological site to the expected climax plant community for the same range or ecological site. Desired conditions are defined in the Land and Resource Management Plan geographic area descriptions.

Comment: As pointed out, earlier studies by Perryman and Laycock (2000) indicate that much of the sagebrush on the Thunder Basin NG is uniformly mature because of the lack of fire that was natural to the system. These much more frequent fires historically would have resulted in a mosaic of different age stands at a landscape level that does not occur now. Prescribed fire (with much larger areas burned that is indicated in the plan) to get a mosaic of different age stands of sagebrush will be absolutely necessary to return the habitat to something more conducive to the entire life cycle of the sage grouse.

Creating a mosaic of different age stands of sagebrush in relation to sage grouse is discussed in the Conservation Measures and Mitigation, unit-wide direction, and geographic area direction in FEIS, Appendix H, pp. H-171 thru H-174.

Comment: Language in the grassland wide standards and guidelines for Biological Resources in the Dakota and Thunder Basin Plans (Chapter 1, section F No 20 and No 55 respectively) is difficult to interpret. Stipulations are listed for sagebrush treatments in sage grouse "wintering habitat," but wintering habitat is not defined anywhere. Also this standard stipulates protection of big sagebrush stands near meadows, riparian areas, and other foraging habitats. Loosely interpreted "other foraging habitats" could mean any site where a forb occurs (See Clayton report). That approach is overly broad and should be removed.

Wintering habitat is described in Appendix H of the Land and Resource Management Plan. In the Errata, Standard #55 in the Thunder Basin Land and Resource Management Plan has been changed to reflect silver sagebrush and greasewood as well as big sagebrush are components of winter habitat. To be more specific, this will be changed to read, "big sagebrush silver sagebrush, or greasewood within 100 yards of meadows and riparian areas should not be burned or sprayed."

The distribution of winter habitat on and near the Little Missouri National Grasslands is largely unknown, so the Dakota Prairie Grasslands is cooperatively funding a research project on sage-grouse distribution and habitat use in North Dakota. As noted on FEIS, Appendix H, p. H-170, greater sage-grouse winter habitat includes areas with the tallest sagebrush available.

Comment: The DPG grassland-wide standards and guidelines for Biological Resources, Plan Revision, Ch.1, F, Nos. 22 and 55, are also difficult to interpret. The standards call for sagebrush treatments in sage-grouse "wintering habitat," without defining wintering habitat. This standard also stipulates protection of big sagebrush stands near meadows, riparian areas, and "other foraging habitats." Loosely interpreted, "other foraging habitats" could mean any site where a forb occurs. Tab 16, Clayton. Standard No. 55 (Plan 1-19) requires buffer strips against meadows and riparian areas when spraying for noxious weeds or burning sagebrush, it is essential that the meadows be burned to provide the meadow habitat and edge that provides the forbs and insects for sage grouse chicks. This standard is very self-defeating. Tab 10 Laycock. This standard will also hinder noxious weed control, an ongoing and serious problem.

As noted in FEIS, Appendix H, p. H-170, greater sage grouse winter habitat includes areas with the tallest sagebrush available. The distribution of winter habitat on and near the Little Missouri National Grasslands is largely unknown, so the Dakota Prairie Grasslands is cooperatively funding a

research project on sage grouse distribution and habitat use in North Dakota.

Comment: Standard No 55 (p. 1-19) requires leaving buffer strips against meadows and riparian areas when spraying or burning sagebrush. If because of decades of fire control, meadows have become encroached by sagebrush, it is essential that the meadows be burned to provide the meadow habitat and edge that provides the forbs and insects for sage grouse chicks. This standard is self-defeating (See Laycock reports) and should be removed.

In the Errata, this has been changed to a change to guideline in TBNG Plan Ch1, p. 1-19 and NNF Plan Ch2, p. 2-39.

Comment: We already have some big horn sheep, which were introduced into the area and they are not able to survive! The big horn sheep were dying off in large numbers. No one knows why but we continue to want to re-establish the sheep where they are not at home, tell me what is making sense here?

Reference FEIS, Appendix H, p. H-244 for the distribution and status of bighorn sheep.

Comment: MA 3.5: Bighorn Sheep Habitat (NNF & DPG): Livestock Grazing: giving the potential for forage competition and disease transmission, these areas should be designated unsuitable for livestock grazing.

MA 3.5 direction contains provisions for addressing conflicts. Forage competition and disease transmission will be resolved in favor of bighorn sheep. Reference Nebraska Land and Resource Management Plan, Chapter 3, pp. 3-22 through 3-23 and Dakota Prairie Land and Resource Management Plan, Chapter 3, pp. 3-23 through 3-24.

Comment: MA 3.5: Bighorn Sheep Habitat (NNF & DPG): Recreation: Guideline #1 in the NNF Plan and #2 in the DPG Plan should be changed to a standard, to protect bighorn sheep from human disturbance during breeding. We appreciate Standard #2 in the NNF Plan and Standard #1 in the DPG Plan, prohibiting snowmobile use. However, on the more general issue of motorized travel, Guideline #3 in the NNF plan should be a standard and the provision as needed should be deleted. This modified standard should be added to the DPG Plan.

Guidelines are advisable actions that should be followed to achieve goals and objectives. Deviations from guidelines must be considered and documented in a project decision document, but do not require management plan amendments. The Forest Service believes bighorn sheep can be adequately protected in this instance through the use of a guideline.

On the Nebraska National Forest, review indicates the intent of Standard #2 is covered under Guideline #3 "Restrict motorized travel, as needed, to protect sheep concentration during lambing, breeding, and winter use, except as authorized and permitted." Further travel opportunities and restrictions will be identified within the next 5 years through site-specific travel management planning. Standard #2 has been removed in the Errata.

This same concept applies to 2.2 Research Natural Areas; the intent of Standard #3 is covered under Guideline #4 "Close or obliterate existing roads, except where they provide necessary access for administrative or scientific purposes, or valid private access, as funding allows." The concern about public access *through* Research Natural Areas will be addressed in site-specific travel management planning. Further travel opportunities and restrictions will be identified within the next 5 years

through site-specific travel management planning. General, Standard #3 (found on page 3-18) "Limit all motorized use, including ..." has been removed in the Errata.

Comment: TES (#10), we recommend that the Forest Service "Prohibit the placement of water developments, oilers, livestock salt, or mineral near in habitats supporting the Eastern Prairie Boggy Wetland guild." Standard. Again, this would provide consistency with FSM 2527.02.

The TES guideline #10 is consistent with FSM 2527.02, which reads in part, "Objectives: To minimize destruction, loss, and degradation of wetlands... and... to preserve and restore the natural and beneficial values of floodplains and wetlands." The guideline, as written, will provide protection for TES species and wetland habitats and will meet manual direction for these resources.

Comment: Black-Footed Ferret (#18): In addition to the oil and gas development referenced in this Standard, the existence of roads and raptor perches provide substantial threats to this endangered species (through possible vehicle collisions and predation). We recommend the standard to read: "In prairie dog colonies, known or thought to be occupied by black-footed ferrets, limit oil and gas development to one location per 80 acres to help maintain suitable ferret habitat and limit road-building to minimum road standards and minimum density." Standard.

Page (1-15) Black footed Ferret #18 - We therefore recommend the following addition to the end of the sentence:" ... limit road-building to reduce raptor perching and predation opportunities by employing perch-inhibitors."

The current Forest Service approach is consistent with published guidelines from the U.S. Fish and Wildlife Service (1990). This approach was endorsed by the U.S. Fish and Wildlife Service during consultation for this planning process. Based on the best information available, the Forest Service believes the current guidelines are necessary for black-footed ferret conservation.

Comment: Page (1-14, 1-15): To address from raptor predation on black-footed ferrets, we recommend an additional standard (like the one that was used for mountain plovers) to read: "To avoid attracting avian predators, new structures and facilities will be designed with low profiles and/or perch-inhibitors." Standard

The Forest Service believes the standards and guidelines for MA 3.63, under Alternative 3, are adequate for ferret recovery, as indicated by the favorable biological determination for this alternative in FEIS Appendix H.

Comment: Page (1-14, 1-15): Black-Footed Ferret (#19) - We recommend the buffer zone be increased to minimum of 1/2 mile and remain a standard. Shock waves from a construction blast can not only harm wildlife directly but may cause collapse of the burrow system that is relied upon by a significant number of wildlife species. There is no analysis in the plan or FEIS that demonstrates no impact from this activity.

Page (1-15): Black-footed Ferret (#24) - We recommend the buffer zone be increased to minimum of 1/2 mile and be made a Standard. Shock waves from a blast can not only harm wildlife directly but may cause collapse of the burrow system that is

relied upon by a significant number of wildlife species. There is no analysis in the plan or FEIS that demonstrates no impact from this activity.

Page (3-27) 3.63 Black-Footed Ferret Reintroduction Habitat: Mineral and Energy Resources (#9) - There is no analysis provided that assures that the 1/8-mile buffer is adequate. We recommend increasing the buffer to 1/2 mile unless it can be technically and scientifically demonstrated that the 1/8-mile buffer is adequate.

The 1/8-mile buffer zone came from the U.S. Fish and Wildlife Service (*Guidelines for Oil and Gas Activities in Prairie Dog Ecosystems Managed for Black-footed Ferret Recovery*, Draft Document, February 1990)..

Comment: Other Prairie Dog comments: No analysis or suggested course of action in the plan makes provisions to expand and protect habitat to foster the recovery of the black-footed ferret. We suggest adding the following standards:

"Identify and foster additional black-tailed prairie dog expansion sites to achieve national black-footed ferret recovery goals." Standard.

"Implement management activities for expanding black-tailed prairie dog sites and distribution, including the use of private landowner incentives and land transfers to consolidate suitable habitat and existing prairie dog colonies." Standard.

"Prohibit poisoning of black-tailed prairie dogs within the boundaries of the Dakota Prairies National Grasslands." Standard.

Land and Resource Management Plan Chapters 1, 2, and 3 contain standards and guidelines that foster the expansion and protection of black-tailed prairie dog habitat.

Comment: Page (3-27) 3.63 Black-Footed Ferret Reintroduction Habitat: Mineral and Energy Resources (#3) - Activities need to be defined.

Site-specific reintroduction plans will describe these types of activities.

Comment: Page (3-27) 3.63 Black-Footed Ferret Reintroduction Habitat: Mineral and Energy Resources (#8) - Any discharge of water into a prairie dog town could flood burrows. We recommend the "unless" clause be removed from this standard.

For the Land and Resource Management Plan for the Dakota Prairie Grasslands, the wording was changed in the Errata to read as follows:

"Prohibit activities that would alter water flow regimes and flood prairie dog burrows that are occupied or thought to be occupied by black-footed ferrets or burrowing owls. Standard"

Comment: Page 1-18 Black tailed Prairie dog #43 We recommend this standard be expanded to include prairie dog burrows that are known to be occupied by prairie dogs.

Prairie Dog (#67): We recommend this standard be expanded to include prairie dog burrows that are known to be occupied by prairie dogs.

This standard has been reworded in the Errata.

Comment: Pg 1-18. Swift Fox #45 We recommend 0.5 mile NSO and NSD [No Surface Disturbance] minimum during the denning season to assure protection. There is no analysis to demonstrate that 0.25 miles is adequate and 0.5 miles has been a standard.

The Forest Service acknowledges the scarcity of research to support either the ¼- or the ½-mile distance. The ¼-mile distance was used in a recent oil and gas leasing document for the Buffalo Gap National Grassland. Future research on this topic would be helpful in determining a reasonable and effective buffer distance.

Comment: Fish, Wildlife, and Rare Plants: Black footed ferret: with regard to guidelines #18-20 and #22 in the TBNG and NNF plans and S&Gs #23-26 in the DPG plan: if a prairie dog colony contains suitable black footed ferret habitat, oil and gas development, geophysical exploration, and all construction must be prohibited all year round. These provisions should be standards. In addition, Standard #21 of the TBNG and NNF plans presumes the destruction of prairie dog acreage suitable for ferrets due to construction and poisoning. The plan should prohibit such actions, not presume they will occur. To specifically address the threat posed to ferrets by prairie dog control efforts and shooting, we recommend that Forest Service replace Standard #21 with the following standard: Destruction of prairie dog acreage suitable for black footed ferrets (including but not limited to poisoning and shooting) is prohibited. We recommend the addition of this standard to the DPG plan. Given this recent plague epizootic on the TBNG, such a standard is necessary to provide for the recovery of black footed ferrets on the National Grasslands. We support standard #28 in the DPG plan. Also in the interest avoiding human disturbance of black footed ferret and prairie dog habitat, we recommend that Guideline #27 be changed to a standard.

The Forest Service has consulted with the U.S. Fish and Wildlife Service on the Preferred Alternative 3 for Endangered Species Act compliance. The U.S. Fish and Wildlife Service concurred with the biological determination of "not likely to adversely affect" for black-footed ferrets under Alternative 3. The Forest Service also consulted with the U.S. Fish and Wildlife Service on the effects of the recent plague epizootic on the Thunder Basin National Grassland, and the U.S. Fish and Wildlife Service concurred with the Forest Service that the Cheyenne River Reintroduction Habitat was still suitable for possible black-footed ferret reintroduction. This consultation occurred during the preparation of the supplemental information report.⁸

⁸ Supplemental Information Report to the Proposed Northern Great Plain Plans Revision Final Environmental Impact Statement and 2001 Revision Thunder Basin National Grassland Plan Disclosing Changes to Black-tailed Prairie Dog Habitat Within Proposed Management Area 3.63 of the Thunder Basin National Grassland Resulting from 2001 Sylvatic Plague Outbreak.

Comment: Fish, Wildlife, and Rare Plants: Mountain Plover: With regard to Guidelines #26 and 28-30 (TBNG Plan 1-15 and 1-16): If an area contains suitable mountain plover habitat, oil and gas development and all construction, must be prohibited all year around. Standard #31 fails to consider that mountain plovers may build a nest on a road. Vehicular traffic should be re-routed in that event. Tree planting should also be prohibited under Guideline #33 (TBNG Plan 1-16). Additionally, the Forest Service should consider adding direction to eliminate or fix leaking or overflowing livestock water tanks. Standard #27 (TBNG plan 1-16) presumes the destruction of prairie dog acreage suitable for mountain plovers due to construction and poisoning. The plan should prohibit such actions not presume they will occur. To specifically address the threat posed to mountain plovers by prairie dog control efforts and shooting, we recommend that Forest Service replace Standard #27 with the following standard: Destruction of prairie dog acreage suitable for mountain plovers (including, but not limited to, poisoning and shooting) is prohibited. Given the recent plague epizootic on the TBNG such a standard is necessary to provide for the recovery of mountain plovers on the TBNG.

The Forest Service consulted with the U.S. Fish and Wildlife Service on the effects of the management direction under Alternative 3. The U.S. Fish and Wildlife Service concurred with the “not likely to jeopardize” determination by the Forest Service for the mountain plover.

Comment: Fish, Wildlife, Rare Plants: Swift Fox: Standard #71 of the TBNG Plan (1-20), Standard 45 of the NNF Plan (1-18), Standard 52 of the DPG Plan (1-17), Guideline #72 of the TBNG Plan (1-20) and Guideline #46 of the NNF Plan should all be standards and should provide for the restriction of construction, oil and gas, mineral activities and other human disturbances at least 1 mile from active dens. Standard #72 of the TBNG plan (1-20) , Standard #47 of the NNF Plan (1-18) and Standard #53 of the DPG plan (1-17) would allow the use of M-44s in inactive or potential swift fox habitat on the TBNG. This seems to stand in clear opposition of Guideline #75 of the TBNG plan (1-20), Guideline #50 of the TBNG plan (1-19) that provide for expansion will not expand and recover. A guideline for swift fox expansion is lacking in the DPG plan and should be added. Also to encourage swift fox expansion the plan must prohibit lethal control of vertebrates (shooting, trapping, etc..) in all active and potential habitat. Recreational shooting and fur trapping must also be prohibited in these areas. These prohibitions must be established by standards and closures orders. Guideline #73 of the TBNG Plan (1-20) and Guideline #48 of the NNF Plan, and would defer modification of livestock grazing to the AMP process. This is inappropriate. The AMP process does not substitute for the need for planning area wide direction for protection of a mosaic of habitat for the swift fox. Guidelines #74 and #75 of the TBNG plan (1-20) Guidelines #49 and #50 of the NNF Plan (1-19) should be standards in order to effectively implement the Swift Fox Conservation Strategy. Finally Guideline #54 of the DPG plan (1-17) should be upgraded to a standard to ensure the protection of swift fox habitat.

Guidelines are advisable actions that should be followed to achieve goals and objectives. Deviations from guidelines must be considered during project level analysis and documented in a project decision document, but do not require management plan amendments. The Forest Service review indicates there will be instances when project level analysis finds deviation from the guideline would better protect resources. The Forest Service acknowledges the scarcity of research to support either the ¼- or the 1-mile distance. The ¼-mile distance was used in a recent oil and gas leasing document for the Buffalo Gap National Grassland. Future research on this topic would be helpful in determining a reasonable and effective buffer distance.

Comment: Fish, Wildlife, Rare Plants: Burrowing Owl: to discourage avian predators a standard for the burrowing owl should be added that is similar to #33 of the TBNG Plan (1-16) (it should also include the prohibition of tree planting). Finally Standard #64 of the TBNG plan (1-19), Standard #40 of the NNF Plan (1-18) and Standard #45 of the DPG plan (1-16) are inadequate. This should be a standard across plans, and should make clear that no insecticides or other pesticides should be used near known or suspected nest sites. In addition, the minimum distance should be changed from .25mi to 1 mile. To specifically address the threat posed to burrowing owls by prairie dog control efforts and shooting we recommend that Forest Service add a standard in all three plans for the burrowing owl that reads, destruction of prairie dog acreage occupied by burrowing owls (including but not limited to poisoning and shooting) is prohibited. Given the recent plague epizootic on the TBNG such a standard is necessary to provide for the protection of burrowing owls on the National Grasslands.

The burrowing owl is a sensitive species. An evaluation of management direction for the burrowing owl under the Preferred Alternative resulted in a biological determination where loss of viability of this species on the national grasslands was considered unlikely. Based on analysis, the Forest Service believes the current proposed management direction is appropriate. Reference FEIS, Appendix H, p. H-198.

Comment: Guideline #4 should be made into a standard. Plant collecting should also be explicitly prohibited by standard, in RNAs, wilderness areas, wild and scenic rivers, SIAs, special botanical areas, semi primitive recreation areas (to ensure other recreational users are not deprived the opportunity to experience native plants), and other sensitive management areas. The plans must explicitly prohibit by standard the collection of endangered, threatened and sensitive plant species as well as plant species of concern.

Standards and guidelines in Section O of the Land and Resource Management Plan provide adequate protection for plant species, regardless of management area.

Comment: Objective #8 states that globally rare plant species are ranked G2-G3. This language must be changed to include G1 and S1-S3. Although at present there may be no G1 species on the grasslands, this may change in the course of the revised plan's implementation. In addition state imperiled plants should be included in Objective #8 given that extirpation or imperilment of plants on a state level in the planning area would violate the requirements of 36 CFR 219.19. We still see no objectives relating to establishing well distributed populations of species at risk. This is an immense oversight as the Forest Service has a separate obligation to ensure well distributed populations of all these species. See 36 CFR 219.19.

The G1 plant species are addressed in the FEIS and the Land and Resource Management Plans as species protected under the Endangered Species Act and are not repeated under Objective #8. Management emphasis during this planning effort focused on globally rare species and not state rankings. However, many of the S1-S3 species are dealt with as Forest Service sensitive species. (reference FEIS Appendix H).

Comment: Fish, Wildlife, and Rare Plants S&Gs: Ground Nesting Birds: Guideline #6 in the TBNG and NNF Plans and #4 in the DPG plan directs managers to delay mowing until July 15th or later to protect ground nesting birds. We appreciate that delaying until July 15th would protect many types of ground nesters, but point out that it still endangers late nesters such as the dickcissel, bobolink, grasshopper sparrow and the burrowing owl (Cerovski et al. 2001). To avoid impacts to late nesters, this guideline should offer more specific direction regarding situations that may require even further delay. Additionally, Guideline #8 should specify a minimum percentage of the landscape to be maintained in a late successional or tall vegetation condition for upland bird nesting, cover, and foraging areas.

The guideline states that project-level analysis will determine the earliest mowing date. Geographic area direction describes a full range of seral and structural stages to be provided across the geographic area.

Comment: Fish, Wildlife and Rare Plants: Bats: Guideline #12 of the TBNG and NNF plans and Guideline #9 of the DPG plan should be changed to a standard so that bats may access retired mine shafts and caves. We appreciate Guideline #13 of the TBNG and NNF plans that directs the protection of bat habitat. However, we feel that the direction is incomplete in that it does not specify protection from what. The agency needs to be clearer on this issue.

Guidelines are advisable actions that should be followed to achieve goals and objectives. Deviations from guidelines must be considered and documented in a project decision document, but do not require management plan amendments. The specific types of activities will be identified at the project level.

Comment: Fish, Wildlife, Rare Plants: Beaver Reintroduction: We believe that the Forest Service should consider reintroducing beaver to the grassland. The benefits of such action could be substantial, however the FEIS and TBNG Plan are completely silent on this issue.

Reference the Land and Resource Management Plan for the Thunder Basin National Grassland p. 3-9 Description of the Cheyenne River Zoological SIA, FEIS, p. 3-466 and p. 3-480, and Nebraska National Forest Land and Resource Management Plan, Quaking Aspen SIA, p. 3-16. Management direction to reintroduce beaver to Nebraska National Forest, Thunder Basin National Grassland, and Dakota Prairie Grasslands is not included in the Land and Resource Management Plans, however management direction in the plans does not preclude beaver reintroductions

Comment: The Forest Service must prepare a supplemental FEIS to address these issues. We strongly encourage the agency to engage in serious discussions with experts to ensure that the final MIS list and the final monitoring protocol, fully capture the range of habitat types and disturbance types and that the monitoring plan properly ensure that the MIS list and other monitoring tools will provide for genuine adaptive and prudent management of the National Grasslands. In addition, the revised plan should explicitly list the MIS that will be used for monitoring the effects of management activities and human disturbances on the grassland ecosystems. The MIS should be listed in the body of the revised plan as non discretionary elements of the management direction not an appendix.

The selection of management indicator species is documented in FEIS Chapter 3, p. 3-258 and FEIS Appendix B, pp. B-34 and B-35. Additional information is available in the administrative record. MIS are identified in each geographic area, Chapter 2 of the Land and Resource Management Plans. Monitoring strategies for each MIS are defined in Chapter 4 of the Land and Resource Management Plans. Monitoring protocols will be developed for each MIS as outlined in the Monitoring Guide described on p. 4-7 of the Land and Resource Management Plans.

Comment: Page (1-18) Sage Grouse: Sage Grouse (#46) - Connelly et al 2000, WAFWA guidelines, recommend 2 miles, not .25 miles. We recommend this distance be used as the Standard and that the Connelly 2000 guidelines be fully incorporated.

Construction of facilities is prohibited within ¼ mile of active display grounds. (Standards and guidelines #46, p. 1-18, Thunder Basin National Grassland Land and Resource Management Plan). Facilities constructed within 2 miles of active display grounds, must operate at a noise level no greater than 10 decibels above background noise (39 decibels). To protect sage grouse breeding activities and nests, some activities are prohibited from March 1 to June 15 within 2 miles of active display grounds. (Standards and guidelines #47, #48, #49 and #52 p. 1-18, Thunder Basin National Grassland Land and Resource Management Plan).

Comment: Sage Grouse (#47-48): a)The list seems a bit subjective as to what becomes a "Standard" vs. a "Guideline." b)Major omissions which should be prohibited include: motorized travel, livestock, utility lines (bury them). We recommend Forest Service prohibit these as a standard. c)Prohibiting hunting dogs as a standard, while holding seismic exploration, construction, work-overs, and large gatherings of people as only guidelines (and ignoring livestock altogether) seems entirely illogical. We ask you review this for consistency and ensure adequate protection for sage grouse is made (keep in mind that many states are using hunting dogs to document new leks, and that training of hunting dogs is of such a low occurrence as to be virtually irrelevant otherwise). d)The highly disturbing activities should probably be prohibited year-round within 2 miles of leks, or at least during the early brood-rearing season through July 15 (see comment on #64).

Standards and Guidelines: Prohibit off-road use year-long (Land and Resource Management Plan Section, Chapter 1, Section Q #1), Livestock grazing section F, #54, addresses standards for grazing within sage grouse habitat. Utility lines in excess of 33 KV will be buried as stated in section P, #3. The difference between #47 and #48 is the level of disturbance. Prohibiting the training of bird hunting dogs is a standard. The Forest Service reviewed the June 15 timing limitation as compared to July 15 and believes June 15 is appropriate.

Comment: Sage Grouse (#49). We believe the "background" noise of 39 db is a strong wind. There is circumstantial evidence that sage grouse don't effectively display in a strong wind (typically there is a very little lekking activity under such conditions), thus using this is any sort of "acceptable" noise baseline is problematic. Gas pressurizing stations are fantastically loud, and that is likely what this guideline is attempting to accommodate. Because Guideline #52 is the stronger guideline, so we recommend striking Guideline 49 and using only Guideline 52.

Both guidelines are needed. Guideline #49 limits noise at the display grounds and Guideline #52 prohibits development or operations of facilities within 2 miles of the display ground.

Comment: Sage grouse (#55) - The 20% figure is unclear. We recommend a maximum burn rate of 20% in at least a 10-year period.

Reference page 1-22, Section G, #6 of Thunder Basin National Grassland Land and Resource Management Plan for fire frequencies.

Comment: We recommend an additional Sage Grouse standard to read: "Prohibit the spraying of grasshoppers within 2-miles of known or suspected sage grouse leks." Standard. This standard is appropriate since insects are critical to grouse broods and approximately 65% of hens nest within this distance of leks.

Land and Resource Management Plan Chapter 1, Section J, #8 and #10 provide guidelines for control of insects and disease. This direction will result in other resources, including greater sage-grouse, being considered before any control of native insects begins.

Comment: Page (1-15) General #17 We recommend elimination of this Standard based on the lack of published qualitative data offered in Appendix H that conclusively links livestock grazing to improved sharp-tailed grouse habitat.

Numerous references in Appendix H of the Land and Resource Management Plans demonstrate that livestock grazing management can be an effective tool for enhancing sharp-tailed grouse habitat.

Comment: Pg 1-17 Greater Prairie Chicken #34 We recommend this standard be modified to define an inactive breeding site as "unoccupied during the current and previous breeding season.

The location and annual status of established prairie chicken display grounds on the Ft. Pierre National Grassland and the Nebraska and Samuel R. McKelvie National Forests are relatively stable from year to year. Because of this stability and the infrequent construction of facilities that could displace displaying prairie chickens, the Forest Service believes the direction, as written, will be effective in preventing abandonment or loss of traditional display grounds.

Comment: PG 1-17 Greater Prairie Chicken #38 We recommend elimination of this Standard based on the lack of published qualitative data offered in Appendix H that conclusively links livestock grazing to improved greater prairie chicken habitat.

Numerous references in Appendix H of the Land and Resource Management Plans demonstrate that livestock grazing management can be an effective tool for enhancing greater prairie chicken habitat.

Comment: Fish, Wildlife and Rare Plants: Sharp tailed grouse: We feel that the minimum distance in Guideline#15 of the TBNG and NNF Plans should be changed to 2 mi. With construction of new facilities a mere .25 mi from display grounds, Forest Service runs the risk of obstructing grouse access to nesting and foraging grounds. the biological assessment states that building tall structures within 2 mi. of display grounds should be avoided and suitable habitats within 3 mi. of display grounds should be protected (Appendix H-171 and 172). Guideline #16 of the TBNG and NNF plans should be changed to a standard to ensure that viewing and breeding displays does not impact grouse reproduction. Standard #17 of the TBNG and NNF Plans should be increased from 1.0 to 2.0 mi. In addition it should be modified to provide direction across the planning areas for the protection of sharp tailed grouse habitat rather than deferring the issue to the AMPs. We recommend the same substantive changes for equivalent S&Gs in the DPG Plan for this species. Wildlife needs should be addressed in both planning area wide and site specific NEPA processes.

The Forest Service reviewed the standards and guidelines for the sharp-tailed grouse and considers them appropriate. Applying sage grouse standards to sharp-tailed grouse is more restrictive than necessary.

Comment: Fish, Wildlife, and Rare Plants: Sage Grouse: Standard #54 (TBNG Plan 1-19) would defer sage grouse habitat protection from livestock grazing to the AMP stage. The AMPs are not a substitute for the revised plans. There should be a standard within this revised plans that adequately protects sage grouse nesting and foraging grounds from the deleterious impacts of livestock grazing. Please add a standard that reduces or eliminates livestock grazing on sage grouse nesting and foraging areas. Standard #55 (TBNG Plan 1-19) would allow for herbicide spraying on wintering habitat if proven beneficial for local sage grouse populations. If any treatment of sagebrush is needed it should be accomplished with prescribed fire not herbicides. Additionally the proposed plan does not mention hunting seasons on sage grouse. We assume that this means that hunting will continue on the National Grasslands. We feel that a standard should be added to prohibit hunting of sage grouse year-round on the National Grasslands. We recommend the same substantive changes for equivalent S&Gs in the DPG plan for this species.

The allotment management plan process provides the site-specific analysis and direction. The Forest Service reviewed Standard #55 for the sage grouse and considers it appropriate. Hunting regulations for game species on the National Grassland are the primary responsibility of the state.

Comment: Fish, Wildlife, and Rare Plants: Greater Prairie Chicken: Standard #38 (NNF Plan 1-17) would defer greater prairie chicken habitat protection from livestock grazing to the AMP stage. The AMPs are not a substitute for the revised plans. There should be a standard within the proposed plans that adequately protects greater prairie chicken nesting and brood rearing habitat from the deleterious impacts of livestock grazing. This is particularly necessary given a US Geographical Service review of greater prairie chicken habitat within the planning area. That review found that although rest rotation grazing systems may provide adequate residual cover for prairie chicken nesting, livestock stocking density is the most important factor to consider in sustaining prairie chicken habitat. Put differently, AUMs must be reduced for cattle and prairie chickens to be compatible. Please add a standard that reduces or eliminates livestock grazing on greater prairie chicken nesting and foraging areas. Guideline #37 (NNF plan 1-17) should be changed to a standard to ensure that viewing of breeding displays does not impact greater prairie chicken reproduction. Guidelines #36 and 39 (NNF Plan 1-17) should be changed to standards. We recommend the same substantive changes for equivalent S&Gs in the DPG plan for this species.

The allotment management plan process provides the site-specific-analysis and direction. Standard #38, in combination with Appendices H and I of the Land and Resource Management Plans, respond to your concern. Guidelines are advisable actions that should be followed to achieve goals and objectives. Deviations from guidelines must be considered and documented in a project decision document, but do not require management plan amendments. The specific types of activities will be identified at the project level.

Comment: Animal Damage Management S&Gs: Prairie Dogs: Guideline #2 of the TBNG Plan (1-23) is well intentioned but considering the State of WY has not adopted a conservation plan for prairie dogs yet and it is unclear when or if they will the Forest Service must provide further direction for land managers on this point. We believe that any eradication on the Grasslands where colonization is believed to be spreading to adjacent lands or where there has been a complaint of unwanted prairie dogs on adjacent lands, is contrary to the well distributed population requirement of 36 CFR 219.19 because it would keep the population from existing near the edges of National Forest Service lands. The NNF plan and DPG plan contain guidelines identical to Guidelines #2 of the TBNG plan (Guideline #2 of the NNF and DPG plans at 1-21), which we object to as well. The NFMA regulation does not say maintain a well distributed population everywhere except near private lands, or where there has been a complaint. We also feel the Forest Service has a legal obligation to conserve prairie dogs on the Grasslands, irrespective of private lands. We are pleased with the FEIS policy. Poisoning would not be authorized for loss of forage to support permitted livestock on NFS lands (FEIS at 3-168). However, the S&Gs needed to make this enforceable are not clearly defined. For example, Standard #1 should clearly specify that poison is not to be used in this circumstance. Standard #4 should be revised to prohibit the use of above-ground baits on a year-long basis.

The standards and guidelines in Section H, Chapter 1 of the Land and Resource Management Plan respond to this concern. Your comments were considered but the Forest Service feels the current S&G provide adequate direction to implement the Land and Resource Management Plan.

Comment: Fish, Wildlife, Rare Plants: Black Tailed prairie dog: The proposed direction is not adequate to ensure that a viable, well distributed population of this species will exist on the TBNG over the long term. We propose the following modifications in the plan's provisions for black tailed prairie dogs: Prohibit prairie dog shooting on all planning areas. This is especially vital given the 2001 plague epizootic on the TBNG. In order to secure the expansion of this species the plan must prohibit recreational shooting entirely. Standard #66 of the TBNG plan (1-19), Guideline #42 of the NNF Plan (1-18) (which should be changed to a standard), and Guideline #47 of the DPG plan (1-16) should therefore be revised to read: Prairie dog shooting shall be prohibited year long. Further this prohibition should be incorporated into grazing permits with provisions for permit revocation if the shooting prohibition is violated by a grazing permittee and/or his/her agent.; Prohibit prairie dog poisoning on all planning areas. This is especially vital given the 2001 plague epizootic on the TBNG. A standard should be added in all three plans that reads: prairie dog poisoning shall be prohibited year long. Further this prohibition should be incorporated into grazing permits with provisions for permit revocation if the poisoning prohibition is violated by a grazing permittee and/or his/her agent.; Protect prairie dog burrows from flooding. Standard #67 of the TBNG Plan (1-20), Standard #43 of the NNF Plan (1-18) and Standard #48 of the DPG plan (1-16) should be widened to include a general prohibition on incidental or

intentional flooding of prairie dog burrows through activities that alter water flow regimes and flood prairie dog burrows.; Eliminate the 7% of suitable acreage reevaluation level in the TBNG plan. The proposed TBNG plan would require land managers to evaluate prairie dog management again when the total acres of active prairie dog colonies expand to 35,000 acres (approximately 7%) of suitable habitat on the TBNG (Standard #68 at 1-20). The other plans do not set a target prairie dog acreage. The 2001 plague epidemic on the TBNG requires enhanced prairie dog protections. Sylvatic plague is cyclic which means it still poses a very real threat to BTPDs on the TBNG. This requires elimination of the 7% occupancy target. The entire prairie dog community must be maintained at levels at least as great as would occur in nature. 10 to 20% of the available land base would be a reasonable allocation if in fact prairie dogs still occurred in relative proportions throughout their historic range. Even using 10-20% of the land base as a benchmark, however, the National Forest are failing to meet the standards imposed by NFMA regulations. Further prairie dog towns must be well distributed throughout each Grassland that historically contained prairie dogs, and should not be concentrated in one or two towns per district. A reasonable number and distribution of towns is needed. The NFMA requires that habitat must be provided to support, at least a minimum number of reproductive individuals and must be well distributed so that those individuals can interact with others in the planning area. (36 CFR 219.19). Prairie dog towns should exist all stages of growth and at all sizes, including newly established mid age and old age and should range in size from only one acre to several hundred acres. Thus, within the legal constraint that prairie dogs be well distributed throughout the planning area, the distribution of prairie dog colony sizes should include numerous large colonies with a continuum of progressively fewer small colonies. In addition core areas of undisturbed prairie dogs should be maintained. Because of the danger associated with epizootics of plague more than one core area within each planning area is needed, so that prairie dog patches that go locally extinct due to plague may be quickly recolonized from unaffected areas. In order to meet these biological requirements the Forest Service should consider translocation of prairie dogs onto currently unoccupied areas. Limit roads through colonies. Guideline #69 of the TBNG plan (1-20) and Guideline #44 of the NNF Plan(1-18) should be revised to standards and should require that new roads be prohibited within the current boundaries of prairie dog colonies so as to minimize human disturbance of this imperiled species.

The management activity most likely to affect prairie dog burrows in terms of altered water flow is oil and gas activity. Other types of activity, such as stock pond creation may impact prairie dogs. All types of projects are assessed on a case-by-case basis before implementation. With current standards and guidelines, the biological determination for prairie dogs on the Thunder Basin National Grassland did not indicate a significant viability risk, with or without plague, over the next 10 to 15 years (reference FEIS, Appendix H, p. H-99 in). In addition, restrictions on prairie dog poisoning have been significantly increased (see Land and Resource Management Plans Section F).

Comment: Goal 1c in DPG Plan: Natural disturbances should not be grouped with anthropogenic sources of disturbance. In addition (as in the TBNG and NNF Plans given the goal of increasing the amount of forests and grasslands restored to or maintained in a healthy condition), the objectives should address the issues of risk from overgrazing and introduction and proliferation of exotic species. We have the same objection to Objective #1 as we discussed for the TBNG and NNF plans. In addition where objectives contain provisions for 10-15 year deadlines, we suggest those be modified to 3-5 year deadlines in order to active protect biological resources and manage those resources in an adaptive way, which integrates new scientific findings from ongoing research and monitoring.

The Forest Service disagrees that natural and anthropogenic disturbance should be considered separately. The plan provides for both forms of disturbance. The overall goal is restoring and maintaining forests and grasslands in a healthy condition. Both wild fire and prescribed fire can assist in this goal, as both affect ecological processes which ultimately influence grassland and forest health. A review of the objectives indicate they do in fact address risk from overgrazing (see Land and Resource Management Plan, Chapter 1, Objective 1). The Forest Service believes the timeframes are appropriate.

Comment: Page 1-19 #65 Burrowing owls are not obligated to prairie dogs, thus the number of active prairie dog acres has no relevance.

Burrowing owls in the Great Plains do not excavate their own burrows but rely on burrowing mammals such as the prairie dog. Researchers also report that colonies greater than 80 acres provide good nesting habitat (FEIS, Appendix H, p. H-195).

Comment: While some structure data are reported in Tables 3-103 and 3-104, the data are not representative of the entire units and do not represent an adequate sample base. Furthermore the data summarized as existing structural conditions (Table 3-121) indicate 15% of the LMNG and CRNG are currently in low structure (Alternative 1). Differences between the estimates in the tables need to be reconciled with structural estimates reported in the former tables.

By law, the Forest Service is required to use the best information available in our analyses. This includes the data presented in Tables 3-103 and 3-104. These data are defined as the categories shown in the table (less than 2 inches, 2 to 2.9 inches, etc.). These categories are different than the proposed definitions of low, moderate, and high structure, which are less than 1.5 inches, 1.5 to 3.49 inches, and greater than 3.5 inches, respectively, for the Little Missouri National Grassland and Cedar River National Grassland (see the Land and Resource Management Plan for the Dakota Prairie Grasslands, Appendix H, for more details).

Furthermore, as noted on FEIS p. 3-232, Table 3-121 shows something different. Specifically, "The acreages in the table [3-121] are based on the midpoints of the ranges established in the objectives for low, moderate, and high structure grasslands. The acreages displayed for Alternative 1 represent the anticipated acres had the alternative been fully implemented on each national grassland and forest. Although not directly comparable, existing grassland structure levels on individual planning units have been presented earlier in this chapter." The reference to "earlier in this chapter" refers, in part, to Tables 3-103 and 3-104.

Comment: Tables 3-106 to 3-111 fail to explain how the data reported relate to site potential, grazing distribution, or other grazing management employed in the specific units. Without such information interpretation of the results is difficult. Apparently this information was included in the FEIS in an effort to show that some actual data exist for the grasslands even if it cannot be interpreted well as presented.

These tables display structure levels based on information gathered for the years presented. Potential structure levels are dependent on the site potential.

Comment: On pg 3-203, there is a discussion of plant guilds. The glossary, Appendix G in the plans, defines a guild as a group of organisms that share a common food source. The guilds described by the Forest Service do not fit this concept, but relate more to the habitats involved than the adaptations of the species listed.

The definition of guild on pg G-24 has been corrected in the Errata.

Comment: Some of the standards are biologically unattainable. Kim Vader's (2000) research indicates a 4-inch VOR is not achievable on non-grazed, silty or shallow sites in the LMNG. Therefore, the FS definition of high structure as "areas where average VORs are greater than 3.5 inches" establishes an artificial goalpost that is biologically unachievable.

VOR monitoring data indicates that VORs of 3.5 inches are biologically obtainable on the Little Missouri National Grassland. Documentation of that fact is in the administrative record. The Forest Service research branch has reviewed the Vader thesis; this review is filed in the administrative record.

Comment: The plan calls VOR reading for the prairie chicken and sharp-tail grouse, that must be maintained season long, within a 1 mile radius of a lek in short and tall grass prairie, Kentucky blue grass lies flat after it matures and is "impossible to maintain these structure levels."

The Land and Resource Management Plan emphasizes quality nesting habitat within 1.0 mile of active prairie chicken and sharp-tailed grouse display grounds (Chapter 1, p. 1-14). The Land and Resource Management Plan does not indicate that the entire area needs to be maintained in a high structural condition indefinitely. Biologists recognize that different plant species can provide different levels of structure, and structural objectives will be achieved on areas that have the capability to produce appropriate structure. See the Land and Resource Management Plan for the Dakota Prairie Grasslands, Chapter 2 (pp. 2-6, 2-13, 2-21, and 2-29) for descriptions of structural objectives.

Comment: If this plan had been truly written for the good range conservation management it would have referred the improved management practices of the 60s,70s,80s, and 90s. Big game numbers increased from 20,000 licenses in 50s to 107,000 in 2000. If the habitat was so poor, as some would like others to believe, the game numbers would have gone down and never would have reached the highs of 2000. With government regulations on predator control or lack of control, game birds have diminished, not from lack of habitat, but from restrictions placed on good.

It is true that there have been improved range management practices on the grasslands, and it is true that big game licenses have increased across North Dakota over the past several years. Big game populations were not a key issue in the revision process. The revision was based on the need to provide habitat diversity (FEIS, Chapter 1, p. 1-16) to maintain viability populations of all species. FEIS, Appendix A, p. A-60 addresses predator control.

Comment: The Forest Service admits that human use and manipulation have changed the "natural" disturbance regimes that "originally" shaped this region... " It is not clear what "originally" means, since human use and manipulation have affected this region for about 10,000 years. The concept of "natural" disturbance regimes is just another manifestation of the "balance of nature" viewpoint held by many resource managers, especially biologists. This concept is scientifically obsolete but is being used by the Forest Service as the basis for this EIS and the management plans.

Natural disturbances are the external factors that influence grassland evolution and development in the long-term. Although human influence may be present for about 10,000 years, that influence has become increasingly more complex and intense in the last 200 years. Herbivory has shifted from large grazers such as bison and elk to domestic livestock, and fencing limits their opportunity to roam. In some cases, fires were purposefully ignited by indigenous people. Now, fires are suppressed where they previously occurred naturally. The Land and Resource Management Plan recognizes the use of domestic livestock and practices such as fire in maintaining or restoring natural functioning processes on the grasslands. Their use is weighed against public input about desired objectives for management. The resulting mix of practices that parallels "natural disturbance regimes" will be designed to meet those objectives at the allotment level.

Comment: It is predicated on the assumption that there is an objective definition of a "plant community" and that "plant communities" can be accurately classified. This concept has been generally discredited by most plant ecologists and is throwback to the Clementsian view of the organization of plant communities as "quasi-organisms" composed of species that have co-evolved into a functioning system in equilibrium with environmental conditions. This view is responsible for the "balance of nature" slant that permeates the entire management philosophy evident in the EIS. To classify "plant communities" is convenient and sometimes useful. It is an arbitrary classification based mainly on the approach used and the attributes selected as a basis for classification. Because environmental conditions (soil, climate, geology, slope, etc.) may be relatively uniform or repeated across fairly large areas and so is the vegetation growing on these areas, it is possible to

classify land types (range sites, soil series, or habitat types) or vegetation types. But the classification of all of these is completely arbitrary and is guided by the intended use and practicality of further subdivision.

The Forest Service agrees that classification is a process based on a set of assumptions and a selected set of criteria. Classifications will be used within landscape assessments to help allocate of resources and identify management opportunities. The Forest Service will clearly describe the criteria and intended use of the vegetation classifications utilized.

Comment: Vegetation management objectives are based on measures for which relationship to desired outputs has not been established. Vegetation composition objectives are set as a percentage of the potential composition. The sampling method and intensity of sampling to determine this are not specified.

Vegetation Composition. There is no clear indication of how the desired percentages in each seral stage were determined except that it was based on professional judgment and experience (Appendix B).

Literature on seral mosaics is limited. Dr. Dan Uresk, Forest Service Research, was consulted for guidance in this regard, and the objectives were based on professional judgment. That process is documented in the administrative record.

Vegetation composition (seral stages) objectives are based on a desired mosaic of conditions that addresses overall rangeland health. Chapter 4 of the Land and Resource Management Plan lists monitoring needs (see pp. 4-10, 4-12, and 4-13).

Comment: Terrestrial Environment (p. 3-176 to 3-179): Change is continuous and humans have influenced the Great Plains for at least 10,000 years. That does not justify attempting to emulate some presumed conditions of fire and herbivory at some arbitrarily selected point in history which either impossible or undesirable from either an ecological or an economic viewpoint. Another question--Who made up the committee of scientists? They were apparently picked very selectively by the Forest Service. Why not list their names here?

The intent was to recognize that fire and herbivory played important roles in shaping the ecological landscape of the Northern Great Plains. Acknowledging that fact provided a basis for utilizing those processes in analyzing management objectives for the grasslands. The assessment and a list of the scientists involved are in the administrative record.

Comment: On page H-186 in Appendix H of the FEIS, the second paragraph under Biological Determinations, Risk Assessments, and Rationale should refer to merlins instead of "ferruginous hawks."

This has been corrected in the Errata.

Comment: The American crow is repeated twice in a list of yearlong avian residents in the planning area on page 3-467 (paragraph 4) of the FEIS.

Thank you for your comment. This has been corrected in the Errata.

Recreation and Travel Management

Comment: It appears that some permittees and cooperators will have restricted access for such things as livestock management and mineral exploration and development due to the new standard for no off-road vehicle use on the TBNG.

Some people commented that they were worried that general grassland-wide and management area direction would preclude motorized use for such things as fire control, grazing permit administration, noxious weed control, wildlife surveys, mineral exploration and development, and emergency services such as law-enforcement, medical, search and rescue. Grassland-wide direction under Q.1., Land and Resource Management Plan, page 1-30 states that access for these purposes will be allowed. Cooperators and permittees will be specifically authorized motorized access, including off-road access, for authorized activities in their agreements or permits.

Comment: Pg 1-30 (Infrastructure Use and Management #2). We suggest limiting vehicle use to only those roads signed and established by the Forest Service.

The Forest Service reviewed Infrastructure Use and Management #2, and the conditions for limiting vehicle use are adequate.

Comment: Finally, because snowmobiles affect many of the same resources as ORVs, snowmobile impacts must be thoroughly analyzed as cumulative impacts. The FEIS fails to do so in violation of 40 CFR 1808.7. In addition, none of the proposed alternatives proposes snowmobile restrictions on the Grasslands.

On the Nebraska National Forest and Dakota Prairie National Grasslands, travel opportunities and restrictions are to be identified within 5 years of the decision on the Land and Resource Management Plan (Goal 4.a.1). Unless specifically restricted in management area direction or existing orders snowmobiles are allowed. Restrictions on snowmobile use will be considered when travel opportunities are identified.

On the Thunder Basin National Grassland, Travel Management Plans are to be completed within 5 years of the decision on the Land and Resource Management Plan (Goal 4.a.1). Further, all motorized cross-country travel off existing roads and trails is prohibited, except for authorized emergency and administrative use (Grassland-wide Direction, Q.1). On the Thunder Basin National Grassland, snowmobile use is limited to existing roads and trails until further considered in the Travel Management Plan.

Comment: Public shooting facility development should be contemplated in the units management plans where it can be done without significant impacts to wildlife populations or habitats.

Numerous issues such as hazardous materials apply to public shooting facilities in addition to those issues you noted. The plan does not prohibit shooting facilities. Permits are governed by Forest Service regulations in 36 CFR 21.

Comment: Pg 1-23 We suggest that the presence of game fish and quality fishery be designated as a high priority feature in the stream ranking for recreation.

Lands with high recreational values (such as those described by the commentor) are listed as high priority areas for acquisition (Land and Resource Management Plan, Chapter 1, p 1-23).

Comment: Because none of the alternatives pose restrictions for motorized use in riparian, highly erosive, or critical habitat areas where user-created roads already exist, resource damage to these areas will necessarily occur while the agency is in the 5-year process of designating travelways. The FEIS fails to discuss the impacts of motorized use on these areas. In addition, the FEIS does not provide any quantitative or qualitative data to justify keeping user-created routes open for use—an action that would increase environmental damage. We further suggest that: Once site specific analysis is completed, ORV use would be allowed only on system roads and trails designated and posted as open for ORVs; Designation of ORV routes shall only occur on roads and trails where the agency demonstrates in a public process that use of the route by ORVs will not cause adverse environmental impacts; designation of ORV routes, construction of new ORV routes, upgrading of existing routes to accommodate new or additional ORV use, and the construction or upgrading of facilities for ORV use must be fully analyzed under the National Environmental Policy Act; and ORV use shall be prohibited unless adequate monitoring and enforcement of the use and impacts are fully funded and implemented.

On the Nebraska National Forest and the Dakota Prairie National Grassland, travel opportunities and restrictions are to be identified within 5 years of the decision on the Land and Resource Management Plans (Goal 4a,1).

On the Thunder Basin National Grassland, all motorized travel, except for authorized administrative use, is prohibited (Land and Resource Management Plan Chapter 1, Goal 4.a.1).

The implementation of the Roads Analysis mandated by the Transportation Rule and Policy signed on January 12, 2001 will help identify high risk areas. The standards and guidelines in the Land and Resource Management Plan gives direction for management of those areas identified.

Under the OHV Decision (January 2001), which is tiered to the FEIS and adopted by the Land and Resource Management Plan for the Dakota Prairie Grasslands, motorized use is restricted to existing roads and trails. There are some exceptions under the OHV which allow for wheeled cross-country motorized travel in the following situations: 1) official administrative business; 2) search and rescue; 3) law enforcement; 4) official administrative business; 5) lessees and permittee administration of there authorized use; 6) travel up to 300 feet from and existing road or trail to a dispersed campsite. Effects of travel management are discussed on pp. 3-287 and 3-288 of the FEIS and also starting on p. 3-336. A Travel Management Plan is discussed under Goal 4a, Items 1 and 3, in the Land and Resource Management Plan and on FEIS p. 3-336.

Comment: The transportation rule and policy require the obliteration of all two-track roads, which will greatly reduce recreation access on the National Grasslands especially for hunting. The OHV policy prohibits most cross-country motor vehicle access, which will also limit recreation use and hunting. The decrease in hunting will likely have environmental effects by increasing game numbers, increasing the effects on habitat, and reducing the estimated economic benefits from recreation and hunting. There will certainly be a reduction in local revenues and state agency revenues. The NGPPR FEIS assumes no change or increases in recreation use and hunting. If the NGPPR FEIS had considered these related regulatory initiatives, which override the DPG Plans Revision regarding motor vehicle use and recreations

access, it would have to change its land management direction where it allows motor vehicle use and it would have to change the assessment of Plans Revisions impacts on recreation use, hunting, and wildlife populations. By not disclosing the combined effects, the NGPPR FEIS overstates future recreation use and hunting and the related revenues to be gained.

Transportation Rule and Policy: The Transportation Rule and Policy were signed on January 12, 2001. The Transportation Rule and Policy provide only guidance for transportation analysis in terms of determining a minimum road system and requiring a roads analysis process to inform road management decisions. The Transportation Rule and Policy did not dictate or adopt land management decisions. These decisions will only be made through subsequent NEPA analysis. The Plan does not make these decisions. The plan revision does include consistent goals and guidelines to accomplish the required transportation planning in the future.

OHV Decision: The OHV decision went into effect in January of 2001 and is the current management direction on the Dakota Prairie Grasslands in North and South Dakota. It is not the current management direction for the other units in the Northern Great plains planning effort. However, because the OHV Decision/FEIS was conducted concurrently with the analysis for the Northern Great Plains, the OHV Decision is not reflected in the acres displayed for the existing condition or alternative 1 or 2 in the Northern Great plains FEIS. See FEIS 3-338. However the text does describe that the effects of the OHV decision would be similar to alternatives 3, 4, and 5 with regard to cross country travel on the Dakota Prairie Grasslands (FEIS 3-68, 3-69, 3-71, 3-338). On FEIS page 3-338 displays alternative as both reflecting the OHV decision to prohibit cross country travel (alternative 1,2, and existing condition) and alternatives that reflect the OHV decision (Alternatives 3 (DEIS and FEIS), 4 and 5). The Northern Great Plains FEIS has considered the cumulative effects of the OHV Decision along with other travel management decisions; including the cumulative effects on mineral development, hunting, recreation, access for fire suppression and noxious weed control. (reference supplemental information added to the FEIS on June 02)

Comment: The FEIS summary states that "Recreation on public lands in the prairie ecosystem is increasing dramatically." FEIS S-15. For the DPG, "...projected increases in recreation related jobs in five years using a 5% rate of increase. FEIS 3-40. However, no data support a 5 percent annual increase.

The assumption of a 5% increase was used along with a 20% rate of increase to characterize the effects of increasing tourism. These assumptions were based on several studies which are identified on pp. 3-14 and 3-15 of the FEIS, Chapter 3.

Comment: FEIS notes that most DPG recreation occurs in semi-primitive motorized areas and that motorized travel/viewing scenery is the most popular recreation use category. FEIS 3-301. Table 2-12 shows that acres allocated to semi-primitive motorized use decrease by almost 18%.

The comment on FEIS page 3-301 is in reference to the Pine Ridge District and the Oglala National Grassland. Table 2-12 refers to the Thunder Basin National Grassland. Neither references is on the Dakota Prairie National Grasslands.

For the Pine Ridge District and Oglala National Grassland, the correct table of comparison would be Table 2-10, which shows a decrease in semi-primitive motorized recreation acres from the existing condition of 10% and an increase from Alternative 1 of 4%. Further, viewing scenery/motorized travel can occur in any motorized management area.

In FEIS Alternative 3 on the Nebraska National Forest, there are 970,320 acres available for motorized

travel/viewing scenery as compared to 85,570 semi-primitive non-motorized acres. That is 92% of the Nebraska National Forest and associated grasslands available for motorized travel/viewing scenery. Similar calculations on the Thunder Basin National Grassland reveal that 99% is available for motorized travel/viewing scenery.

Comment: The FEIS also assumes that "recreation use of National Forest System lands contribute jobs and income to local economies comparable to levels contributed by livestock grazing on National Forest pastures." FEIS 3-15. This statement is based on the assumption of a 50/50 ratio between resident and nonresident tourist and ignores the fact that the DPG has, "No inventoried trail systems or developed campgrounds," FEIS page 3-301. The assumption of a 50/50 ratio seems questionable. Also the FEIS does not discuss the fact that the discounted economic benefits of livestock grazing on the DPG are about 68% higher than the discounted economic benefits of recreation on the DPG.

The basis of both these determinations is unclear. The Dakota Prairie Grasslands does have inventoried trails and developed campgrounds (FEIS, Chapter 3, p. 3-301). The statement about "recreation use of National Forest System lands contribute jobs and income to local economies comparable to levels contributed by livestock grazing on National Forest pastures." is based on the studies referenced on pp. 3-14 and 3-15 of the FEIS, Chapter 3. Table 3-3 shows that recreation and tourism on the grasslands account for two-thirds of the jobs and three-quarters of the income as livestock production on the Northern Great Plains (FEIS Table 3-3, p 3-19). The discounted net benefits are noted for all the alternatives (FEIS p 3-45).

Comment: Projections of future recreational use are based on surveys and projections of much larger areas. These offer conflicting data. Since the population of most of the planning area is low and relatively constant it is hard to see how the objectives of the various plans require major revision for recreational purposes.

See FEIS, Chapter 3, pp. 3-295 through 3-333. No increase in recreation was assumed, though some limited available information shows it is increasing. The reason for changes was based on public comment and trends for the future.

Comment: The FEIS admits but does not address the decrease in recreation access for most of the ND public. The Forest Service, however, does not adequately discuss the specific and cumulative effects of the OHV decision on recreation use. The FEIS does not discuss the combined effects of prohibiting all cross-country motor vehicle access with the transportation rule which requires the Forest Service to decommission many of the roads and all of the "two-tracks" on the National Grasslands. Nor does the FEIS address how these changes respond to the objective of increasing recreation opportunity, when most recreation use in ND relies on motorized access.

The Transportation Rule and Policy does not require the obliteration of all two-track roads. It requires that the Dakota Prairie Grasslands conduct an analysis of its transportation system - what is out there on the ground, identification of conflicts/benefits, and how the current system fits with long-range goals. Any site-specific closures will require NEPA and site-specific decisions with full public involvement.

Transportation Rule and Policy: The Transportation Rule and Policy were signed on January 12,

2001. The Transportation Rule and Policy provide only guidance for transportation analysis in terms of determining a minimum road system and requiring a roads analysis process to inform road management decisions. The Transportation Rule and Policy did not dictate or adopt land management decisions. These decisions will only be made through subsequent NEPA analysis. The Plan does not make these decisions. The plan revision does include consistent goals and guidelines to accomplish the required transportation planning in the future.

OHV Decision: The OHV decision went into effect in January of 2001 and is the current management direction on the Dakota Prairie Grasslands in North and South Dakota. It is not the current management direction for the other units in the Northern Great plains planning effort. However, because the OHV Decision/ FEIS was conducted concurrently with the analysis for the Northern Great Plains, the OHV Decision is not reflected in the acres displayed for the existing condition or alternative 1 or 2 in the Northern Great plains FEIS. See FEIS 3-338. However the text does describe that the effects of the OHV decision would be similar to alternatives 3, 4, and 5 with regard to cross country travel on the Dakota Prairie Grasslands (FEIS 3-68, 3-69, 3-71, 3-338). On FEIS page 3-338 displays alternative as both reflecting the OHV decision to prohibit cross country travel (alternative 1,2, and existing condition) and alternatives that reflect the OHV decision (Alternatives 3 (DEIS and FEIS), 4 and 5). The Northern Great Plains FEIS has considered the cumulative effects of the OHV Decision along with other travel management decisions; including the cumulative effects on mineral development, hunting, recreation, access for fire suppression and noxious weed control. (reference supplemental information added to the FEIS on June 02)

Comment: The plan will reduce recreation use of the Grasslands, by prohibiting all cross-country motor vehicle use, with RNAs and Special Interest Areas and Roadless areas added.

The Land and Resource Management Plan for the Dakota Prairie Grasslands adopted the OHV Decision signed by the Regional Forester in January 2001. The OHV Decision restricts motorized travel to existing roads and trails with several exceptions for things such military, fire, search and rescue, law enforcement, official administrative business, lessees and permittees in the administration of a valid federal lease or permit, travel to a campsite within 300 ft of an existing road or trail.

It should be noted that Special Interest Areas and Roadless areas, although closed to cross-country travel, are open to motorized travel on existing roads and trails.

Travel management has both beneficial and adverse effects on recreation. Restrictions on motorized travel would benefit people who prefer non-motorized recreation such as hiking, horseback riding, walk-in hunting, mountain biking, bird watching, and backcountry hunting. Many of these areas are increasing with continued growth projections (FEIS p. 3-307) for example bird watching is up 155%, mountain biking and backpacking are expected to grow 50% and 23 % respectively.

Restrictions on motorized use would limit those who prefer motorized opportunities such as driving for pleasure, motorized camping off-road camping, and motorized hunting access. Motorized scenic viewing and driving for pleasure are the single most popular recreation category on most of the DPG (FEIS p. 3-298-299). Most of this recreational activity occurs on existing roads and two-tracks. While some of this may be curtailed, under the OHV Decision, 90% of the DPG is open to motorized use on existing roads and trails. Hunting is also popular but limiting motorized activities for hunters could ultimately provide better hunting opportunities as wildlife security is improved. This in turn may actually increase the number of people seeking a quality hunting experience.

Comment: Our concern that this increase will be offset by a reduction in traditional recreational uses of the grasslands such as snowmobiling, hunting and RV based sightseeing. McKenzie County has enjoyed a steady increase in tourism related activities up to 24% per year for the past 5 years. The plan gives no credit to continued growth in the industry with the existing plan.

The FEIS p 3-38 cites that data it had available for the trends in recreation. The trend is that recreation will likely continue to increase, but it lacked data to support this information in all areas of the Northern Great Plains. It also notes that this growth rate will vary considerably. The Forest Service does note that some alternatives are likely to support anticipated increases better than others. While the Forest Service assumed no growth in tourism it also indicates that alternative 5 and 3 and 4 (in that order) are more likely to better support such increases (FEIS p 3-39). The plan will provide a more diverse set of recreational settings than currently exist (FEIS p 3-338 travel management effects on recreation).

Soil

Comment: Soils (3-280) Therefore, it would seem that the most important goal of this planning effort would be to insure conservation of the soil, not "biodiversity." Yet, very little space is devoted to soil and no information is presented on the current level of soil protection in the planning units.

The Forest Service is required to "Conserve soil and water resources and not allow significant or permanent impairment of the productivity of the land" (36 CFR 219.27(a) (1)). Several objectives, standards, and guidelines in the Land and Resource Management Plan pertain to conservation of soil. See Land and Resource Management Plan Goal 1.a.1 (pp. 1-2 and 1-3) and the Standards and Guidelines Section C (p. 1-11) for further information.

Comment: Soils (#4) Is there a Forest-wide soil analysis decision support system in place to backup the 40% slope figure? If the analysis is not available, we recommend you use the Forest Service agency standard of 35% slope cutoff value.

The supporting documentation for the 40% slope value is in the Water Conservation Practices Handbook, Forest Service Handbook 2509.25. This is Region 2 Directive. Regions are allowed to place Regional Handbooks into the Forest Service Handbook

Comment: The soil sites (range sites) referred to in Chapter 2 are not a standardized process. It is a grossly over-simplified abbreviation of the NRCS range sites contained in the agency's Technical Guide. A concrete methodology needs to be established and spelled out in these guidelines.

The Land and Resource Management Plan for the Dakota Prairie Grasslands, Chapter 2, provides a general sense of the concept of seral expression by characterizing general soil types with sense of the major plant species present. The intent of this section was not to provide an exhaustive list of sites nor species present. The characterizations in Chapter 2 were in response to comments on the DEIS about not being able to understand the concept of seral expression.

Comment: I do not know of any scientifically approved method of determining to what extent soils have eroded or been disturbed by management activities. How are watershed conditions going to be quantified? Similar concerns exist with methodologies for quantifying water quality.

The complexity of ecosystems does not allow use of only one scientific method for quantifying watershed condition. Where historical data does not exist in a management activity area, the Forest Service will monitor those sites using the Soil Quality Standards as outlined by Region One in the Forest Service Manual. Water quality will be measured using the Methods and Standards for Water Analysis and the standard parameter values listed by the state and EPA.

Special Designations

Comment: Additionally, language should be written into the ROD stating that the DEIS' 1.2 Recommended for Wilderness Area found in the Sheyenne National Grasslands be categorized as a 1.2a Management Area once restoration has been completed. This will guide future management direction for the area as intended in the DEIS and ensure that the area's wilderness characteristics are protected without hampering the necessary restoration.

As a result of the DEIS comment period and review, the FEIS and ROD do not allocate any area on the Sheyenne National Grassland as Management Area 1.2a. This decision on allocation can be revisited in the next planning cycle based on public comments.

Comment: The continued habitat fragmentation as a result of these acreage reductions is not adequately addressed in the Final Impact Statement (FEIS). The Dakota Chapter requests that the Forest Service (FS) conduct a cumulative effects analysis of the loss of roadless acreage on the Little Missouri National Grasslands (LMNG) before finalizing the Record of Decision (ROD).

The proposed alternatives would have various mixes of management area. Management direction for MA 1.2, 1.2a, 1.31, 2.2 and the 'no new road' designations in 3.63 areas would retain roadless characteristics. On the Little Missouri National Grassland, these acres vary as shown in the following table. Acreages may vary slightly due to mathematical rounding.

Acres of roadless in MA 1.2, 1.2a, 1.31, 2.2 and portions of MA 3.63 that would remain under Alternatives (Alt.) 1-5 on the Little Missouri National Grassland.

Alt. 1	Alt. 2	Alt. 3 (draft)	Alt. 3 (final)	Alt. 4	Alt. 5
42,540	59	149,480	120,770	185,120	104,810

The effects of fragmentation are noted in FEIS, Chapter 3, p 3-3-179. Additional information is available in the administrative record.⁹

⁹ See Svingen, Dan. 2002. Memo to David Pieper regarding LRMP FEIS-fragmentation. 2 pp.

Comment: There are also unstated acres of protection slated for the sensitive species and the Eastern Boggy Biome.

Management direction for the prairie boggy wetlands guild is provided in Chapter 2 , p. 2-32, of the Land and Resource Management Plan for the Dakota Prairie Grasslands. Further direction is provided in Chapter 3, p. 3-31 point 1, under MA 3.64., where species of this guild are found. Additional information on the species found in this guild is found in the FEIS, Appendix H. The Alternative 3 map which accompanied the Grasslands plan shows the location of MA3.64 areas on the Sheyenne National Grassland.

Comment: Pg 1-27 Item #4. Although the criteria was reduced from 3,000 acres in the DEIS, the criteria of 2,000 acres is still quite high. Such a parcel can offer very high recreational value and wildlife habitats. Efforts should be made to obtain access to parcels this large. Perhaps a criterion of 640 acres would be better.

The guideline provides a course filter useful in considering proposals. Site-specific analysis will identify and retain those areas with special areas such as high recreational value and wildlife habitats.

Comment: Rock Creek Area does not consist of "gentle slopes" and has many more mule deer than elk; Wildlife Draw contains considerable amounts of the noxious weed, hound's tongue, and the numerous big sagebrush in the area would indicate to us that prairie dogs have not been present there for eons.

In the Errata, the description of Rock Creek Area has been corrected to include mule deer, and the description of Wildlife Draw has been corrected to include the presence of hound's tongue.

Comment: Rare plant communities do not imply that the plant species occurring within them are either rare or endangered only that someone has found that a particular group of species only make up the most important species in the community in rare instances. Does that have any real environmental significance or any other significance that would justify an effort to preserve such communities? There is no reason to suppose it does.

The environmental significance of rare plant communities is discussed on p. 3-195 of the FEIS, including supporting references.

Comment: E-5 - "...prescribed natural fires..." in RNA's. This would lead one to think that you have some pretty high connections. Please define "prescribed natural fires."

The definition can be found on p. G-38 of the Land and Resource Management Plan under Prescribed Fire. In the Errata, *with* was changed to *within* in the definition of prescribed fire.

Comment: The Grand River Badlands and South Fork areas of the Grand River NG are classified properly as "Low." However, almost all of the areas, as shown in Table C 1 below, have either "Moderate" or "High" ratings for "Potential to Manage Boundaries" which are erroneous for this factor based on what is written in the narrative for each area.

Roadless area status is displayed in Table C 1 (FEIS, Appendix C). The narratives do indicate there would be problems managing the boundaries that were used in the “public proposed inventory (FEIS, Appendix C, pp. C-14, C-19, C-23).” In response, the Grand River Badlands was dropped as an inventoried roadless area, and the boundary of the South Fork Area was modified. All of these public proposed areas will be managed as MA 6.1 or MA 3.65.

Comment: The description of the "Availability Ratings" (Table C-6) is highly confusing for all of the terms because a "High" rating means that "Potential for conflicting values is "Low" (except for Plant and Animal Species, this will be discussed later).

FEIS, Appendix C, p. C-12, explains how wilderness availability was assessed. Table C-6 (FEIS, Appendix C, p. C-325) summarizes how wilderness availability ratings were defined. For example, an area was categorized as having high wilderness availability if there was little potential for conflicting with oil, gas and coal development. Likewise, an area was categorized as having high wilderness availability if designating as wilderness would have mainly positive effects on key plant and animal species. Conversely, an area was categorized as having low wilderness availability if designating that area as wilderness would result in substantial conflicts with oil, gas, and coal development, and/or would result in mostly negative effects on key wildlife and plant species.

Comment: Oil, Gas, and Coal--Even using the reverse and misleading logic in the definitions given for the Availability Ratings, the ratings for Oil, Gas, and Coal in the tables for some proposed Roadless areas (Tables C-9 through C-12) are not consistent with the write-up.

The inventoried roadless area received a low availability rating if it had the following: a majority of the acreage leased with NSO stipulations, non-NSO leases scattered across the roadless area, or private mineral ownership existing under federal land surface. See FEIS, Appendix C, p. C-328.

Comment: Effects on Adjacent Lands--Tables for most of the proposed areas rate this factor as "Moderate" (Potential for conflicting values is moderate--Table C-6). However, based on the write-ups for each data, the ratings for almost every area should be "Low" (Potential for conflicting values is "High"). For the proposed Delamer (Table C-70), Durler (Table C-73), McLeod (Table C-76), Sheyenne (Table C-79), and Venlo (Table C-82) areas on the Sheyenne NG, the rating for this factor is "High" (Potential for conflicting values is low).

The rating for "Effects on Adjacent Lands" in the tables for the areas on the Sheyenne NG should be low (Potential for conflicting values is high--Table C-6). The same is true for the Steer Creek East and West areas on the Bessey Ranger District (Tables C-103, C-106).

Ratings for each area were assigned by an interdisciplinary team familiar with that site. Specific

rating were given for a variety of categories. These are shown in FEIS, Appendix C, Tables C-9 through C-12 (tables start on FEIS, p. 3-330). These rating are qualitative, rather than quantitative. The Forest Service believes the ratings shown are reasonable and appropriate. Several factors were considered in the "Effects to Adjacent Landowners" category, including noxious weeds, potential for trespass, and use of roadways. As noted in the narrative for Delamer (see FEIS p. C-150), the most likely source of conflict would be the spread of noxious weeds. However, the Forest Service will be controlling noxious weeds regardless of this site's designation (see FEIS p. C-150). Therefore, there is little potential for conflict with neighboring lands. Therefore, this site rates as "highly available as wilderness."

Comment: A bigger problem is that, for many of the areas classified as "Moderate" for "Potential to Manage Boundaries" in the DEIS, the classification was changed to "High" in the FEIS in spite of reviewer comments on the DEIS that clearly pointed out that the ratings were erroneous for this category.

Review of this information for the Dakota Prairie Grasslands indicates no change in their category between draft and final (FEIS Table 3-9 p 3-330).

Comment: Page (3-6), 1.31 - Nonmotorized Backcountry Recreation: We recommend the acreage allotted to MA1.31 be returned to the DEIS level of 121,950 acres since there is not objective analysis explaining a 43% reduction (from 121,950 acres to 69,050 acres) between the DEIS and the FEIS.

The change in MA 1.31 acres is attributed to the following: 1) The Bell Lake area was changed from MA 1.31 to MA 6.1 due to a change in oil and gas activity. Some large oil and gas discoveries were made between the DEIS and the FEIS. Due to the increase in oil and gas activity, it no longer made sense to try and manage the area as MA 1.31; 2) Portions of Magpie, Bullion Butte and Wannagan contain relatively large areas of outstanding (private) minerals. The mineral rights are dominate to the surface estate which means the private holders of these mineral rights have the right of access and development. Therefore, some of the MA 1.31 portions of these areas were changed to MA's 3.65 and 6.1; 3) Finally, portions of Kinley Plateau and Bullion Butte were changed from MA 1.31 to MA 1.2a (Suitable for Wilderness). Alternative management strategies for managing Nonmotorized Backcountry Recreation are considered in the FEIS (Chapter 2, pp. 2-242 thru 2-245).

Comment: The FEIS does not adequately address the existence of roads, improvements, and private mineral rights, all of which disqualify these areas from any common-sense definition of roadless or wilderness suitability.

Appendix C of the FEIS evaluates the inventoried Roadless Areas according to direction found in 36 CFR 219.17 and FSH 1909.12, Chapter 7.

Comment: If the complete list of proposed Roadless areas is not dropped from the Proposed Alternative, then a clear section must be added to each area write-up specifying how the FS plans to deal with the weed problem in that area.

Direction for noxious weed control is found in the Land and Resource Management Plan on p. 1-3, Goal 1.c, Objectives 4 - 7 and on p. 1-20, Noxious Weeds and Invasive Species standards and guidelines. These objectives, standards, and guidelines apply to all geographic areas and management areas on the Dakota Prairie Grasslands.

Comment: A review of the descriptions of Roadless Areas in the FEIS indicates very little change from the DEIS in spite of very extensive comments from at least W.A. Laycock and the Heritage Alliance of ND (HAND).

The criteria for determining areas are found in the 36 CFR 219.17 and the Forest Service Handbook 1909.12,7 (FEIS Appendix C). The commentator is correct in stating that inventoried areas have changed little. On the Grand River, one of the public proposed areas was dropped (Grand River Badlands) and another areas was made smaller (South Fork). Elsewhere, few changes were made in the roadless inventory. However, there were many changes in the way the roadless areas would be managed under the new Land and Resource Management Plan. These changes were made in response to the many public comments. Changes were made in Bell Lake, Bullion Butte, Kinley Plateau, John's Town/Horse Creek and in portions of Magpie, Bullion Butte, and Twin Butte. A roadless inventory was only part of the Land and Resource Management Plan. In addition, the Land and Resource Management Plan contains management direction for the roadless areas.

Comment: Living next to your roadless area, which I am against, the plan states it has an environmental class 1 restriction on roadless areas, what does this mean?

Class 1 refers to classifications of air quality as directed by the Federal Clear Air Act. Within Class 1 areas, the act protects air-quality-related values from adverse impacts due to air pollution. Roadless areas do not have a Class 1 designation. Only wilderness areas create before Aug 7, 1977 have a Class 1 designation. See page 3-411 of the FEIS, Chapter 3, for additional information.

Comment: The Conata Basin East and West areas (Wall SD) should be evaluated for potential wilderness designation as well.

Roadless inventory process is described in FEIS, Appendix C beginning on p. C-4. Conata Basin did not meet the established criteria.

Comment: It has since been disclosed that Special Interest Areas identified for the Thunder Basin National Grassland were the product of an agreement with the State and the Forest Service to not recommend wilderness for these areas. The classification of these lands as special interest areas does not conform to Forest Service roadless evaluation policy and essentially implements now suspended Part 219 regulations, which were adopted in the final months of the previous administration. As these areas are proposed without basis, they need to be removed from the final Plan Revision.

The roadless evaluation is contained in FEIS Appendix C and is in accordance with FSH 1909.12, 7.

Comment: The FEIS claims that wilderness recommendations in ND and WY were dropped to respond to public comments and the desires of the State (FEIS A-13). The vast majority of public comments supported more wilderness recommendations not less. Thus the FEIS violates the professional and scientific integrity provisions of NEPA (40 CFR 1502.24) in purposefully misleading the public about how widely supported wilderness designation in the planning area was.

Views regarding wilderness vary greatly. The wilderness recommendations were dropped in response to the unified opposition by elected officials at the local, state, and federal levels. However, these areas will be managed to protect their primitive character.

Comment: In the DEIS, Cow Creek Buttes was recommended for wilderness designation. According to Table 3-194 in the FEIS this area has high capability high availability and high need for Wilderness. The agency has not explained why this area is not being recommended despite its qualifications. In addition, the other agency identified roadless areas on the TBNG also have high ratings with regards to capability, availability and need for wilderness recommendation. The agency has a legal obligation to manage the grasslands for reasonable balance of multiple uses; recommending only a few percent of most of the national grasslands for wilderness designation and allowing the vast majority of the lands to be developed does not represent a reasonable balance. For these reasons the Forest Service should recommend wilderness designation for every area that qualifies at this time.

Alternative management strategies for managing roadless areas are considered in the FEIS. Detailed evaluations are contained in Appendix C.

Comment: The accompanying maps of this area depict the Indian Creek area being bisected by a two-track road that will apparently be outside of the recommended Wilderness area. A contiguous Wilderness unit is preferable from both the users and managers standpoint. The Record of Decision should not distinguish this two-track road from the rest of the Indian Creek area being recommended for inclusion in the National Wilderness Preservation System.

This is not a Forest Service-constructed road and is not maintained. This road provides access to private land inholdings within the area recommended for wilderness. The Blackhills Sportsman presented a resolution supporting Indian Creek as recommended for wilderness as long as the road was left open. This resolution was endorsed by the Sierra Club.

Comment: The preferred alternative proposes no wild and scenic rivers on National Forest lands and only proposes a small segment through Theodore Roosevelt National Park. The analysis for this issue is legally inadequate and must be re-conducted in a supplemental FEIS. Nor does the agency propose any management direction that would protect potential wild and scenic rivers for future consideration. If management actions have reduced or eliminated the eligibility of TBNG stream segments form consideration for W&S River designation the Forest Service violated NEPA by failing to disclose that such impacts would occur. The Sierra Club has recommended 3 areas for wild and scenic designation: areas of the Little Missouri River in ND, Cheyenne River in Buffalo Gap, SD and Cheyenne River in TB WY. All three should be designated in a supplemental FEIS.

The Wild and Scenic River Analysis is contained in the FEIS, pp. 3-389 thru 3-392, and Appendix G. Management Area 4.22 (River and Travel Corridors) was created to protect and preserve scenic values and recreation uses of the Little Missouri River.

Comment: MA 4.22: This category must not be used by Forest Service as a substitute for proposing National Wild and Scenic River designation.

The Wild and Scenic River Evaluation is contained in Appendix G. Alternative management strategies are considered in the FEIS.

Comment: Page (3-17): Little Missouri River RNA - We recommend livestock grazing be prohibited from the river corridor to enhance plant diversity and wildlife utilization of this unique cottonwood gallery. This would provide consistency with FSM 2526.02, FSM 2527.02, and other water/wetland area objectives. We encourage the Forest Service make this a stipulation in grazing permits.

Although rest may allow the Forest Service to meet some riparian area objectives found in FSM 2526.02 and 2537.02, grazing is allowed in RNAs if needed to establish or maintain vegetative communities (FSM 4063.3). Grazing suitability and desired vegetative conditions for the Little Missouri RNA and other RNAs will be analyzed and determined in the final RNA management plan (Land and Resource Management Plan, Chapter 3, page 3-15).

Comment: 2.2 Research Natural Areas Pg 3-19 Samuel R McKelvie National Forest On the basis of resource impacts to sandhills wetlands, trampling of creek bank of Steer Creek, manure in waterways, etc, we recommend the livestock grazing period in this area be eliminated altogether to protect the soil, water and vegetation resources of this RNA.

Specific management actions appropriate for this area will be determined during site-specific planning (p. 1-5 of the Land and Resource Management Plan for the Nebraska National Forest, Special Area Objective).

Comment: Research Natural Areas 2.2 - Item 3 states that all motorized vehicle use to include snowmobiles is limited. Is motorized vehicle use by permittee included under administrative purpose? This needs to be clarified. I assume it is. How can the Forest Service control traffic of snowmobiles on Little Missouri ice within the proposed Little Missouri RNA? I do not believe the Forest Service has control of the riverbed.

Motorized vehicle use (including snowmobiles) by a permittee in a proposed RNA would be included under administrative use. The Forest Service does not control snowmobiles traffic on the Little Missouri River but could control use within the RNA on National Forest System land.

Comment: The Forest Service Region One office has identified plant communities and landscape types that need to be represented in Research Natural Areas. The Dakota Prairie Grasslands (in Region One) has failed to identify many of these categories as RNAs in this draft planning process. Many of these plant communities and landscapes are unique in the Forest Service system to these grasslands. If RNAs are not identified for all of them no, then when will this occur? No explanations are offered for this known oversight.

The commenter is referring to the assessment *Research Natural Areas of the Northern Region: Status and Needs Assessment* (Chadde 1995). The Forest Service did use this assessment to identify plant communities needed for inclusion in RNAs during the planning process. It was not possible to find good examples of each plant community type during the planning process, therefore it is true that some plant communities are not represented in the proposed RNAs found in this plan. Future planning efforts will provide an opportunity to add additional plant community types to the RNA system.

Comment: Cheyenne River Zoological SIA, one standard states manage mature cottonwood willow riparian area while promoting best habitat conditions for mountain plover breeding, nesting and brood rearing. Nowhere in any of these documents can you find two standards or management objectives that are more diametrically opposed to each other than these. Rapid development of woody species requires very specific grazing patterns, probably with no heavy grazing. In Appendix H of the FEIS, it states the following about the mountain plover: On its breeding range, this species prefers large flat grassland areas with sparse and short vegetation and bare ground. This condition will be found on heavily grazed areas, including prairie dog towns. You can manage for one or the other of these two objectives but not for both on the same area.

The management area is large enough to contain both habitat types, but, as you note, they cannot occur in the same place. This area includes a portion of the Cheyenne River as well as extensive prairie dog colonies and occupied mountain plover habitat on the uplands. This difference in adjacent habitats allows the Forest Service to manage for both objectives in the same Management Area.

Comment: 2.1 Special Interest Areas We suggest the Forest Service examine portions of the Special Interest Areas (including the Bessey and Sam McKelvie Forest) for restoration to grasslands to provide habitat for local native wildlife species. Portions of these areas should be analyzed to manage and allow for the gradual transition from tree species back to the native grassland that historically occupied the area.

In Alternatives 1 and 2, the FEIS considers managing the area as rangeland emphasis which would allow a gradual restoration of the native grasslands.

Comment: Page (1-5): Special Areas - Goal 2b, Objective 1: "Within 15 years" sets a low bar for attaining protection to special areas and features. We recommend changing to "Within 5 years..."

The Forest Service has reviewed the language of this objective and the existing timeframe is appropriate. Objectives must be attainable. Therefore, 15 years provides a reasonable timeframe for meeting this objective; 5 years would not provide sufficient time.

Comment: Goal 2b: Special areas objective #1 in DPG Plan: wilderness SIAs and RNAs should be protected in less than 15 years. We recommend this objective be modified to specify that those areas will be protected upon adoption of the proposed plan.

Upon the signing of Record of Decisions for the Land and Resource Management Plans, several standards and guidelines will go into effect, providing protection for these special areas. However, additional reclamation or restoration may be needed to conserve features within some of these management areas. Therefore, the Forest Service has established an objective of 15 years to protect their important features.

Comment: Goal 2b: Special areas objective #1 in TBNG and NNF Plans and Special areas objective #2 in DPG Plan: RNA management direction and monitoring plans are supposed to be completed during the plan revision process not 5 years afterwards. See 36 CFR 219.25, 219.11(d) and 219.12(h).

36 CFR 219.25 requires identification and recommendation for establishment of RNAs in the Land and Resource Management Plan (FEIS, Appendix E). 36 CFR 219.11(d) requires monitoring (FEIS, Chapter 4). 36 CFR 219.12(h) requires alternatives considered in the FEIS.

Comment: For 3.64 Special Plant and Wildlife Habitat General #3 and #4 and 2.2 Research Natural Areas Infrastructure #1, we recommend some guidance be provided such that the resource damage created by new road construction does not exceed the existing resource impact it is intended to fix.

Construction of roads will follow existing Forest Service standards and policies that minimize damage to resources. See general standard and guidelines for Management Area 3.64 in the Land and Resource Management Plans for the Nebraska National Forest and the Dakota Prairie Grasslands. In addition, at the site-specific level, mitigation and guidance can be provided to ensure that resource conditions are improved during the road reconstruction process.

In accordance with the guideline specified, there will be no new road or trail construction in RNAs. Correction of resource damage from existing trails is allowed.

Comment: MA 5.12: For the NNF, no standards are provided for these areas, and the guidelines fail to offer sufficient protection for native flora, fauna and natural processes. No S&Gs at all are provided for this management area in the TBNG plan, which is of particular concern as more acres (160,870 acres) are designated MA 5.12 on the TBNG than under any other management area category.

MA 6.1: No standards are provided for these areas, and the guidelines fail to offer sufficient protection for native flora, fauna, and natural processes. This is of concern on the TBNG, NNF, and DPG which respectively, contain 118,090 acres, 701,750 acres, and 549,720 acres proposed for designation in this category. This amounts to approximately 47% of the entire planning area. Essentially half of the TBNG, NNF, and DPG have been proposed for designation in this category, which is focused on commodity production in general and livestock grazing in particular. We object to this refusal by Forest Service to offer sufficient protections to uses of the NG for watershed and wildlife and fish purposes as prescribed by multiple use sustained yield act (16 USCA 528).

In the case where the management area does not provide specific standards and guidelines, the grassland-wide direction in Land and Resource Management Plan, Chapter 1, and applicable geographic area direction in Land and Resource Management Plan, Chapter 2, apply.

The Forest Service disagrees that MA 6.1 has no environmental protections. The desired condition for this Management Area includes "...will be managed to preserve the ecological integrity across the landscape, especially large blocks of native upland prairie. This MA recognizes that grazing and mineral interests, among other resource uses, will be more visible than in other MAs. Standards and Guidelines for MA 6.1 include all of those listed Dakota Prairie Grasslands wide (See Chapter 1 of the Land and Resource Management Plan) and those listed for each Geographical Area (See Chapter 2 of the Land and Resource Management Plan). All are designed to maintain or enhance ecological

conditions.

Comment: Page (3-37): Recreation (#2) - We recommend the objective be re-written as a standard to read: "Prohibit new OHV trail construction and minimize resource impact from existing OHV trails." Standard.

In the Errata, Recreation guideline #2 has been changed to a standard in the Land and Resource Management Plan for the Dakota Prairie Grasslands. There are no existing OHV trails within this MA. The standard as written will provide protection to this area from OHV trails.

Comment: A glaring omission in the proposed TBNG plan is the lack of direction regarding current roadless areas. The Alternative 3 map shows areas where no new road construction will be allowed. We applaud the Forest Service for recognizing the importance of the roadless areas and trying to help maintain their natural quality by protecting them from new road construction. However, after reviewing the Goals and Objectives, Standards and Guidelines, Geographic Area Direction, and Management Area Direction, we have been unable to find any direction on this issue. So it seems that the efforts of the planning team in trying to protect roadless areas were wasted. The agency must include new standards in the proposed plan that clearly outline that no new road construction is allowed in roadless areas (including all such areas referenced earlier in our comments).

The ID team completed an inventory of roadless areas (IRAs) for the NGP. That inventory and associated information for each roadless area is contained in Appendix C of the FEIS. The IRAs are underlain by a variety of different management areas which in turn guide the management of that IRA. IRAs are underlain by MAs 1.2 (Suitable for Wilderness) and 1.31 (Non-motorized Backcountry Recreation). Management direction contained in these MAs guide how that IRA will be managed.

The recent Roadless Conservation Rule prohibited new road construction/reconstruction in IRAs. That rule is currently enjoined by the courts. While that is being decided, the Chief of the Forest Service has reserved all road construction/reconstruction decisions to himself and in some cases the Regional Forester.

Comment: In addition, the Dakota Prairie's 1.2a Suitable for Wilderness management area will not provide permanent protection but can be changed administratively at any time.

The Forest Service does not designate Wilderness; Congress designates Wilderness. The Forest Service will manage this area to protect wilderness values. Uses and activities will only be allowed if they do not degrade wilderness characteristics. For more information on standards and guidelines see pp. 3-3, 3-4, and 3-5 (Land and Resource Management Plan, Chapter 1).

Comment: Page (3-19): Sheyenne National Grassland - Fritillary Prairie RNA. Due to the presence of rare species including butterflies, we recommend that haying be prohibited from this unit to preserve late season nectar and larvae host sources. There is no analysis to demonstrate mowing has a non-significant impact on butterflies population numbers.

The effects of haying on rare butterflies are addressed in FEIS Appendix H (Page H-70). Some research has found that haying in late fall may be favorable to butterflies. In response to this, a guideline has been developed to emphasize late fall mowing in sites with rare butterflies (Land and Resource Management Plan, Chapter 2, p. 2-31). As directed in the grassland-wide goals and objectives in the Land and Resource Management Plan, a management and monitoring plan will be developed. At that time, specific direction will be developed for Fritillary Prairie RNA.

Comment: Quaking Aspen Stand SIA (NNF): a standard should be added which prohibits human disturbance of the beavers in this SIA.

The purpose of Quaking Aspen Stand SIA is to protect a unique community. Protection of the community also requires management of the beaver (Land and Resource Management Plan, Chapter 3, p. 3-16).

Comment: Page (3-30) 3.64 Special Plant and Wildlife Habitat: Mineral and Energy Resources (#2) - This point needs to be clarified prior to providing commentary. Is this a standard or guideline? Why is Cedar River mentioned specifically? What about the other National Grassland units with Dakota Prairies?

Management Area Direction for 3.64 permits oil and gas leasing but prohibits ground-disturbing activity. This makes the oil and gas resource available and protects the oil and gas resource from drainage. Minerals and Energy Resources #2 has been corrected in the Errata. This management area has low to no mineral potential in other grassland units on the Dakota Prairie Grasslands.

Comment: For 1.2A-Suitable for Wilderness Fire #1 and 1.31 Nonmotorized Backcountry Recreation Fire #1, we suggest adding language to ensure fire suppression machinery (if used) is cleaned and made free of weeds and/or weed seed as not to introduce or spread noxious weeds and invasive species.

There is a grassland-wide and forest-wide direction listed under Land and Resource Management Plan Section J that outlines provisions in contracts to limit land and resources to exposure to these plants. This will be applied to any project during the site-specific analysis.

Comment: MA 3.63: In 1994, the Custer NF contracted for a review of the literature in relation to the lands now called the DPG. The resulting study (Knowles and Knowles 1994) suggested that the McKenzie, Medora, and Grand River Ranger Districts should each be a major black footed ferret reintroduction site, resulting in about 15,000 hectares of prairie dog colonies. This Knowles and Knowles study constitutes the best available science, and should be incorporated into the final selected alternative. At least one ferret recovery area should be identified in both the Medora and Grand River Ranger Districts. The FEIS preferred alternative must increase prairie dog acreage across the planning area in order to facilitate both black footed ferret and prairie dog recovery.

Knowles and Knowles (1994) was incorporated in FEIS, Appendix H, p. H-329. A range of reasonable alternatives for the black-footed ferret reintroduction was considered in the FEIS. One reintroduction area was identified on the Little Missouri National Grassland in the Preferred Alternative. Development of a prairie dog colony complex is prescribed for the Grand River National Grassland under the Preferred Alternative.

Comment: 3.51 Bighorn Sheep The FEIS reduces bighorn sheep designated habitat by nearly 1,000 from the Draft EIS. We strongly urge the Forest Service to restore the acreage to MA 3.51. There appears to be no analysis or justification for why this acreage was reduced.

Analysis between the Draft and Final EIS indicated an area of approximately 1,000 acres of unsuitable bighorn sheep habitat. This area was removed from the MA 3.51 (Nebraska National Forest Land and Resource Management Plan).

Comment: NGPPR FEIS Fails to Fully Address Effects of Air Quality Standards Plan Revision and FEIS Blur Regulatory Air Quality Class Distinctions The FEIS appears to express the intent to apply Class 1 air quality criteria to various management areas on the ND National Grasslands, despite the contrary provision in the Clean Air Act and regulations. Most of the LMNG inventoried roadless areas are within 40 to 60 miles of the Theodore Roosevelt National Park, which is a Class 1 air quality area. Moreover, the air quality reference sites are to be located within these inventoried roadless areas. These two facts will have potentially significant impacts on the oil and gas fields in the Williston Basin, as well as the nascent coalbed methane development in ND. Needless to say, the proposed coal fired power plant for western ND will have a very difficult time securing approval. Power plant emissions are not adequately discussed or quantified in the FEIS despite the fact that several plants exist in these air sheds. Nor is there any question that emissions would affect the Class 1 areas. Agricultural activities, especially farming, can generate considerable fugitive emissions of particulate matter. The FEIS mentions this as an activity on lands outside the grasslands but provides no information and makes no assessment as to the impact of these emissions on air quality of the grasslands. Standards and Guidelines Implement de facto Wilderness Management and Class 1 Air Quality Whether these areas are called wilderness or not, it is clear that the agency's intention is to manage them all as de facto wilderness, regardless

of the name used. The FEIS and Plans Revision appear to use the agency's land management authority to impose a higher level of air quality protection for these areas, which means a lower level of emissions impacts from industries in the Power River Basin. This may lead to additional restrictions or chill future operations, energy leasing, or new power plants. It also leads to significant regulatory ambiguity, since the state of ND has primary authority and the Forest Service has limited, if any, authority to regulate air quality, either directly or indirectly.

The Forest Service is not proposing any Class I airshed requirements for the proposed wilderness area designations. As stated in the FEIS, Chapter 3, pp. 3-411 to 3-418, the Air Quality regulators (the states and EPA) administers the law, policy and direction for air quality standards, with which the Forest Service will comply. Analysis of a coal-fired power plant in southwestern North Dakota is beyond the scope of this FEIS since the power plant is in the future (speculative) and there are not enough details at this time.

Comment: Nevertheless, the 2001 Revision proposes to totally exclude our industry from 19,700 acres of land considered as "research natural areas" and 41,500 acres of land deemed "suitable for wilderness," despite the fact that the lands do not meet the criteria for establishment as wilderness and the Forest Service itself recognizes that there is no Congressional or Gubernatorial support for wilderness designation. In addition, the 2001 Revision proposes to effectively excluded our industry from 6,400 acres of Special Interest Area, 69,400 acres of "Backcountry nonmotorized" lands and 19,300 acres of Bighorn Sheep Habitat," and substantially impede our access to 35,800 acres contained in the new MA 3.51A, entitled Bighorn Sheep-Non-Federal Minerals. For the reasons set forth in these comments, we respectfully urge the Forest Service to make appropriate modifications to ease the cumulative effect of these restrictions on the oil and gas industry.

Of the 41,500 acres "suitable for wilderness," 2 of the 4 areas are already administratively not available, so this represents no change in these areas. The other two areas are available for leasing, but they will be leased NSO. The current leases will be honored, but no new leases will be issued. The bighorn sheep areas and backcountry nonmotorized areas are also proposed for leasing with an NSO stipulation.

In reviewing comments on the Land and Resource Management Plan and FEIS, the Forest Service has decided to make an additional change to MA 3.51A and Research Natural Areas. MA 3.51A included 35,800 surface acres and 26,200 mineral acres. The Forest Service has created a new MA (3.51B); it includes four of the five areas that had been in 3.51A in the Land and Resource Management Plan. The new MA 3.51B would include 19,440 acres of federal minerals that would be available for leasing. The primary change in this area will be that leasing will occur under strict CSU/timing limitations to protect bighorn sheep. Research Natural Areas will be available for lease with NSO stipulations(reference the Record of Decision and its attachments).

In MA 3.51A (6,760 acres of federal minerals), the possibility for development was left open for review and potential mineral development if the private minerals or adjacent spacing units in an area are developed and the federal minerals can be developed with no additional significant impact to sheep.

Comment: In the early 1970s, 474,000 acres of roadless areas were identified on the LMNG (Ellison 1973). The most recent roadless area inventory of the LMNG completed in 2000 (27 years later), found only 219,000 acres with more than 80,000 of these acres underlain by undeveloped oil and gas leases. The narrative regarding Table 3-193 in the FEIS indicates that when existing oil and gas leases are taken into account, this acreage may be reduced to as little as 84,000 acres (this estimate assumes no additional leasing in these areas and no new roading outside of currently leased areas.). Questions unanswered in the FEIS include: How many qualifying roadless areas might be expected under the different alternatives if future oil and gas leasing, expiring leases, leases held by production, the differing management area prescriptions, and the Reasonably Foreseeable Development Scenario for oil and gas are taken into account? What would be the acreages of these roadless areas? How do these acreages compare with those under the "No Lease Alternative?" What about roadless area values?

In all alternatives, there are 17 inventoried roadless areas. MA 1.2A (Suitable for Wilderness) has four inventoried roadless areas; MA 2.2 (Research Natural Areas) has two. There would be at least six roadless areas with acreage that is not administratively available for leasing. The total acres would be approximately 54,000. A no lease alternative would not apply to valid existing leases. Areas with no surface occupancy (NSO) stipulations would remain roadless, but existing leases within these areas could be accessed from perimeter sites. IRA descriptions and parameters can be found in the FEIS, Chapter 3, p 3-363 to 3-371.

Comment: The Dakota Prairie Grasslands Plan and FEIS do not address the effects of the roadless rule, which essentially closes as much as 218,650 acres mineral leasing. If the roadless acres are added to Research Natural Areas and Special Interest Areas, 265,600 acres or about 27% of the Little Missouri National Grassland is closed to all forms of mineral development.

The Dakota Prairie Grasslands Plan and FEIS also did not take into account the combined effects of the roadless rule and transportation rule on oil and gas lease operations within the roadless areas for those portions currently under lease. The rules require an environmental impact statement for any road that may alter the roadless character. Unless drilling and development could occur outside of the roadless areas, it is a safe assumption that the remaining leases within the roadless areas will not be developed. The FEIS does not discuss the effects of these decisions on County royalty rights or mineral rights, or the state land leases located within the roadless areas.

The FEIS assumes that revisions in stipulations and management direction will not affect existing leases. The Forest Service cannot change lease stipulations without the consent of the lessee but the reality is environmental review of drilling and development does consider plan direction and conflicts.

The management direction and standards will directly affect the environmental analysis required for road construction, drilling and field development, even when the terms of the lease cannot be changed. Past experience shows that industry will

delay drilling or will not drill in areas which have new restrictions, due to the higher costs, regulatory hurdles, and expensive NEPA documents. With respect to the rest of the Little Missouri National Grassland, the balance of the land is subject to management direction that will increase the cost of development for any areas not under current production. It will also discourage infield wells, which are intended to maintain production levels.

The Forest Service increased land in bighorn sheep management to 76,060 acres from 57,269 acres. While about 26,200 acres are theoretically available for mineral development, this is only if there is production on the adjacent non-federal mineral estate. This will not occur if the land is not under lease. FEIS 3-132. Changing the non-federal mineral estate to Management Area 3.51 from will not change the applicable standards. This whole debate begs the question of whether the surface owner can lawfully restrict access to the mineral estate. The effects of the increase in black-footed ferret reintroduction from 0 to 34,310 acres will have similar effects. Due to the widespread application of NSO stipulations, restrictions on road construction or reconstruction, or timing limitations these areas are unlikely to be drilled or developed.

See Land and Resource Management Plan for the Dakota Prairie Grasslands, Chapter 3, p. 3-25. MA 3.51A is managed to benefit bighorn sheep. Bighorn sheep viability is the primary concern in this area. Conflicts will be resolved in favor of bighorn sheep habitat. This MA is distinguished from MA 3.51 by the inclusion of non-federal ownership. The Forest Service does not regulate private mineral ownerships. These can be developed at the mineral owner's discretion. The Forest Service has administrative authority over National grasslands surface does have authority over most federal minerals. In MA 3.51A, the Forest Service may decide to develop mineral interests if no additional significant adverse impacts to bighorn sheep would occur. This approach adds flexibility and opportunities for mineral development. The addition of MA 3.63 was necessary to fulfill Forest Service responsibilities under the Endangered Species Act.

In reviewing comments on the Land and Resource Management Plan and FEIS, the Forest Service has decided to make an additional change to MA 3.51A and Research Natural Areas. MA 3.51A included 35,800 surface acres and 26,200 mineral acres. The Forest Service has created a new MA (3.51B); it includes four of the five areas that had been in 3.51A in the Land and Resource Management Plan. The new MA 3.51B would include 19,440 acres of federal minerals that would be available for leasing. The primary change in this area will be that leasing will occur under strict CSU/timing limitations to protect bighorn sheep. Research Natural Areas will be available for lease with NSO stipulations (reference the Record of Decision and its attachments).

Comment: Page 98 of chapter 3, paragraph 1 (FEIS), could reduce and even restrict grazing on Research Natural Areas (RNAs). Beyond that, it states that, "For the protection of the integrity of the management direction of the RNA or sensitive ecosystem there may be added a 1/4 mile buffer zone surrounding each management area." In other words, a 400-acre RNA will become 800 acres with the buffer zone.

When the site-specific management plans for RNAs are written and approved, grazing may in fact be reduced or restricted within a specific RNA. This activity would proceed through the NEPA process and public input would be invited. With regards to your comment on buffer zones around the RNA, the Forest Service was unable to locate any reference to "a buffer" and therefore cannot respond.

Comment: Under MA 3.51A, new leasing would be allowed only after the development of a well on an adjacent spacing unit or the construction of an access road across the area to access existing rights. This management strategy makes it difficult if not impossible for an oil and gas company to strategically plan future projects. There is the "unknown" of the word "may" in that the adjacent federal minerals "may be leased" using controlled surface use (CSU) stipulations "if no significant adverse impact to bighorn sheep would occur. Realistically, the lands included within MA 3.51A are not considered available for lease. This dilemma will be resolved should the Forest Service revise the wording of the section as recommended by the North Dakota Petroleum Council.

A new management area has been developed for 4 of the 5 areas that were 3.51A. The new area is 3.51B and it includes all except the Hank's Gully parcel of 3.51A. The new management area will be leased with CSU and timing limitations sufficient to protect the bighorn sheep. Hank's Gully was retained in 3.51A because of the lambing that occurs in this area.

In reviewing comments on the Land and Resource Management Plan and FEIS, the Forest Service has decided to make an additional change to MA 3.51A. The Forest Service has created a new MA (3.51B); it includes four of the five areas that had been in 3.51A in the Land and Resource Management Plan. The primary change in this area will be that leasing will occur under strict CSU/timing limitations to protect bighorn sheep (reference the Record of Decision and its attachments).

Comment: The exclusion of the oil and gas industry from the lands designated as MA 3.51 in the DEIS and Draft Revision is not supported by the scientific literature cited by the Forest Service in support of that exclusion. Other literature concludes that road and well-site construction resulted only in temporary displacement of sheep and that they quickly re-established themselves when construction ceased. At best, the literature suggests the human activity, including that associated with oil and gas development, should be minimized in lambing and lamb rearing areas during lambing and lamb rearing periods. Such can be accomplished through the use of CSU stipulations and timing limitations. Total exclusion of oil and gas, either through the NSO approach of MA 3.51 or the "not currently available for lease" approach of MA 3.51A is not necessary as a good environmental practice.

All literature cited was reviewed, and the NSO stipulations for Management Area 3.51 is the best approach for bighorn sheep. However the Forest Service has recognized that this approach may not meet the desired objectives where existing wells, leases, and private minerals occur. The Forest Service has responded to these conditions in the development of MA 3.51A and MA3.51B. The Forest Service has decided to make an additional change to MA 3.51A. The Forest Service has created a new MA (3.51B); it includes four of the five areas that had been in 3.51A in the Land and Resource Management Plan. The primary change in this area will be that leasing will occur under strict CSU/timing limitations to protect bighorn sheep (reference the Record of Decision and its attachments).

Comment: 3.51 Bighorn Sheep Habitat: Recreation Guideline "Restrict travel to protect sheep concentrations during lambing, breeding, and winter use." Is the restricted travel 12 months? This needs to be clarified.

The lambing, breeding, and winter periods for bighorn sheep do not encompass all 12 months. This guideline would generally not apply to July through September.

Comment: Regarding 3.51a Bighorn Sheep Management Areas, No leases should be issued until every attempt to exchange private surface and subsurface inholdings has been exhausted. The goal of Forest Service management should be "sheep in wild areas." The 3.51a areas should be leased with No-Surface-Occupancy lease stipulations. With FEIS' reduction in areas of suitable sheep habitat I question whether the Forest Service will be able to maintain the required minimum viable population of this desired non-native species. The 12,000 acres of uninhabited bighorn sheep habitat, identified by the ND Game and Fish Department as essential for long-term maintenance of a meta-population, that was eliminated as essential for long-term maintenance of a meta-population, that was eliminated from the 3.51 management designation in the FEIS, should remain a 3.51 areas to enable the future expansion of the state's bighorn sheep population.

In reviewing comments on the Land and Resource Management Plan and FEIS, the Forest Service has decided to make an additional change to MA 3.51A. The Forest Service has created a new MA (3.51B); it includes four of the five areas that had been in 3.51A in the Land and Resource Management Plan. The primary change in this area will be that leasing will occur under strict CSU/timing limitations to protect bighorn sheep (reference the Record of Decision and its attachments).

The Forest Service plans to pursue land exchanges where possible (see FEIS, Appendix A, pp. A-39 and A-87, the Land and Resource Management Plan for the Dakota Prairie Grasslands, p. 3-23, 25, and the Record of Decision for MA 3.51B). 12,000 acres of uninhabited bighorn sheep habitat were removed from the Land and Resource Management Plan and FEIS because there are higher priorities for maintaining bighorn sheep in North Dakota and no plans for reintroduction of sheep into these areas during the life of the plan. Reviews of the FEIS Appendix H concluded viable populations would be maintained.

Comment: Should leasing be considered, extreme care should be taken when developing leasing stipulations based upon the use of GIS data. For each alternative the US Forest Service should request the most current information available from the ND Game and Fish Department regarding bighorn sheep lambing areas and critical habitat. The Game and Fish Department is currently monitoring a number of radio-collared bighorn sheep. These animals are providing a lot of new information about habitat use that formerly was not available. Areas that should not be leased under any alternative include bighorn sheep lambing areas and bighorn sheep escape cover.

The Forest Service is required to use the best available information. Scientific literature has been cited as well as academia. MA 3.51, 3.51A, and 3.51B have been developed to provide direction for bighorn sheep management.

Comment: The FS incorrectly cited R.W. Sayer's doctoral dissertation to support their conclusion that "the most significant disturbance to bighorns in North Dakota was the vehicle traffic and activity associated with oil well maintenance." Sayer concluded only that the "most common disturbance factor" was traffic. Other literature by Mead and Morgatini suggest that sheep quickly adjust to human activity, including that associated with oil and gas development, should be minimized in lambing and lamb rearing areas during lambing and lamb rearing periods. This can be accomplished through the use of Timing Limitations (TL) and Controlled Surface Use (CSU) stipulations.

This statement is in regards to the various types of disturbance that were recorded during the study. On p. 40 (of Sayer's dissertation), "Vehicles were the most common type of disturbance o bighorns at Magpie Creek." Vehicles counts were highest on oil well maintenance days (p. 125).

Comment: The literature also suggests that human activity, including that associated with oil and gas development, should be minimized in lambing and lamb-rearing areas during lambing and lamb-rearing periods. This can be accomplished through the use of timing limitations (TL) and Controlled Surface Use Stipulations (CSU). Making federal minerals "not currently available for lease" is not necessary as a good conservation practice.

The Forest Service is required to use the best available information. Scientific literature has been cited as well as academia. MA 3.51, 3.51A, and 3.51B have been developed to provide direction for bighorn sheep management.

Comment: Through the Governors Working Group, industry has provided an acceptable alternative to the non-leasing of federal minerals in MA 3.51A. The 19 October 2001 Hayden-Wing Associates analysis, and associated reference material, outlines stringent criteria that will allow oil and gas operations in these areas while protecting bighorn sheep and their habitat. There fore, suggested changes to MA 3.51A Bighorn Sheep Habitat with Non-Federal Mineral Ownership, Chapter 3, Page 3-25 and 3-26 and Appendix D page D-22 are enclosed.

The Hayden-Wing ideas have been considered and are part of the administrative record. In reviewing comments on the final plan and FEIS, the Forest Service has decided to make an additional change to MA 3.51A. The Forest Service has created a new MA (3.51B); it includes four of the five areas that had been in 3.51A in the Land and Resource Management Plan. The primary change in this area will be that leasing will occur under strict CSU/timing limitations to protect bighorn sheep (reference the Record of Decision and its attachments).

Comment: We believe Ma 3.51A can provide quality forage, cover, and escape terrain, can be protected while achieving desired population objectives in the presence of oil and gas operations. However, since the Forest Service does not control much of the mineral estate or surface access in these areas, solitude for bighorn sheep cannot be achieved if the Federal minerals are leased or not .

As written, federal minerals in MA 3.51 A may be leased if development of private minerals occurs and the federal minerals can be developed without additional significant impact to the sheep. This management area was developed based on comments from the draft pointing out that bighorn sheep

may be disturbed whether the Forest Service develops the federal minerals or not. This management area provides the flexibility to evaluate the private mineral development and determine what the sheep need.

In reviewing comments on the final plan and FEIS, the Forest Service has decided to make an additional change to MA 3.51A. The Forest Service has created a new MA (3.51B); it includes four of the five areas that had been in 3.51A in the Land and Resource Management Plan. The primary change in this area will be that leasing will occur under strict CSU/timing limitations to protect bighorn sheep (reference the Record of Decision and its attachments).

Comment: Regarding 3.51a Bighorn Sheep Management Areas, no leases should be issued until every attempt to exchange private surface and subsurface inholdings had been exhausted. The goal of Forest Service management should be "wild sheep in wild areas." Bighorns scattered among oil wells does not serve the public's best interests. The 3.51a areas should be leased with No-Surface-Occupancy lease stipulations. With the FEIS' reduction in acres of suitable sheep habitat the Dakota Chapter questions whether the Forest Service will be able to maintain the required minimum viable population this desired non-native species. The 12,000 acres of uninhabited bighorn sheep habitat, identified by the North Dakota Game and Fish Department as essential for long term maintenance of a meta-population, that was eliminated from the 3.51 management decision in the FEIS should remain as 3.51 areas to enable the future expansion of the state's bighorn sheep population.

Land and Resource Management Plan, Chapter 3, p. 3-25 has management direction to pursue land exchanges that would benefit bighorn sheep. Areas changed from 3.51 between the draft and final Land and Resource Management Plan were identified through consultation with ND Game and Fish Department.

In reviewing comments on the final plan and FEIS, the Forest Service has decided to make an additional change to MA 3.51A. The Forest Service has created a new MA (3.51B); it includes four of the five areas that had been in 3.51A in the Land and Resource Management Plan. The primary change in this area will be that leasing will occur under strict CSU/timing limitations to protect bighorn sheep (reference the Record of Decision and its attachments).

Comment: The elimination of 12,000 acres identified by the North Dakota Game and Fish Department for relocation and expansion of bighorn sheep is a direct hit to the viability of minimum population requirements. Efforts should be made to exchange private surface and subsurface holdings prior to any lease activity, and No-Surface-Occupancy lease stipulations need to be upheld.

12,000 acres of uninhabited bighorn sheep habitat that were dropped from the Land and Resource Management Plan and FEIS because there are higher priorities for maintaining bighorn sheep in North Dakota and no plans for reintroduction of sheep into these areas during the life of the plan. Land and Resource Management Plan, Chapter 3, p. 3-25 has management direction to pursue land exchanges that would benefit bighorn sheep. Areas changed from 3.51 between the draft and final plans were identified through consultation with ND Game and Fish Department. Review of FEIS Appendix H determined viability of bighorn sheep would be maintained.

Comment: Land Ownership (p. 3-406 to 3-409): This section talks about land exchanges and purchases but it does not give the pertinent data about how much acreage in each National Grassland is private, state, and Forest Service. This is absolutely essential information because it indicates how much additional land is affected by Forest Service decisions, especially on grazing and stocking rates.

Table 3-8 (FEIS, Chapter 3, p. 3-32) displays federal and other ownership. The “other” ownership in this table includes state and private.

Comment: The plan does not take into consideration the effects of actions such as the off-highway vehicle policy, Roadless rule, or the transportation regulations. This violates federal law.

The Land and Resource Management Plan adopts the OHV Decision and incorporates the OHV EIS by reference. The transportation regulations do not make any management decisions. The Roadless Rule is enjoined and a Forest Plan amendment will be considered if it is released.

Water

Comment: Appendix D: (D-2) Water, Wetlands, Woody Draws... Why is there not an NSO stipulation for these areas? "Trying to locate..." activities and facilities away from these areas is not language strong enough to ensure protections consistent with FSM direction nor common sense land management.

The Forest Service is following FSM directions. NSO stipulations will be on a project-by-project basis, with appropriate NEPA analysis. Guidelines are advisable actions that should be followed to achieve goals and objectives. Deviations from guidelines must be analyzed and documented but do not require management plan amendments..

Comment: Guideline 1-15-34. Maintain hydrological regimes and protect and restore developed springs and seeps where sensitive plant species would be enhanced. The GSI requests formal clarification from the Forest Service that it does not intend by this guideline to restore developed springs and seeps.

Guideline #34 (Land and Resource Management Plan, Chapter 1, p. 1-15) should be interpreted as written: Forest Service will “...protect and restore developed springs and seeps where habitat for sensitive plants species would be enhanced.” The intent of this guideline is to protect and restore the natural flow of water at springs and seeps where water tanks and other developments have been constructed. Construction of these developments may have altered both the local hydrology and sensitive species habitat.

Comment: Water/Riparian/Wetlands; condition of riparian areas (p3-281 to 3-285): Riparian conditions on the Sheyenne NG are not accurately reported in the FEIS. Table 3-142 indicates 40% of the riparian acres on the SNG are estimated to be meeting objectives while another 55% are estimated to be moving toward objectives. About 9 mi of streams and rivers on the SNG are apparently included in their summary (pg H-158). Although the data in the FEIS suggests riparian resources are in relatively good condition riparian inventory summary sheets provided to

McKenzie County by the District Office indicates 37% are functioning at risk with the downward trend. Another 35% are functioning at risk with trend recorded as not apparent. About 7 mi of streams and rivers were included on the summary sheets. Reasons for the discrepancies are not obvious. These discrepancies make the reviewers question the scientific validity of the Forest Service FEIS and Planning documents.

The comparison is of two different data sets. The tables in the FEIS display inventoried data from woody draw riparian areas. The inventory summary data sheets provided to McKenzie County as a result of the FOIA contain stream and woody draw data collected by the Districts.

Comment: The Forest Service planning documents are ambiguous with respect to the amount of riparian areas. The summary on p H-158 Appendix H indicates there are 189 mi of streams and rivers (40,000 ac) on the LMNG. It was not obvious why the summary data obtained through FOIA reported more miles of riparian areas than what is reported on p H-158.

See the narrative that applies to the Table on H-158. The table was not intended to represent all riparian areas. The inventory summary data sheets provided to McKenzie County as a result of the FOIA contain stream and woody draw data collected by the Districts. The inventories for the woody draws and the streams are being updated continuously across the administrative unit.

Comment: Large discrepancies also exist between summary riparian data supplied to McKenzie county via FOIA and riparian conditions summarized in the FEIS. For example 15% and 30% of the riparian areas (expressed in acres) in McKenzie and Medora units respectively were not meeting or moving toward objectives (FEIS pg 3-283 Table 3-142). Summary information on a Forest Service spreadsheet (FOIA) indicates 33% and 47% of the riparian areas measured in miles on the Medora NG and McKenzie NG respectively were functioning at risk with trend not apparent or downward or were non functional. It could be assumed that the latter group of areas would not be meeting riparian objectives. The point is the Forest Service planning documents are ambiguous in terms of extent or amount of riparian areas and the management objectives for riparian areas.

The amount of riparian areas summarized on p. H-158 (FEIS Appendix H) is the best data the Forest Service had at the time the FEIS analysis was conducted. The acres listed in the FEIS are estimated woody draw riparian area data. The information obtained through FOIA, if you are referring to the riparian data FOIA by McKenzie County, is stream riparian data from the Little Missouri National Grassland Rangeland Assessment

Comment: H-134 - Have you considered facilities that were developed partially for stockwater (e.g. artesian wells) that have resulted in new wetlands and riparian areas, and give Grazing Associations and permittees credit for benefits that wildlife receive?

The Forest Service recognizes that these facilities have created wetlands and riparian areas. The positive values of constructed ponds for wildlife are discussed on FEIS, Chapter 3, pp. 3-469 thru 3-470.

Comment: Shortcomings on Riparian Area Management: For those riparian areas which the Forest Service classifies as merely "moving toward" the Forest Plan objectives, there is no indication of: (a) How much progress has been made; (b) what the actual condition of the riparian area is after the progress to date; or (c) how rapid or slow the progress has been.

FEIS, Chapter 3, Table 3-142 (p. 3-283) displays the current condition of riparian areas. Chapter 4 of the Land and Resource Management Plans outlines the monitoring questions to be evaluated.

Comment: The riparian area's health depends on how and what plants are measured. At the very least, other criteria should be used such as percent banks that are stable, width/depth ratios, balance of pools to riffles, and the percent of the flood plain vegetated by perennials. Just because a riparian area is at a particular seral stage does not mean it is healthy.

Chapter 4 of the Land and Resource Management Plans states that the Forest Service will develop a monitoring guide outlining protocols for each monitoring item.

Comment: Water S&Gs: Standard 3. We generally support the water S&Gs in the DPG plan, but recommend that Guidelines #5,6,10 and 13 be changed to standards to make water protection measures more enforceable. Additionally, a number of important issues are not addressed in the water standards and guidelines: 1) In stream flows should be protected at all streams. In the managed recreation S&Gs Standard #1 provides this protection at special recreation features. Protection of instream flows must be extended by including similar wording in the water S&Gs. 2) The agency must take prompt action to eliminate sources of degradation and pollution for streams listed as impaired or exceeding TMDL limits. 3) The agency must prohibit surface discharge of water originating from below ground (e.g. from coalbed methane or coal mine operations) where such discharge would alter water quality and/or adversely affect native species or the aquatic ecosystem. 4) The agency must prohibit introduction of species to waters where such species are not native. 5) The agency must prohibit development of sub surface water resources if the proposed development could adversely affect an aquatic ecosystem could interfere with existing water users or may unreasonably lower the water table. 6) Little Thunder Creek, Black Thunder Creek and the Cheyenne River in the TBNG are listed as impaired under Clean Water Act in 1996. These streams should be identified as deserving special management attention and prioritized watershed restoration.

1) Guidelines are advisable actions that should be followed to achieve grassland goals and objectives. Deviations from guidelines must be analyzed during project-level analysis and documented in a project decision document but do not require management plan amendments. The Forest Service review indicates there will be instances when project level analysis finds deviation from the guideline would better protect resources.

2) The standards and guidelines in the Land and Resource Management Plan, Chapter 1, Section B. Water, (pp. 1-9 through 1-11) support compliance with TMDLs.

- 3) Surface discharge of water originating from coal mines or coalbed methane development does not apply on the Dakota Prairie Grasslands.
- 4) The National Forest Management Act requires the Forest Service to maintain population viability for native and desired non-native species. The Forest Service is committed to controlling undesirable non-native and invasive species (e.g., noxious weeds). See Land and Resource Management Plan, Chapter 1, Goal 1.c., p. 1-4.
- 5) Adverse effects to water resources are addressed in the Land and Resource Management Plan, Chapter 1, Goal 1: Objective 5 and in Section B, Water standard #3 (p. 1-9).
- 6) Your comment is correct; Little Thunder Creek, Black Thunder Creek, and the Cheyenne River were listed as impaired by Wyoming Department of Environmental Quality in 1996. However, recent information (WYDEQ 2000¹⁰ and WYDEQ 2002¹¹) no longer lists these streams with impaired water quality. The standards and guidelines in the Land and Resource Management Plan, Chapter 1, Section B are sufficient to maintain and protect water quality in the Cheyenne River, Little Thunder Creek, and Black Thunder Creek.

Comment: We request that the Revision establish a priority to direct funds towards restoring damaged riparian areas and stream channels that have been degraded from domestic livestock grazing. A recommendation would be to develop a goal of how many acres to restore annually.

Goal 1a, Objective 1 in the Land and Resource Management Plans describes how watershed improvement projects are prioritized.

Comment: TES (#7), we recommend that the Forest Service "Prohibit activities that would negatively impact the hydrologic regime of the Sheyenne River and the Sheyenne aquifer." Standard. This would provide consistency with FSM 2526.02 and FSM 2527.02.

Guidelines are advisable actions that should be followed to achieve goals and objectives. Deviations from guidelines must be analyzed during project level analysis and documented in a project decision document, but do not require management plan amendments. The Forest Service review indicates there will be instances when project level analysis finds deviation from the guideline would better protect resources.

¹⁰ WYDEQ. 2000. Wyoming's 2000 305(b) state water quality assessment report. Wyoming Department of Environmental Quality. Cheyenne, WY.

¹¹ WYDEQ. 2002. Wyoming's Draft 2002 305(b) state water quality assessment report and draft 2002 303(d) list of waters requiring TMDLs. Wyoming Department of Environmental Quality. Cheyenne, WY.

Comment: Page (1-10) In Standard 1 and 2, we recommend striking the word "increased" from each of these two standards.

Page (1-11) Water (#7) We recommend the standard be rewritten substituting "improve" for "sustain." If all perennial streams were in PFC that standard would be ok. However, more often the existing stream health is poor, and the Plan should set a standard that will improve existing poor stream health. This would provide consistency with FSM 2526.02: "...improve riparian areas..." and FSM 2527.02 "...restore the natural and beneficial values of floodplains and wetlands."

This wording comes directly from the Water Conservation Practices Handbook (FSH 2509.25) and applies to all national forests and grasslands in Region 2 of the Forest Service.

Comment: Water S&Gs: Standard #3 Given the continuing loss of wetlands across the west, the plan should not only prohibit any activities near the water body that would cause degradation, but also any activities in the upland that would adversely affect the water body (e.g. by reducing/altering recharge).

The water influence zone is defined in the glossary and does include the upland.

Comment: In the event the Forest Service fails to recognize Sheyenne's importance and does not designate this entire Geographic Area as MA 2.2., we offer the following comments: a) Page (2-30): Infrastructure (#3) - We recommend this guideline be changed to a standard that reads: "Prohibit development of artesian wells." Because of the globally unique ecosystem of the Sheyenne National Grassland and the importance of its groundwater as that affects surface water supply to surface systems (soil moisture, hydrologic regime of wetlands and surface seeps, etc.), the sub-surface hydrology must not be tampered with. This would also make policy consistent with MA 3.66 infrastructure standard and FSM 2502.

The Land and Resource Management Plan for the Dakota Prairie Grassland, Infrastructure, #3, p. 2-30 restricts the development of artesian wells. This guideline will provide sufficient protection to groundwater resources in accordance with FSM 2502. Any deviation from this guideline will be analyzed during project-level analysis.

Comment: Goal 1a, Objective 5: Add the time frame "annually." Monitoring abandoned wells to prevent cross contamination should be done as frequently as needed. "Throughout the life of the plan" does not assure this is done in a timely manner.

As outlined in Chapter 4 of the Land and Resource Management Plan, the frequency of reporting is annually.

Comment: Failure to provide strong, measurable standards for the restoration of woody draws and riparian areas, and failure to suggest adaptive management strategies to remedy continued declining health in riparian areas due primarily to inappropriate livestock grazing in these areas and altered hydrologic regimes. Many land use plans provide that if a grazed area fails to meet management objectives during a grazing season, then (a) the pasture may not be grazed until the standard/objective is met; and/or (b) the pasture is automatically rested for the next grazing season, whether or not the standard/objective was met in the interim. We recommend the Forest Service adopt a similar policies/remedies throughout the grasslands plan.

In Chapter 4 of the Land and Resource Management Plans, a monitoring guide will be developed that will outline protocols for each monitoring item. The Land and Resource Management Plan Standards and Guidelines, Section 1, Item 4 displays the management practices to maintain or improve riparian/woody draws.

Comment: Goal 1a, Objective 4: The value 10% seems like a low bar for stream segments with high resource values. We recommend that number be made higher (20% or 30%) as is reasonable with expected water availability.

Standards provide direction to be followed in all cases unless a site-specific exception is authorized by further NEPA. Monitoring identifies the measurable outcomes to inform management (see Land and Resource Management Plan, Chapter 4, page 4-1). Benchmarks are presented in the FEIS for various resources and land use activities. Monitoring will reflect changes from these benchmarks.

Comment: Standards and Guidelines: To protect long-term stream, wetland, and riparian area health from damage by increased runoff. Other area in the plan suggest removal of dams which would create more runoff, a double-standard. Guidelines for deposits of waste materials, road construction, pipelines, power lines and drilling operations already exist as regulations for oil and gas drilling and production facilities. Paleontological surveys are already in current regulations. there is no basis for any change required.

Dam reclamation is a site-specific project that would require additional NEPA analysis and would have to comply with standards in the Land and Resource Management Plan for the Dakota Prairie Grasslands unless the plan was amended. Surface disturbances associated with oil and gas operations are covered under a Surface Use Plan of Operations (SUPO) supplied by the operator when an Application for a Permit to Drill a well (APD) is submitted. Paleontological resources are protected under a series of steps outlined in the survey process covered in the Land and Resource Management Plan Appendix J, p. J-9.

Comment: Water/Riparian/Wetlands (p. 3-287 to 3-289): Under "Cumulative Effects" (p. 3-288) the statement is made that "Standards and Guidelines would protect riparian resources under all alternatives." If this is true (and it probably is), then what is the point of including a litany of possible effects of grazing or other resource uses, that have no relation either to the existing situation or any proposed alternative?

See FEIS, Chapter 3, Cumulative Effects (p. 3-288). The "litany of possible effects of grazing ..." was based upon documentation of existing situations.

Comment: I assume the protocol for monitoring riparian areas will be the proper functioning condition assessment. This method is not scientifically accepted for establishing baseline information or for measuring trend. It is simply a qualitative assessment, subject to human bias, and is influenced by the length of time between the last grazing period and the timing of the riparian assessment.

Your assumption is incorrect. The Forest Service will use proper functioning condition to evaluate existing condition. Monitoring is discussed in Chapter 4 of the Land and Resource Management Plan. Class A monitoring methods will be used to assess whether perennial streams are in proper functioning condition. Class A methods produce repeatable results that are statistically valid; they are often quantitative. In addition, vegetative conditions will also be used to assess riparian conditions (Land and Resource Management Plan for the Dakota Prairie Grasslands, Chapter 4, p. 4-5).

Comment: Density of water developments over a large area ignores the pattern of water development and the relationship of water development to topography in influencing grazing distribution.

There is no disagreement with this statement. Analysis of specific patterns will be accomplished at the allotment management plan level.

Comment: The FS planning documents are ambiguous with respect to the amount of riparian areas. The summary on page H-158 (appendices) indicates there are 189 miles of streams and rivers (40,000 acres). It was not obvious why the summary data (obtained through FOIA) reported more miles of riparian areas than what is reported on page H-158. However, these data "only represents riparian habitat associated with perennial streams and rivers and does not include forested habitats associated with intermittent water courses." Their definition suggests intermittent stream data should have been summarized and discussed in the FEIS. The omission of intermittent stream analyses from the planning documents is a serious deficiency. Grazing permittees will likely to be significantly impacted when numerous standards and guidelines regarding livestock grazing in riparian areas are not met.

The Land and Resource Management Plan was developed at the landscape scale; therefore it does not address the numerous intermittent streams and/or riparian habitats. Those ecosystems will be addressed at the allotment management plan level, which will include input from permittees during the planning process.

Comment: Riparian condition and trend assessments (of perennial watercourses) in the Grasslands were not accurately described in the FEIS. Summary data for intermittent riparian areas are omitted from the FEIS, although they are included in the riparian definition.

The Land and Resource Management Plan analysis was designed at a landscape scale. The Forest Service excluded intermittent streams in the summary data because they will be analyzed at the project level. They are included in the riparian definition because they are a part of the equation at the allotment management plan and project scales.