APPENDIX A
PUBLIC INVOLVEMENT

APPENDIX A – PUBLIC INVOLVEMENT

During project development and analysis period, collaboration efforts were made to involve, interact, and cooperate with individuals and groups interested in the Mystic Range Project. Part of this effort included public scoping as discussed below.

Scoping

Scoping is the process of obtaining public comments about proposed Federal actions to help determine the breadth of issues to be addressed by project actions. The Mystic Range Project was entered into the Schedule of Proposed Actions (SOPA) in February 2009. A scoping letter soliciting comments on the proposed action, potential concerns, and opportunities for managing the Mystic Range Project was mailed to approximately 91 members of the public, American Indian Tribes, other public agencies, range permittees, organizations, and Forest Service specialists on June 5, 2009. A Notice of Intent (NOI) to prepare an EIS was published in the *Federal Register* on Friday, June 12, 2009. The Notice of Intent and Scoping letter were also made available on the Black Hills National Forest website in June 2009.

A meeting was scheduled with each permittee, to ensure that they understood the NEPA process and the proposed action.

Also, other groups or individuals who are known to have or may have interest in management of the National Forest (and specifically this project area) were included on a mailing and contacted with a scoping letter. The mailing list is held in the Mystic Range Project File.

The public scoping period for this project ended on July 13, 2009. Comments were received in writing via regular mail, email, telephone, facsimile, and personal contact.

A key group that was consulted with and/or involved in the planning process was the South Dakota Game, Fish, and Parks. A concerted effort was made to engage in consultation regarding the project with Tribal contacts known to have interest in management of the National Forest.

Opportunity to Comment

The public was provided an opportunity to comment on the Mystic Range Project Draft Environmental Impact Statement (DEIS) during the 45-day comment period. This comment period began when a Notice of Availability (NOA) was published in the *Federal Register* on April 9, 2010. The comment period ended on May 24, 2010. The Mystic Ranger District received 17 responses, including letters, emails, phone calls, facsimiles, and meetings with individuals at the Mystic Ranger District Office in Rapid City, SD. These responses have been analyzed using a process called content analysis.

Another meeting was scheduled with each permittee, to ensure that they understood the NEPA process and the proposed action.

Comment Content Analysis and Agency Response Process

Content analysis is a method developed by a specialized Forest Service unit, the Content Analysis Team (CAT), for analyzing public comments. This method employs both qualitative and quantitative approaches. It is a systematic process designed to provide a mailing list of respondents, distinguish specific comments in each response, evaluate similar comments from different responses, and from those, identify specific concerns.

The content analysis process strives to identify all relevant issues, not just those represented by the majority of the respondents. In addition to capturing relevant, factual input, the content analysis identifies the relative emotion and strength of public sentiment behind particular viewpoints. The intention of the content analysis process is to represent the public's viewpoints and concerns as fairly as possible, and to present those concerns in such a way as to assist the ID Team in effectively responding to them.

The ID Team reviewed the public comment statements and considered the substance of the concerns, evaluated whether they triggered a change in the environmental analysis, and drafted responses. For some comments, they reviewed the original letter or other input to ascertain the full context for the concern statement.

The ID Team provided any recommendations for adjustments to the DEIS analysis or documentation to the Team Leader for review, consideration, and action. The ID Team provided responses to 17 letters and 156 public comments.

In general, the ID Team responded in the following ways to public concerns as prescribed in the 40 CFR 1503.4.

- Modify alternatives including the proposed action
- Supplement, improve, or modify analysis
- Make factual corrections
- Explain why the comments do not need further Forest Service Response

In response to the comments on the DEIS, the ID Team has made factual and clarifying corrections in the document, and/or explained why changes are not warranted. Minimal response (basically acknowledgement) has been made to concerns stating a position or an opinion. However, these positions and opinions have been compiled by the ID Team for consideration by the Responsible Official. Some specific suggestions for management of the project area may be adopted by the Responsible Official, other specific concerns are beyond the authority of the Forest Service and beyond the scope of the DEIS or determined to be impractical. None of the comments necessitated reanalysis of alternatives.

The following is a list of individuals or organizations that commented on the Mystic Range Project DEIS:

First Name	Last Name	Organization	City	State
Jean	Public		Florham Park	New Jersey
John	Persell	Biodiversity Conservation Alliance	Laramie	Wyoming
Colin	Paterson	Norbeck Society	Rapid City	South Dakota
Larry	Svoboda	US Environmental Protection Agency Region 8 Office of Ecosystems Protection &Remediation	Denver	Colorado
Jonathan	Ratner	Western Watershed Projects Wyoming Office	Pinedale	Wyoming
Jeffery	Vonk	South Dakota Department of Game, Fish and Parks	Pierre	South Dakota
Hiene	Junge	Pennington County Highway Department	Rapid City	South Dakota
Jim	Margadant	Porcupine Holistic Resource Management Team	Rapid City	South Dakota
Brian	Brademeyer	Friends of Norbeck Native Ecosystems Council Defenders of the Black Hills	Rapid City	South Dakota
Brenda	Parsons	Defenders of the Black Hills		
John	Sanders	Sanders Ranch Partnership	Rapid City	South Dakota
Robert	Stewart	US Department of the Interior Office of Environmental Policy and Compliance	Denver	Colorado
Matthew	Kammerer	Permittee	Rapid City	South Dakota
Nancy	Hilding	Prairie Hills Audubon Society	Black Hawk	South Dakota
Shawn & Sherry	Seymour	Permittee	Mud Butte	South Dakota
Merlin & Frank	Bloom	Permittee	Rapid City	South Dakota
Dale	Hogan	Permittee	Newell	South Dakota

Public Comment on the Draft EIS

Public comment on the Draft EIS is rich and varied, and reflects, for the most part, respondents' livelihood, lifestyle, and/or position/opinion on issues or concerns.

In general, approximately half of the respondents were in favor of the Proposed Action (Alternative C) and the other half supported the No Action alternative (Alternative A). The following are sample excerpts from original responses:

"I strongly support Alternative A, cancellation of all term grazing permits" (Letter 4).

"Removing the stress from livestock grazing would allow the most rapid return to full ecosystem functioning, as the DEIS notes regarding Alternative A" (Letter 11).

"I strongly believe that cattle grazing on forest service is vital to the cattle industry. Not only does the cattle grazing help the ecosystem but they help replenish plant and grasses. Proposal C in the Environmental Impact Study is the best choice" (Letter 13).

"Alternative C is my preferred choice since it is not rigid in its ability to take into account unforeseen changes and allows development of fences and springs that would be beneficial to both range and wildlife" (Letter 5).

Agency Response to Public Comments

In the content analysis process, each response is assigned a unique number (ID) and given a number (Letter Number). This ID allows analysts to link specific comments to the original letter. All respondents' names and addresses are entered into a project-specific database, enabling creation of a complete list of all respondents. Each comment is given a number (Comment Number) and is coded by response. The following report: *Mystic Range Project DEIS Public Comment and Agency Response Report* contains the complete list of respondents' comments and the Agency's response. Original letters are held in the Mystic Range Project File at the Mystic Ranger District Office in Rapid City.

Letter No:	Comment No:	Resource:
1	1	Plan

Public Jean

Comment:
I oppose allowing cheap cattle ranchers to destroy this land when general taxpayers all over this nation have worked and slaved and paid taxes to save it for their children. local profiteers take advantage of general taxpayers and cheat them from money. let the ranchers rent private land and see what it costs. the ranchers have been existing on welfare payments for cheap land from general taxpayers. it is time to pay up. they leave the land destroyed. throw out the bums. an dlet them rent private land.

Agency Response:
Chapter 3 of the DEIS discloses the environmental effects of livestock grazing, including no grazing (No Action).

Grazing rates are set by Congress.

Your comments have been noted.

Letter No:	Comment No:	Resource:
2	1	Range

Pennington County Highway Department

Comment:
Livestock management is limited by food and water resources. I had hoped that long term alternatives and goals would eliminate livestock ranging within right-of ways and across high speed roads. The inability of road users to safely stop when they cannot see these dark colored animals, especially during night time hours, leads to the possibility of numerous accidents within Pennington County.

Agency Response:
The proposed action, Alternative C does eliminate livestock access to Sheridan Lake and Deerfield Roads by constructing additional fencing. An underlying need for this proposal is to reduce the risk of livestock-vehicle collisions by fencing animals off the paved road segments within this project area.

Letter No:	Comment No:	Resource:
2	2	Range

Pennington County Highway Department

Comment:
Although access to current water sources may not be available by restricting access to and across roads, development options for water do appear available. The maps indicate approximately one-half (1/2) of the inventoried livestock guards currently in place on Pennington County maintained roads, adjacent to and throughout that portion of the Forest where the analysis was completed. I assume the Forest has no need for the remaining livestock guards and we can work on eliminating them.

Agency Response:
Please see Agency Response to Letter 2, Comment 1. The proposed action includes continuance of existing cattleguards for livestock control. The Mystic District would continue to coordinate with Pennington County Highway Department to remove unnecessary cattleguards as opportunities become available.

Letter No:	Comment No:	Resource:
2	3	Range

Pennington County Highway Department

Comment:
It appears the 2.5 miles of fence proposed with the Bald Horse Allotment reduces the amount of livestock onto Sheridan Lake Road but does not eliminate it. The pasture south of Sheridan Lake Road remains as is. Due to the planned reconstruction and realignment of Sheridan Lake Road by Pennington County, the Forest Service should consider fencing both sides of the right-of way in this area.

Agency Response:
The proposed action, Alternative C does eliminate livestock access to Sheridan Lake Road by constructing additional fencing on the north side of the highway. Once the northern right of way fence is constructed, livestock will no longer graze that portion of the Burnt Fork Pasture south of the highway as noted on page 112 of the DEIS.

Letter No: 2 **Comment No:** 4 **Resource:** Range

Pennington County Highway Department

Comment:
The Lake Shore Pasture abutting Deerfield Road (FH-17) offers similar roadway and livestock conflicts as Sheridan Lake Road. This is a high speed asphalt road and fencing should be considered along both sides of the right-of-way.

Agency Response:
See Agency Response to Letter 2, Comment 1. The proposed action does eliminate livestock access to the Deerfield Road by constructing additional fencing on the south side of the highway, including installation of a new cattleguard on the Ditch Creek Road. Once the southern right of way fence is constructed, livestock will no longer graze the Lake Shore Pasture north of the highway as noted on Page 113 of the DEIS.

Letter No: 2 **Comment No:** 5 **Resource:** Range

Pennington County Highway Department

Comment:
I do not find Mystic Road, Palmer Creek Road, Palmer Gulch Road, Pink Cabin Road or Slate Prairie Road mentioned as high speed roads, even though these roads have posted speed limits of 35 to 50 miles per hour.

Agency Response:
The proposed action, Alternative C does eliminate livestock access to Sheridan Lake and Deerfield Roads by constructing additional fencing. Several years ago cattleguards were removed from the Pink Cabin Road and Palmer Gulch Road (south of sawmill) since the pastures are no longer grazed; proposed livestock use is limited to trailing across these roads (see Page 43 of the DEIS). Proposed improvements would reduce livestock access to the Twin Springs Road and fence them out from the Old Hill City Road. The Mystic Road, Palmer Creek Road, and Slate Prairie Road may still be fenced to prevent livestock access as an adaptive management measure as shown on Page 47 of the DEIS.

Letter No: 2 **Comment No:** 6 **Resource:** Range

Pennington County Highway Department

Comment:
We feel that a detailed evaluation of the conditions of the existing structures, livestock guards needs to be completed. The existing livestock guards, fences, waterlines, spring developments, and ponds will require maintenance and reconstruction. Many existing livestock guards are over 50 years old. Bases and rails are failing. Structural support for current traffic is not always available. We feel that the construction and maintenance cost are underestimated or omitted. Pennington County currently estimates the cost to install one new livestock guard equates to fencing approximately 9,200 feet of right-of-way.

Agency Response:
Inspections of existing cattleguards are completed as part of the deferred maintenance program conducted by forest engineering personnel. The Mystic Range staff notifies the engineers if they observe a maintenance issue or defect in a cattleguard structure. Cattleguards that are the responsibility of the Forest Service are repaired or replaced as needed. The Quicksilver software program was used to compare the economic costs of the proposed action and other alternatives to both the Forest Service and permittees. This is shown on Pages 267-268 of the DEIS.

Letter No: 2 **Comment No:** 7 **Resource:** Range

Pennington County Highway Department

Comment:
Part of the Pennington County Highway Department's responsibility is to provide safe and efficient facilities for the road users. Potential injury to road users by allowing livestock to roam within road right-of-way is a major concern to the County. Hopefully, the safety of the diverse public that utilize the roads within the National Forest can be safely and economically incorporated into plans.

Agency Response:
Please see Agency Response to Letter 2, Comments 1 and 5.

Letter No: 3 **Comment No:** 1 **Resource:** Plan

Brademeyer Brian

Comment:
The Forest Service committed to eliminating livestock grazing form the Norbeck Wildlife Preserve in the April 21, 1998, Stipulation and Court Order of District Court Judge Daniel in the Needles/Grizzly litigation. The Mystic Range Project DEIS seems unaware of this Court Order. This DEIS must be withdrawn, and the Forest Plan grazing standards and guidelines for the Norbeck Preserve (including the Black Elk Wilderness Area) amended to eliminate livestock grazing, before further analysis of the Mystic Range Project can commence.

Since the Forest Service seems to have no institutional memory of the events surrounding the Norbeck Wildlife Preserve (e.g., neither the Norbeck Wildlife Project DEIS nor the Mystic Range Project DEIS even mention Judge Daniel's Court Order), we present below in Sections I-III a brief history of the Norbeck grazing arguments from the last 20 years. We hope that these will be useful to you in the withdrawal, correction and re-issuance of the Mystic Range Project DEIS.

Agency Response:
The Order filed on April 21, 1998, in the District Court of Colorado, 'Order Setting Briefing Schedule and Dismissing Certain Claims' pertains to a variety of issues related to the Norbeck FEIS/SEIS and the Grizzly and Needles EA's. This court document dismissed claims and set a briefing schedule based on additional issues brought forth by the plaintiffs (Sierra Club - Black Hills Group, et al.,) involving the above projects.

The Court document does not contain language stating that the Forest Service will eliminate livestock grazing from Norbeck.

The DEIS, pg 26, discloses the purpose for which the Norbeck Wildlife Preserve was established

The Mystic Range DEIS discloses the effects of grazing within the Norbeck Wildlife Preserve. Both Alternative A and a provision in Alternative C exclude grazing within Norbeck.

Letter No:	Comment No:	Resource:
3	2	Plan

Brademeyer Brian

Comment:
I. The North Custer EA Failed to Provide the Site-Specific Assessment Directed by the Chief; this failure has not been corrected in the Mystic Range Project DEIS.

The concerns that we raised in our October 26, 1990 appeal and our December 23, 1990 Intervention on Supervisor Kenops' original North Custer Allotment decision have never been addressed. We had asked in our scoping letter of November 14, 1996, and again in our comments on the draft EA of January 28, 1997, that these appeal and intervention concerns be fully addressed in the revision of the North Custer AMP. In particular, we repeated our contentions that: (1) livestock grazing is inappropriate on the Norbeck portions of the Allotment; and (2) the impacts to the protection and breeding place needs of game and non-game wildlife have never been adequately addressed.

The final North Custer EA continued to ignore these concerns, and failed to even respond to the deficiencies that prompted the remand of the 1990 Decision. As the Chief pointed out regarding the previous North Custer analysis:

While some environmental effects were determined, we find there are some deficiencies. There is mention of cattle/wildlife conflicts, but the analysis of these effects has not been made. The effects on critical riparian resources of the proposed action and alternatives are not site specific, nor are the effects on vegetation and soil productivity. [Chief's Ruling of 5/29/91 at 2, emphasis added].

The North Custer Allotment final EA continued to ignore these specific deficiencies pointed out by the Chief. In 1990, the agency used a categorical exclusion to improperly bypass a thorough site-specific assessment of grazing impacts in the North Custer Allotment in general, and the Norbeck Wildlife Preserve in particular. The final North Custer EA presented an Environmental Assessment that failed to assess any impacts to the critical protection and breeding place needs of wildlife. Rather, the EA continued to present mere post hoc rationalizations for decisions already made, in violation of the clear mandate of NEPA.

In his 1991 remand, the Chief explicitly pointed out that impacts to riparian resources were not site specific, and thus failed to satisfy NEPA's mandate for full disclosure and fully-informed decision making. Cattle destroy riparian areas and consume forage that otherwise might be available for game animals. Cattle destroy soil and vegetation, particularly in riparian and boggy areas.

The Forest Service has continued to allow cattle grazing within the Norbeck Wildlife Preserve, all the while justifying timber sales on the basis of need for additional forage. Moreover, the agency has never addressed the environmental impacts of grazing on wildlife, particularly the negative impacts of grazing and logging on their protection and breeding place needs, as pointed out by the Chief in his remand.

Grazing within Norbeck may adversely impact wildlife. Given that the Forest Service continues to base timber sales within Norbeck on the need to create forage to benefit game animals, it is incumbent upon the agency to consider the impacts of grazing prior to authorizing such timber sales. The Norbeck EIS is not site-specific to the North Custer (or Palmer Gulch) Allotment, and as such is an inadequate document to meet NEPA requirements for the Mystic Range Project. The Forest's totally inadequate response to these concerns is "The ID team agrees." [North Custer EA at Appendix E, Comment 1-3].

Agency Response:
See Agency Response to Letter 3, Comment 1.

The North Custer EA is beyond the scope of the Mystic Range EIS.

Letter No:	Comment No:	Resource:
3	3	Plan

Brademeyer Brian

Comment:
II. The Constraints Placed by the Norbeck Organic Act on the North Custer Allotment have not been Adequately Reviewed by the Forest Service; this Inadequate Review is being continued in the Mystic Range Project DEIS.

A. Livestock Grazing is Inappropriate on the Palmer Gulch Allotment's Norbeck Portion

American Wildlands, in its appeal of the 1989 Norbeck EIS, stated that grazing on the Norbeck National Wildlife Preserve was in violation of the Organic Act of Norbeck. We concur that livestock grazing on Norbeck is in violation of the Organic Act, and that therefore there should be no grazing permitted on the Norbeck portions of the North Custer Allotment (or Palmer Gulch Allotment). Although the agency admits that "Fundamentally the Forest Service agrees" [North Custer EA at App. E, Comment 1-4], the agency fails to provide any quantitative assessment of the harm this inappropriate grazing is causing wildlife in Norbeck, especially wildlife seeking protection or breeding places. The agency's speculation about likely behavior of permittees denied grazing access to Norbeck does not justify the certain harm and disturbance to wildlife, and especially to the Preserve's protection and breeding place mandate. The Mystic Range Project DEIS continues this failure to provide such assessment, in violation of the full disclosure and fully-informed decision making mandates of NEPA.

Agency Response:
See Agency Response to Letter 3, Comments 1 and 2.

The Mystic Range DEIS addresses the effects of each alternative on twelve Norbeck Focus Species (game animals and birds). See Table 3-6, pg 187, and numerous pages within the Wildlife section of Chapter 3 in the DEIS.

Letter No:	Comment No:	Resource:
3	4	Wildlife

Brademeyer Brian

Comment:
B. Grazing Violates the "Protection" Mandate of the Norbeck Organic Act

The Forest Service never addressed the negative impact that livestock grazing has on the protection needs of ground-nesting birds, small mammals, reptiles, and amphibians. The agency did not deny that grazing removes cover material that protects these species from predators. The agency failed to present evidence that the negative effects of such lack of protection for small wildlife are insignificant. Since "protection" of game animals and birds is a core mandate of Norbeck, this lack of assessment of impacts is inexcusable, and a clear violation of NEPA. The Mystic Range Project DEIS continues this failure to take a “hard look” at the impacts of livestock grazing in Norbeck.

Agency Response:
Effects of the Alternatives Considered in Detail (DEIS pg. 35) are disclosed in Chapter 3, Affected Environment and Environmental Consequences for each respective resource. This includes analysis of potential effects of all adaptive options within Alternatives B and C.

The decision on this project will be consistent with the Revised Forest Plan, as amended, and with the Norbeck Organic Act.

Letter No:	Comment No:	Resource:
3	5	Wildlife

Brademeyer Brian

Comment:
C. Grazing Violates the "Breeding Place" Mandate of the Norbeck Organic Act

The Forest Service never addressed the negative impact that livestock grazing has on the breeding place needs of elk, deer, mountain goats, ground-nesting birds, small mammals, reptiles, and amphibians. The agency does not deny that grazing removes cover material that protects these species and their nests and young from predators, or that enhances visible separation of big-game parturition areas. The agency failed to present evidence that the negative effects of degrading such breeding places for big game and small wildlife are insignificant. Since providing for the "breeding place" needs of game animals and birds is a core mandate of Norbeck, this lack of assessment of impacts is inexcusable, and a clear violation of NEPA. The Mystic Range Project DEIS continues this failure to take a “hard look” at the impacts of livestock grazing on the breeding place needs in Norbeck.

Agency Response:
Effects of the Alternatives Considered in Detail (DEIS pg. 35) are disclosed in Chapter 3, Affected Environment and Environmental Consequences for each respective resource. This includes analysis of potential effects of all adaptive options within Alternative B and C.

Letter No: 3 **Comment No:** 6 **Resource:** Wildlife

Brademeyer Brian

Comment:

D. Grazing will Adversely Affect Wildlife SS-4 and SS-5 Habitat within Norbeck

We pointed out in our appeal of the 1990 North Custer AMP that 11% of the forage tonnage to be gained in 10 years, and 50% of the tonnage to be gained in 40 years, after treatment of Norbeck could be supplied to wildlife by restricting cattle from the Norbeck Wildlife Preserve. Extrapolation leads us to conclude that 50% of the area to be treated under the Norbeck EIS/SEIS program is being treated to compensate for cattle grazing within the Norbeck.

This is more than the "interesting suggestion" acknowledged by the Forest Service [North Custer EA at App. E, Comment 1-2]. Timber harvest analyses have also totally failed to address the core concerns in Norbeck, which are the protection and breeding place needs of game animals and birds. Grazing, logging and road building are all inappropriate activities under proper interpretation of the Norbeck mandate.

While a direct comparison between acres treated and forage produced is undoubtedly more complicated than this, our 1990 analysis demonstrated that a substantial portion of the forage created by commercial timber treatment within the Norbeck would simply compensate wildlife for forage utilized by domestic livestock. Furthermore, this portion would be even higher if one considered that vegetation in the lowland primary range is more nutritious than vegetation in the upland secondary ranges.

We contend that management practice of commercial logging of established SS-4 and SS-5 wildlife habitat in order to provide structural stage 1 habitat is not a legal option within a wildlife preserve, at least as long as cattle are consuming a substantial fraction of the available forage. We therefore contended that continued livestock grazing within the Norbeck, and more specifically within the North Custer Allotment, was in violation of the Organic Act of Norbeck. An acceptable Mystic Range Project EIS must specifically address this issue as it applies to the Norbeck portions of the Palmer Gulch Allotment.

Agency Response:

See Agency Responses to Letter 3, Comments 3-5.

Letter No: 3 **Comment No:** 7 **Resource:** Plan

Brademeyer Brian

Comment:

E. Failure to Disclose the Impacts of Grazing within Norbeck

The North Custer EA presented absolutely no assessment of the benefits of the No Action alternative on meeting the objectives of the Norbeck Preserve, i.e., to provide for the protection and breeding place needs of game animals and birds. This defective No Action alternative fails to provide the "detailed assessment" envisioned under NEPA. Instead of fully evaluating this concern, the North Custer EA dismissed it in the most cavalier of fashions:

The team determined that there is little to be gained for reasoned decision-making by gathering quantified data concerning cattle/wildlife conflicts, since there is little or no effect of livestock grazing on the various groups of species present on the allotment. [North Custer EA at App. E, Comment 1-23, emphasis added].

Clearly, the ID team has abused the NEPA process to merely rationalize decisions already made, since the conclusion of "little or no effect" has been made in the total absence of quantitative data, or even of acknowledgement of the critical wildlife/cattle conflicts in Norbeck, which are disruption of wildlife protection and breeding place needs, not forage considerations. The above statement clearly shows that the Forest Service should not be managing the Norbeck Wildlife Preserve.

Agency Response:

See Agency Response to Letter 3, Comments 1, 2, and 3.

Cumulative Effects are disclosed in Chapter 3 and Appendix C.

Letter No:	Comment No:	Resource:
3	8	Plan

Brademeyer Brian

Comment:
III. Failure to Correct the Admitted "Inconsistency" of Livestock Grazing in Norbeck

The final North Custer EA acknowledged that "Forest Supervisor Darrel Kenops conceded that livestock grazing is inconsistent with the purposes of the wildlife preserve" in his 1989 Decision. Yet the agency continued to justify grazing under the unsupported speculation that "to abruptly terminate livestock grazing in the Preserve would likely encourage private land sale and subdivision, which might be more damaging to wildlife in the long run." [cited in draft North Custer EA at 8]. The agency has never adequately assessed the "damage" that current grazing activities are causing to Norbeck's wildlife. Nor has the agency dealt with the much greater likelihood of future development caused by subsidizing and otherwise sustaining these "inconsistent" inholdings, rather than attempting to either seek long-term wildlife easements from these landowners or condemning them outright.

The agency once again resorted to pre-formed conclusions on the lack of effects of grazing to dismiss concerns over future developments of inholdings:

With regard to seeking wildlife easements from private landholders or condemning their property, the ID team believes such actions would be unwarranted, given the minor effects of livestock grazing on wildlife in the Norbeck portion of the North Custer Allotment. [North Custer EA at App. E, Comment 1-27, emphasis added].

One has to wonder why the ID team accepted the determination that grazing is an inappropriate activity in Norbeck at all, given the above rationalization. Self-serving assertions of "minor effects" cannot be substituted for scientific analysis. It is also clear that the Forest Service will never address the protection and breeding place needs of wildlife, since these so clearly conflict with grazing and logging and other intensive management. Without addressing the significance of impacts to wildlife and the wildlife purposes of the Preserve, a fully-informed decision cannot be made and, therefore, an appropriate course of action cannot be determined. The entire Norbeck EIS/SEIS process has failed to address these central questions of impacts to wildlife protection and breeding place objectives. This failure is being continued in the Mystic Range Project DEIS.

For over 20 years now, the agency has displayed a deliberate pattern of failing to address the issue of grazing impacts on wildlife within the Norbeck Wildlife Preserve. The North Custer AMP Decision Notice of 1990 was not accompanied by an Environmental Assessment. It is noteworthy that the Forest Service had categorically excluded the North Custer AMP from NEPA analysis, and this clearly-inappropriate categorical exclusion was properly remanded by the Chief.

Such concerns must be the central focus of the Palmer Gulch Allotment analysis, and its ripple effects on other proposed activities within the Norbeck Wildlife Preserve. Unfortunately, they continue to be ignored in the Mystic Range Project DEIS.

Agency Response:
See Agency Response to Letter 3, Comments 1, 2, 3 and 7.

The DEIS clearly stated the purpose for establishing the Norbeck Wildlife Preserve: "…for the protection of game animals and birds and to be recognized as a breeding place therefore" (DEIS pg. 26). The Mystic Range DEIS addresses the effects of each alternative on twelve Norbeck Focus Species (game animals and birds). See Table 3-6, pg 187, and numerous pages within the Wildlife section of Chapter 3 in the DEIS.

Letter No:	Comment No:	Resource:
3	9	Plan

Brademeyer Brian

Comment:
IV. The Mystic Range Project DEIS's Palmer Gulch Allotment Does Not Comply with the Grazing Stipulation and Court Order of 4/21/98.

The Forest Service has, in the intervening 20 years, continued to ignore our requests for detailed analysis of the impacts of grazing with respect to wildlife. This willful, unlawful pattern of ignoring the impacts of grazing could not be tolerated. It was long past time for the agency to take the required "hard look" at the impacts of livestock grazing within Norbeck, and of the additional forage that would be available for game animals if livestock grazing were curtailed or eliminated. When the NEPA appeal process on the 1997 North Custer Allotment Decision had been completed, Plaintiffs in the 1994 Needles/Grizzly litigation moved to add the North Custer Allotment's grazing within Norbeck as a violation of the Norbeck Organic Act (these concerns had been filed as Count 1 in 1994 as a violation of the Administrative Procedures Act). Subsequent negotiations led to the Settlement Stipulation and Court Order of April 21, 1998.

The Forest Service has subsequently mischaracterized this legal history (e.g., the CEEM chronology cites the wording of the District Court order in 1999 regarding the Needles/Grizzly litigation, but misses the essential point of the District Court case):

U.S. District Court for the District of Colorado denies plaintiffs motion for summary judgment and dismisses counts 1, 2 and 3 with prejudice.

[CEEM Report at 56.] One of those counts, concerning the appropriateness of the North Custer Grazing Allotment in the Norbeck Wildlife Preserve was settled among the parties by stipulation that grazing was inappropriate in Norbeck, and would be eliminated from the Preserve [Judge Daniel Order of April 21, 1998]. The Forest Service agreed to eliminate grazing within the Norbeck Wildlife Preserve and settled the North Custer Allotment count with prejudice in favor of the Plaintiffs. Judge Daniel's final July 30, 1999, order on the Needles/Grizzly litigation contained the oversight cited above by CEEM.

Judge Daniel's Order of 4/21/98 clearly occurred after the 1997 LRMP Revision, so the Forest Plan standards and guidelines contain grazing as an allowable use of the Norbeck Preserve, including the Palmer Gulch Allotment on parts of the Black Elk Wilderness.

However, the Phase I and Phase II Amendments to the LRMP occurred after Judge Daniel's Order of 4/21/98, so those NEPA processes should have been used to correct the Forest Plan Standards and Guidelines to eliminate grazing from the entire Norbeck Preserve, including the Black Elk Wilderness Area.

The Mystic Range Project DEIS continues to ignore this Court Order eliminating grazing from the Norbeck. There are even numerous references to livestock grazing in the concurrent Norbeck Wildlife Project DEIS; see, for example:

- Permitted grazing occurs on Forest only in the portion of Norbeck referred to as Palmer [NWP DEIS at 117].
- The Norbeck Wildlife Project includes portions of the North Custer and Palmer Gulch grazing allotments and the entire Spokane grazing allotment [NWP DEIS at 236].
- No changes are proposed for the number of animal months (AMs) or permitted livestock use in any alternative. Grazing is expected to continue as authorized, which is on about 8% of the USFS acres in the project area (Palmer Gulch allotment only). [NWP DEIS at 239].

The elimination of livestock grazing through Judge Daniel's Court Order, in recognition of its incompatibility with the Norbeck Organic Act, shows why the Black Elk Wilderness must contain direction consistent with the Norbeck Act. The prohibition of grazing in Norbeck prohibits grazing in Black Elk as well, even though the Wilderness Act permits such grazing.

The Mystic Range Project DEIS fails to amend the Forest Plan to reflect the elimination of livestock grazing agreed to in the North Custer Allotment Settlement Agreement [Judge Daniel Order of 4/21/98]. The DEIS must be withdrawn, and the Forest Plan must be amended in a new NEPA analysis.

Agency Response:
See Agency Response to Letter 3, Comments 1, 2, 3 and 7.

See response to Letter 10 Comment 35. Both Alternative B and C may result in adjustments to numbers and AUMs (DEIS pgs 108-109).

Amending Forest Plan direction was not part of the Purpose and Need for this project.

Letter No:	Comment No:	Resource:
3	10	Plan

Brademeyer Brian

Comment:
V. The Mystic Range Project DEIS for the Palmer Gulch Allotment Does Not Comply with Tenth Circuit 8/8/01 Ruling Regarding the Primacy of the Norbeck Organic Act.

For 12 years, the Forest Service has failed to comply with the Court Order of 4/21/98 to eliminate livestock grazing within the Norbeck Wildlife Preserve, and to amend the Forest Plan to reflect that Court Order. Yet even if such an order had never occurred, the Tenth Circuit Ruling of August 8, 2001, should have itself triggered such management changes. The Norbeck Wildlife Project Draft Environmental Impact Statement glosses over the Tenth Circuit ruling of August 8, 2001 in the Needles/Grizzly litigation:

The Tenth Circuit focused on the roles of the Norbeck Organic Act (NOA) and the National Forest Management Act (NFMA) in the planning process for actions in Norbeck, and ruled that the mandate of NOA supersedes that of NFMA.

Agency Response:
See Agency Response to Letter 3, Comment 1.

Letter No:	Comment No:	Resource:
3	11	Plan

Brademeyer Brian

Comment:
[NWP DEIS at 2.] The Circuit Court ruling was much broader than claimed in the NWP DEIS, ruling that in tiering to the 1983 Black Hills Land and Resource Management Plan, the 1989 Norbeck Management Plan went beyond the bounds of the Norbeck Act:

Accordingly, the 1983 Plan overtly effectuates the NFMA mandate to optimize overall wildlife, fish, and vegetative habitat diversity. See 1604(g)(3)(B); 36 C.F.R. 219.27(g). Consequently, under the 1983 plan, the management emphasis for the Norbeck Preserve became the optimization of overall habitat capability, thus extending management decisions beyond the parameters of the Norbeck Organic Act. See Aplee. Supp. App. at 14 (1983 Plan).

Agency Response:
The 1997 Revised Forest Plan, as amended allows livestock grazing to continue within the Norbeck Wildlife Preserve. The decision on this project will be consistent with the Forest Plan, and with the Norbeck Organic Act.

Letter No:	Comment No:	Resource:
3	12	Plan

Brademeyer Brian

Comment:
[Tenth Circuit at paragraph 5.] The Circuit Court further rejected the Forest Service's argument that the "Court need not decide the relationship between the NFMA and the Norbeck Act" in this case:

We disagree. The agency's consistent recitation and reliance upon "overall diversity" and other terms extraneous to the Norbeck Act make clear that the agency itself did not rely solely on the Norbeck Act in approving the commercial timber harvest plans. Appellees remark that "[t]his is not a case in which the Forest Service is balancing competing habitat needs of 'game animals and birds' on the one hand, against habitat needs of other wildlife species on the other." Id. Again, we disagree. The agency's record leaves no doubt that this is precisely that kind of balancing case.

Agency Response:
The Mystic Range Project does not propose any commercial timber harvest. The decision on this project will be consistent with the Forest Plan and the Norbeck Organic Act.

Letter No: 3 **Comment No:** 13 **Resource:** Plan

Brademeyer Brian

Comment:
[Tenth Circuit at paragraph 10.] The Circuit Court ruled that the Black Hills National Forest must give primacy to the Norbeck Organic Act's specific mandates in managing the Norbeck Wildlife Preserve:

These preserves comprise less than .05 percent of the National Forest System. In this limited context, we cannot apply the NFMA mandate in a way that effectively abolishes the specific statutory mandates Congress has established. That is the law even if reason and equity support a different conclusion. See Tennessee Valley Auth. v. Hill, 437 U.S. 153, 194 (1978). Accordingly, we hold that the Norbeck Organic Act governs the management of the Norbeck Preserve, and management plans must comply with its specific mandate.

Agency Response:
The Tenth Circuit ruling cited in the comment pertains to a different action. The Mystic Range Project proposes no timber harvest. The decision on this project will be consistent with the Revised Forest Plan, as amended, and with the Norbeck Organic Act.

Letter No: 3 **Comment No:** 14 **Resource:** Plan

Brademeyer Brian

Comment:
[Tenth Circuit at paragraph 15, emphasis added.] The Court continued:

The Forest Service can continue to establish management plans under both the Norbeck Act and the NFMA, but the NFMA mandate must be supplemental and may not diminish (through balancing) the more specific mandate of the Norbeck Act.

Agency Response:
The decision on the Mystic Range Project will be consistent with the Forest Plan, as amended.

See Agency Response to Letter 3 Comments 3-13.

Letter No: 3 **Comment No:** 15 **Resource:** Plan

Brademeyer Brian

Comment:
[Tenth Circuit at paragraph 18, emphasis added.] The Court ruling unequivocally establishes that, within the Norbeck Wildlife Preserve, management actions must protect game animals and birds, and retain the area's breeding place characteristics, in compliance with the specific mandate of the Norbeck Organic Act.

Agency Response:
See Agency Response to Letter 3, Comment 13.

Letter No: 4 **Comment No:** 1 **Resource:** Plan

Parsons Brenda

Comment:
I strongly support Alternative A, cancellation of all term grazing permits.

Agency Response:
Comment noted.

Letter No: 4 **Comment No:** 2 **Resource:** Plan

Parsons Brenda

Comment:
Livestock grazing is unlawful within the Norbeck Wildlife Preserve under the Court Order of April 21, 1998. After twelve years of dithering, it is time to get the cows out of Norbeck!

Agency Response:
See Agency Response to Letter 3, Comment 1.

Letter No:	Comment No:	Resource:
4	3	Plan

Parsons Brenda

Comment:
The Keystone, Ford, Rabbit, Palmer, Sunday, Lower Bear, and Upper Bear Pastures within the Palmer Gulch Allotment should be declared unsuitable, and the Forest Plan amended to permanently eliminate livestock grazing.

Agency Response:
Comment noted. All acres within the Mystic Range Project are considered suitable for livestock grazing as noted on page 67 of the DEIS per the Forest Plan, as amended.

Letter No:	Comment No:	Resource:
4	4	Plan

Parsons Brenda

Comment:
The Mystic Range Project Draft EIS must be withdrawn, and the Forest Plan amended to eliminate livestock grazing in the Norbeck Wildlife Preserve, including Black Elk Wilderness Area.

Agency Response:
See Agency Response to Letter 3, Comment 1.

Livestock are not permitted in the Black Elk Wilderness.

Letter No:	Comment No:	Resource:
5	1	Range

Sanders John

Comment:
For obvious reasons, I am against Alternative A. Our family has been running this ranch continuously since 1884 and have grazed cattle in the Black Hills for over 90 years. In 1920, when the Secretary of Agriculture first authorized grazing permits in the Black Hills, we applied for a permit (then called Pactola District #6) on February 14, 1920 and was issued it May 10, 1920. It allowed 360 head of cattle to graze from May 1 through November 15 and a 100-head winter permit from November 16 through May 15. We now have a much larger area and rotate the cattle through multiple pastures, but have fewer cattle (299 head) and a shorter grazing season (June 1 through October 26).

Agency Response:
Your comments have been noted and considered regarding opposition to Alternative A.

Letter No:	Comment No:	Resource:
5	2	Plan

Sanders John

Comment:
If Alternative A is implemented, we do not have enough private land to raise cattle and would have to stop ranching, forcing me into retirement and denying my son the opportunity to pursue his interest in ranching. With no cattle on our land, it would lose its agricultural status for property valuation purposes and the greatly-increased property taxes would make too prohibitive to keep. About 500 acres of land around the Bald Hills would be sold, probably to developers, who would create a small city in the heart of the Black Hills as the land is easily accessible from U.S. Highway 385 and within reasonable commuting distance to Rapid City. Besides personal reasons, the loss of our ranch would also negatively affect the country's economy by increasing food prices. Since 1980, approximately half a million ranches in the United States have been lost to development and about 12,000 ranches a year are being lost. South Dakota itself already has 20% fewer cattle this year alone. Granted, the people who want cattle removed are probably vegetarians and would be happy with this outcome.

Agency Response:
Comment noted and considered.

Letter No:	Comment No:	Resource:
5	3	Range

Sanders John

Comment:
Alternative B is short sighted since it doesn't allow for unforseen changes. For example, I had to develop several new water systems during the recent drought as springs dried up. We also cannot forsee future road development, closures, or realignment that may require changes in fence locations. I work vigorously to improve all permit assets with modern materials which allows me to spend more time range riding.

Agency Response:
Alternative B provides the opportunity to use adaptive management options as shown in Table 2-1, Page 47. In comparison, Alternative C provides the same suite of options plus allows for new structural improvements, and prescribed burning on the Porcupine Allotment. Both alternatives allow for annual maintenance and reconstruction of structural range improvements as needed. Range riding allows monitoring of residual heights of riparian vegetation and allowable use percentages for upland vegetation, and determining when to move livestock to the next pasture based on observations.

Your comments have been noted regarding your work to improve permit assets.

Letter No:	Comment No:	Resource:
5	4	Range

Sanders John

Comment:
Alternative C is my preferred choice since it is not rigid in its ability to take into account unforseen changes and allows development of fences and springs that would be beneficial to both range and wildlife. Adding fences along Sheridan Lake Road and eliminating the south side of Burnt Ranch to keep cows off the road has always been one of my objectives since the road sees a lot of traffic, especially during the rally, buy eliminating this hazard will allow for better range rotation and hence better usage of the entire permit. This alternative would also allow all the improvements we had discussed over the years.

Agency Response:
Your comments and support for Alternative C have been noted and considered.

Letter No:	Comment No:	Resource:
5	5	Wildlife

Sanders John

Comment:
Cattle may have a direct causal affect on increasing the turkey population as I have seen a noticeable increase in turkey and grouse populations in the recent years. The turkey dig into the cattle dung, which I assume is easily to find the grass seeds. I have been doing photo point monitoring since before 1999. Deer and Elk tend to follow the cattle movement since the cattle will eat the hard grasses and when they move on the animals will move into an area to graze on the new fresh growth.

Agency Response:
Thank you for your comment.

Letter No:	Comment No:	Resource:
6	1	Wildlife

Office of Environmental Policy and Compliance — US Dept. of the Interior

Comment:
Chapter 3: Affected Environment and Environmental Consequences, Wildlife Habitat, pages 130-196

There are several bird species—including Management Indicator Species, Species of Local Concern, and Sensitive species—potentially impacted by the proposed activities, such as the Black-backed woodpecker (Picoides arcticus), Brown creeper, (Certhia americana), Goldencrowned kinglet (Regulus satrapa), Song sparrow (Melospiza melodia), Grasshopper sparrow (Ammodramus savannarum) , and the Ruffed grouse (Bonasa umbellus). It would be beneficial to the public for the final EIS to include information from the most recent USGS Breeding Bird Survey, such as species status and trends information, distribution and trend maps, and population change analysis results (Sauer et al., 2008). Based on this additional information, the impact assessment may need to be revised, and additional mitigation actions may need to be included in the final EIS.

Agency Response:
Regional BBS data for the Black Hills (Sauer et al. 2008) was reviewed, and most species are categorized as "data with an important deficiency," indicating a low confidence level in status and trend. Since 2001, Black Hills National Forest has been monitoring the birds of the Black Hills at the forest-level in cooperation with the Rocky Mountain Bird Observatory (RMBO 2001-2009). This monitoring was designed and is conducted by the RMBO to provide statistically rigorous population trend for at least 61 species in the Black Hills over time. For R2 sensitive species, MIS, and SOLC species analyzed in the EIS, Forest Plan monitoring data (USDA Forest Service 2009), along with RMBO monitoring data is discussed for each species. Design criteria and mitigation measures can be found in Appendix B.

Letter No:	Comment No:	Resource:
6	2	Wildlife

Office of Environmental Policy and Compliance — US Dept. of the Interior

Comment:
Page 167: The DEIS identifies a number insectivorous bat species that may be impacted by the proposed activities; however, the DEIS does not include proposed mitigation actions. The document states "Although research is lacking, grazing intensities that reduces vegetation height and species diversity would likely decrease prey availability, especially if prey species require specific plants for forage and oviposition. Loss of stagnant water sources would also reduce insect prey availability." Suggest that the final EIS include possible mitigation activities to avoid or minimize the loss of species, and take into consideration the species-specific physiological requirements, including foraging behavior and maternity roost requirements. Suggest that the final EIS include information on species-status and trends from available scientific references, such as the Ellison et al, 2003, and include an analyses and discussion of possible impacts to the bat species.

Agency Response:
Ellison et al. (2003) was reviewed and population data for South Dakota bat species is limited in this publication. Discussion of bat species status and trend specific to the Black Hills can be found in Stukel and Tigner (2003) and the Forest Plan monitoring reports (USDA Forest Service 2001-2009), as discussed for each species and referenced in the FEIS. Design Criteria for riparian and other habitats can be found in Appendix B.

Letter No:	Comment No:	Resource:
6	3	Wildlife

Office of Environmental Policy and Compliance — US Dept. of the Interior

Comment:
Page 169: The DEIS states "Hibernacula, day roosts, maternity roosts, or snags should not be affected by the presence of livestock grazing." Suggest the final EIS provide a reference and discussion to support the statement.

Agency Response:
Gruver and Keinath (2006), Schmidt (2003a, 2003b, 2003c, 2003d, 2003e), Schmidt and Anderson (2003), as referenced in the FEIS.

Letter No:	Comment No:	Resource:
6	4	Wildlife

Office of Environmental Policy and Compliance — US Dept. of the Interior

Comment:
Page 170: The DEIS identifies a number of riparian-dependent species potentially affected by the proposed activities, including the meadow jumping mouse, but minimal discussion of proposed mitigation. It would be beneficial to the public for the final EIS to propose and discuss species-specific mitigation.

Agency Response:
Meadow jumping mouse is discussed in the DEIS (pages 171-176). Design Criteria for riparian and other habitats can be found in Appendix B.

Letter No:	Comment No:	Resource:
6	5	Wildlife

Office of Environmental Policy and Compliance — US Dept. of the Interior

Comment:
References cited

Ellison, L.E., T.J. O'Shea, M.A. Bogan, A.L. Everette, and D.M. Schneider, 2003, Existing data on colonies of bats in the United States: summary and analysis of the U.S. Geological Survey's Bat Population Database. In: O'Shea, T.J., and M.A. Bogan (eds.). Monitoring trends in bat populations of the United States and territories: problems and prospects Information and Technology Report 2003-0003. U.S. Geological Survey. 127-237 p.

Sauer, J. R., J. E. Hines, and J. Fallon, 2008, The North American Breeding Bird Survey, Results and Analysis 1966 - 2007. Version 5.15.2008: USGS Patuxent Wildlife Research Center, Laurel, MD. Available online : http://www.mbr-pwrc.usgs.gov/bbs/.

Agency Response:
These citations are associated with Letter 6 Comments 2 and 3. See Agency Response above.

Letter No:	Comment No:	Resource:
7	1	Hydro/Soils

Kammerer — Matthew

Comment:
I have concerns on the fecal matter in spring creek. It seems that a lot of the blame is on cattle. What about all of the septic tanks in that area. I guess out of sight out of mind!

Agency Response:
The current TMDL (Total Maximum Daily Load) that was completed for Spring Creek indentifies several sources that are contributors of fecal coliform. Modeling in that report identifies livestock contributes 38%, humans 15%, wildlife 8%, urban runoff 14% and agriculture washoff 25%.

Letter No:	Comment No:	Resource:
7	2	Range

Kammerer Matthew

Comment:
I also have some questions on the way a spring may or may not be improved.

Agency Response:
Specialist review and clearance is necessary before improvement work may commence; approvals are site specific. Some range improvements are noted in Alternative C as proposed action items, and others may result from adaptive management options and still need review. Alternative C. Design Criteria are expected to be implemented as noted on Page 48. Coordination and discussions between the permittee and Forest Service district range personnel are necessary prior to range improvement implementation.

Letter No:	Comment No:	Resource:
8	1	Plan

Prairie Hills Audubon Society

Comment:
I am resending to you our group comments on the Mystic Range Project, which Brian Brademeyer signed for us and has already sent in for us with my authorization. I resend this file, from my own e-mail address. My signature is also attached as a jpg file.

Agency Response:
Comment noted.

Letter No:	Comment No:	Resource:
9	1	Range

Porcupine Holistic Resource Management Team

Comment:
1. The District's resolve to improve the range condition on its grazing allotments is apparent in the DEIS and we appreciated your candor during our meeting on May 5th in explaining generally how this would be accomplished under both Alternative B and Alternative C. We also appreciate that under both of these alternatives the District proposes that the present holistic management system will continue. The permittee, and the HM Team, are committed to continuing to use holistic management on the Porcupine Allotment. We also request that the new Allotment Management Plan for the Porcupine Allotment provide that the District will administer it under the policies and philosophy set forth in Alternative C of the DEIS. We feel this would be most compatible with the HR goals for the Allotment and the planning the HR Team has engaged in with respect to management and range improvements.

Agency Response:
Your comments have been noted and considered regarding support for continued use of holistic management within the Proposed Action, Alternative C.

Letter No:	Comment No:	Resource:
9	2	Range

Porcupine Holistic Resource Management Team

Comment:
That being said, we want to make sure that your District and the Black Hills National Forest view the placement of improvements on the Porcupine Allotment in the same manner as we do; i.e., the permittee will place improvements on the Allotment is such a manner and at such times as they meet and further the HM successional, water cycle, mineral cycle, and energy flow goals for the Allotment. Under Alternative C, for the Porcupine Allotment, page 44 of the DEIS states: This alternative would continue with the HM grazing system as proposed in Alternative B. It would also require construction of new structural improvements and provide for the option to construct additional improvements if needed for resource management purposes. Required improvements include construction of a fence to exclude livestock from Wells Spring at the Wells Cabin Pasture, construction of a fence to exclude livestock from The Seeps in the South Wolf 1 Pasture, and construction of approximately 1.75 miles of pasture boundary fence to better control livestock and regulate animal impact in the Babbington-South Wolf 1 Pasture. It also includes installation of new water storage and water tanks in the northeast side of the Wildcat-North 1 Pasture. Approximately 0.75 miles of new pipeline would be extended from the Babbington Pasture to the new water development. The DEIS then goes on to list a number of additional structural improvements that may be considered as "adaptive options to construct…if needed in keeping with Holistic Management objectives." With respect to the placement of structural improvements, page 30 of the DEIS states, "Reconstruction activities are generally expected to occur within a 3-5 year timeframe. New structural improvements are generally expected to occur in 1-3 years. Adaptive improvements are more likely to be constructed in 5-10 years, if at all. We are concerned since the Forest Service does seem to view some improvements as "required" and others as "adaptive." Whether and when an improvement is constructed does appear to depend upon this classification. While providing for the holistic management of the Porcupine Allotment, the DEIS contains language that could be construed in a manner that would be contrary to the principles of the holistic management system. It is possible to forsee circumstances arising in which different agency personnel might demand that the permittee place the "required" structural improvements on the allotment within the 3 year timeframe or suffer the loss of the allotment or other sanctions. This becomes the new imperative, irrespective of other holistic management objectives for the allotment, the current livestock market, or the resources of the permittee. The permittee can be forced back into a pattern of management that disregards attention to complex interconnected changes and the goal of self-sufficiency, but which instead demands reliance on more expensive technology in order to preserve his land base or grazing numbers.

Agency Response:
The proposed improvements for the Porcupine Allotment were designed to meet and further HM goals. These range improvements were crafted in cooperation and at the suggestion of the permittee and HRM Team. The timeframe is listed as “generally” to help imply some priority for completion (new structures within 1 to 3 years), but not to imply inflexibility or a new imperative. The Forest Service intends to work cooperatively with the permittee and HRM Team in the implementation of the proposed action to further improve resource conditions. Of the listed improvements, construction of fencing to further protect the small riparian areas is generally considered by the IDT as the highest priority, followed by additional water storage capacity.

Letter No:	Comment No:	Resource:
9	3	Range

Porcupine Holistic Resource Management Team

Comment:
Under the system of holistic management the fate of the permittee is tied to the health of the land. And, as Allen Savory points out, The tool of technology present a particular challenge in that regard. Today we can do so many powerful things to intervene directly in the ecosystem process that we tend not to wait for the tendency of some slower tool to have the desired effect. This has led mankind to rush in where angels fear to tread. Unfortunately when we do take direct action on any one of the processes - by applying soluble, inorganic fertilizers, clearing brush with chemicals, spraying insects, building check dams, ripping soil, or a host of other technological interventions - we often ignore the whole and produce more and different problems, which we again attack with another "technological solution." Inevitably this leads to the crisis management of resources that characterizes our present age. …When a technological solution can pass what we call the testing guidelines, we should use it. To pass them it must benefit the whole ecosystem, be socially and culturally acceptable, strengthen the weakest link in the situation under management, address the cause and not the symptom of the problem, be economically sound, and reflect wise use of wealth and energy. In pointing this contradiction out we do not intend to imply that the permittee and the HM Team oppose the structural improvement listed in the DEIS. We have discussed these improvements our planning meetings and with Mark Vedder and Beck Knutson, Mystic District personnel who work closely with the permittee. It has always been our intention and understanding that these identified improvements would be placed on the Allotment as part of the holistic management plan and not governed by a timeframe. Therefore, for the reasons stated above, we believe the DEIS should classify all structural improvements identified for the Porcupine Allotment as adaptive rather than required improvements. As you stated during our May 5th meeting, the DEIS will "describe what we want on the ground, and then achieve it at whatever means." We believe that the HM management practices guided by the permittee and the HM Team are already achieving this on the Porcupine Allotment.

Agency Response:
Your comments will be considered regarding classifying all required structural improvements identified for the Porcupine Allotment as “adaptive options”.

Letter No:	Comment No:	Resource:
9	4	Plan

Porcupine Holistic Resource Management Team

Comment:
2. We still requesting that the DEIS be revised to change management codes for the Porcupine Allotment. Our reasons for such a reclassification are contained in our scoping comments of August 31, 2009.

Agency Response:
Comment noted. Management Area designations are discussed on page 14 of the DEIS. Reclassifying Management Area designation for the Porcupine Allotment is outside the scope of the Mystic Range Project.

Letter No:	Comment No:	Resource:
9	5	Botany

Porcupine Holistic Resource Management Team

Comment:
3. At page 54 of the DEIS there is an indication that the District references native plant species and desirable plant species for the Porcupine Allotment's monitoring sites. We are requesting specific information as to what these plant species are so that we can adequately evaluate USFS and permittee monitoring protocols.

Agency Response:
Table 1.2 describes the desired conditions for the different community types in the project area. In the description desirable and acceptable plant species are listed.

Letter No:	Comment No:	Resource:
9	6	Fire/Fuels

Porcupine Holistic Resource Management Team

Comment:
4. We are requesting that the District recognize and provide that all 9,858 acres of the Porcupine Allotment is available for treatment by prescribed fire in order to meet the goals of both HR Team and the Land Resource Management Plan; including, but not limited to, recycling dead plant material for an increased efficacy of mineral and energy flows (See the reference to "less than desired processes' in Kroos, R.R.H. 2009 Range Health Monitoring Report), improved or maintained native plant communities which provide for healthy range ecosystems, nutritious forage for livestock and big game, nesting cover for upland birds, and habitat for small game and non-game species. This would enable the permittee to integrate prescribed burning into the Allotment's annual operating plan and coordinate such burning with the South Dakota Game Fish & Parks' vegetative treatment plans on 360 acres it owns in the center of the Porcupine Allotment. After careful assessment, some acres may drop out of the proposed burn for other resource values, such as shrub and hardwood regeneration or the desire to retain natural barriers to protect cultural resources or sensitive species or local concern habitats (See Scoping Comments of August 9, 2009). This flexibility will help to eliminate concerns and problems caused by ownership boundaries and different management schedules and will promote the sharing of resources. We advocate that Alternative C offers the ability to best employ the broad us of fire as a beneficial disturbance agent, versus being confined to a limited number of acres.

Agency Response:
Thank you for your encouragement to burn. The areas identified are appropriate and conducive for successful prescribed fire implementation within the Porcupine Allotment. The conclusion based on considerations contained within the Land Resource Management Plan that the 5,300 acres set aside to burn will meet the Agency objectives of multiple use as well as ensuring that Range improvement objectives to increase grass/forb production and elimination of the heavy dead down fuels to increase grass/forb availability for large ungulates.

Letter No:	Comment No:	Resource:
9	7	Botany

Porcupine Holistic Resource Management Team

Comment:
5. We note that p. 207 of the DEIS references three Black Hills Montane Grasslands on the Porcupine Allotment, located in Upper Gillette Canyon, Middle Gillette Canyon, and West Hell Canyon. These areas were inventoried and evaluated in 2000 (Marriott 2000). From the DEIS it appears that the condition of these montane grasslands varied, all being grazed, some quite heavily, and contained a mix of exotic and native species. Marriott's 2000 report predates the Jasper Fire, and Stan Rennard's holistic management on the Porcupine Allotment would have just commenced. The DEIS further indicates, at p. 217, that under Alternative C, the montane grasslands on the Porcupine Allotment will "continue to be evaluated and grazing practices altered to preserve their characteristics as part of the annual Holistic Management planned grazing." The Jasper Fire has altered the vegetation and livestock use patterns on the Allotment and holistic management had been utilized since Marriott surveyed the area. Therefore the HM Team requests that the District immediately resurvey these montane grasslands using Marriott's methodology to establish comparable, measurable, 10-year trend data. We feel it is very important to determine the baseline against which HM planning on the Allotment is done and judged. Such a survey is necessary to ensure holistic management is benefiting the ecosystem and to best understand its affects upon the vegetation in these areas.

Agency Response:
The Best Available Science was used to address Montane Grasslands in the project area. Range monitoring occurs on all of these grasslands to help evaluate the vegetation in these areas.

Letter No:	Comment No:	Resource:
9	8	Range

Porcupine Holistic Resource Management Team

Comment:
6. Under the HM system the Porcupine Allotment has been grazed by a combination of cows, calves, bulls, and yearlings. We note that the DEIS indicates that this flexibility in grazing will be permitted to continue. This flexibility is the result of the HM monitoring and planning for the Allotment which personnel from the Mystic District have played a key role. We wish to assure you that the USFS will continue to have a partnership role in the holistic management of the Allotment.

Agency Response:
Your comment and support for continuing HM on the Porcupine Allotment is noted.

Letter No:	Comment No:	Resource:
9	9	Range

Porcupine Holistic Resource Management Team

Comment:
7. If we have misinterpreted any of the District's management goals and objectives the Porcupine Allotment or we have misapprehended or are in error as to how the District intends of implement or achieve such goals and objectives on the Allotment, we request that you advise us immediately. In such an event we would ask that the permittee and the HM Team be allowed to meet with you before the Final EIS and Record of Decision are released for the Mystic Range Project.

Agency Response:
Your comments and the request a meeting with the Mystic District Ranger (if you have misunderstood the goals and objectives for this Porcupine Allotment) is noted, and your request would be considered.

Letter No:	Comment No:	Resource:
10	1	Plan

Western Watersheds

Comment:
The Forest Service needs to provide a complete listing of all applicable Forest Plan direction, standards and guidelines, as well as each of the Watershed Conservation Practices Handbook direction and how the proposed action complies with each. While the EIS does provide a listing, rationale as to how the project complies with each is lacking. The Forest Service needs to provide a rational basis for those conclusions.

Agency Response:
A specific listing is not required in the NEPA document, but rather the Forest Service must tier and reference documents which are used in daily business, such as the Forest Plan, Manual and Handbook direction, regulations, laws, policies, etc.

Forest Plan direction is summarized in Chapter 1, pgs 24-26. Goals 1, 2, and 3 are considered the primary project drivers in terms of providing FP direction and guidance to support the purpose and need and the development of a responsive proposed action. Appendix E Management Direction and Opportunities discloses objectives and opportunities.

Letter No:	Comment No:	Resource:
10	2	Plan

Western Watersheds

Comment:
FSH 2209.13 91.1 requires:

"Under the National Forest Management Act (NFMA), project level decisions which authorize the use of specific National Forest System lands for a particular purpose like livestock grazing must be consistent with the broad programmatic direction established in the LRMP. Consistency is determined by examining whether the project level decision will implement the goals, objectives, desired conditions, standards and guidelines, and monitoring requirements from the LRMP."

A fundamental aspect of NEPA is to take a "hard look" at current management, conditions, assumptions and implementation. A NEPA document that fails to analyze the following violates the purposes of NEPA:

1) Validity of assumptions from previous NEPA processes
2) Accuracy of predictions from previous NEPA processes
3) Adequacy of Forest Service implementation of previous decisions
4) Permittee compliance with permit terms and conditions, AMP's, AOIs and other requirements
5) Effectiveness of actions taken in previous decisions

These above items are absolutely critical to be part of this NEPA process. Without this critical link the validity of the current assumptions are baseless. Let's look at each one of these individually. Without analyzing the accuracy and validity of the assumptions used in previous NEPA processes one has no way to judge the accuracy and effectiveness of the current analysis and proposals. This vitiates the NEPA process.

Agency Response:
The Mystic Range Project EIS tiers to the Revised Forest Plan, as amended. Chapter 3 discloses the environmental effects (direct/indirect/cumulative) for each resource.

See Agency Responses to Letter 10, Comments 4-39.

Letter No:	Comment No:	Resource:
10	3	Plan

Western Watersheds

Comment:
The predictions made in previous NEPA processes also need to be disclosed and analyzed because if the accuracy was not there, most likely you are making the same predictions in the current process and as such the process again will be vitiated.

Agency Response:
The DEIS contains a summary of past practices and current conditions in the Range Section. Appendix C describes the past, present and foreseeable actions for each Specialist's analysis.

Letter No:	Comment No:	Resource:
10	4	Range

Western Watersheds

Comment:
A review of the adequacy of the Forest Service's implementation of current AMP's, AOIs and Forest Plan standards is essential to a valid NEPA process. For instance, if in previous processes, the Forest Service said they were going to do a certain monitoring plan or implement a certain type of management or require certain impact limits, but if these were never effectively implemented, that is incredibly important for the reader and the decision maker to know. If there have been problems with Forest Service implementation in the past, it is not logical to assume that implementation will now all of a sudden the appropriate.

Agency Response:
The project's main focus is to determine whether or not livestock grazing should continue on the proposed allotments and, if so, what changes may need to be implemented to meet the Black Hills National Forest Land and Resource Management Plan, as amended. The DEIS contains a summary of past practices and current conditions expressed in the Range section starting on Page 65. Historic management is summarized as well. The current rangeland conditions are a reflection of monitoring work, implementation of AMPs, and permit administration by the Forest Service range personnel in cooperation with respective permittees.

Letter No:	Comment No:	Resource:
10	5	Range

Western Watersheds

Comment:
Another critical component is permittee compliance. If the permittee has failed to properly comply with their permit terms and conditions and AMP and AOI requirements, including utilization requirements, rotation requirements and fence maintenance then it is absolutely critical to discuss this in the document and its effects on the proposed action. Permittee failure to comply with permit terms and conditions and other requirements shows two things, firstly that the permittee has failed to implement even the minimal standards that are currently in place and secondly, it shows that the Forest Service has failed to take decisive permit action to ensure compliance. Both of these are very important aspects that must be discussed for a valid NEPA process, most especially when the FS as here is relying on adaptive management promises.

Given that documents obtained from the Forest Service over the last many years clearly show routine lack of compliance over most of these allotment, such analysis is even more critical.

Agency Response:
A summary of the past history of each allotment is found in the Range section, including statements regarding condition of range improvements, permittee compliance with assigned maintenance of improvements, and comments on permittee actions to manage their livestock.

Maintenance responsibilities and requirements are assigned through the terms and conditions of the Term Grazing Permit. Permit administration is a process linked to but separate from the DEIS. Permittee compliance with terms and conditions of the permit is handled through permit administration.

Your comments have been noted and considered regarding permittee compliance.

Letter No:	Comment No:	Resource:
10	6	Range

Western Watersheds

Comment:
Another critical component is an examination of the effectiveness of the actions taken in previous decisions. A classic example of this is fences and water developments. Often, new fences and water developments are proposed to solve riparian issues in spite of the fact that these have been used for many decades without correcting riparian issues. Doing more of the same that has not lead to good results is not an effective strategy for public lands management.

All of the allotments in question contains significant developed water resources and many pastures. The NEPA document provides no information to justify more of the same. In a 6 or 10 pasture rotation will adding more pastures solve the problem? How far do we go? 20 pastures for 3 days each? It is obvious from the information provided that nearly all the allotments are overstocked. More of the same will not solve the problem.

Agency Response:
The Proposed Action, Alternative C would resolve riparian issues with multiple approaches to improve resource conditions and trends, besides simply building a new fence or off-site water development. The DEIS proposes establishing a riparian stubble height requirement of 4 inches as a standard for triggering livestock movement to the next pasture (see DEIS, Appendix B-4). A few new water developments are intended to further distribute livestock away from riparian areas. One new fence is proposed to reduce livestock access to Slate Creek and incorporate the fenced area into another pasture which would greatly reduce the days of planned use (from 36 days to 4 days).

The movement of livestock before the threshold is exceeded for residual riparian stubble height (and/or upland vegetation percent utilization by weight) would improve resource conditions. The effectiveness of various adaptive options including establishing additional pastures is discussed in the Range Specialist Report. Additionally, the degree to which permittees are successful in applying some available adaptive management options may further progress in improving resource conditions. For example, permittees may influence livestock grazing use and presence by strategic salt and/or supplement placement, range riding to affect livestock grazing behaviors, and culling animals that do not range out from riparian areas (Page 42 of the DEIS).

Two and one-half allotments out of eight are suggested as overstocked based on the DEIS suitability/capability analysis (Page 69 of DEIS). Any new water developments are intended to gain further livestock distribution throughout a pasture or replace sources no longer available due to new fencing (highway right of way and riparian management). The Proposed Action, Alternative C initially does not call for additional fencing to create more pastures for seven of the eight allotments. The eighth allotment, Porcupine may have up to three new pastures established by cross fencing some existing pastures. These pastures would be intended to foster use of holistic management as currently practiced since 1989. These potentially new pastures plus two temporary pastures would only result if adaptive management options (Table 2-1, Page 47) are exercised based on observed results from monitoring.

Letter No:	Comment No:	Resource:
10	7	Plan

Western Watersheds

Comment:
FSH 2209.13 93.3a requires:

“The team, using an interdisciplinary approach, should identify the desired rangeland conditions within the analysis area. Desired conditions should be specific, quantifiable, and focused on rangeland resources.” (Emphasis added)

The EIS does not comply with this requirement. The so-called Desired Conditions in Table 1-2 are general Forest Plan desired conditions and have not been made site-specific for the area in question.

Agency Response:
See Agency Response to Letter 10, Comment 8.

Letter No: 10 **Comment No:** 8 **Resource:** Range

Western Watersheds

Comment:
FSH 2209.13 93.3c requires:

"Identification of resource management needs is simply the comparison of desired conditions with existing conditions to determine the extent and rate at which current management is meeting or moving toward those desired conditions." (emphasis added)

The EIS failed to meet this requirement. To say conditions are "moving toward" is meaningless without this information. For instance, everyone admits these lands were basically unmanaged until about the 1950's. Given how severely degraded these lands were up through that time, it would not be surprising that things look better than 1950, but is that "moving towards" sufficient?

Agency Response:
Desired conditions are described starting on Page 28 of the DEIS for all allotments. The existing conditions are noted on an allotment by allotment basis starting on page 65 of the DEIS. The IDT determined the apparent trend of each benchmark for each upland and riparian site. Qualitative assessments for each site were determined by the IDT after comparison of trend data gathered from monitoring results (Page 49 of DEIS). The qualitative descriptors are used to summarize the IDT's assessment into three catagories: Not Meeting Desired Conditions, Moving Towards Desired Conditions, or Meeting Desired Conditions.

The success, progress, and difficulties of regulating and managing livestock grazing within the project area are highlighted in the Background section of the DEIS starting on Page 22, and also discussed in the Range Specialist Report.

Letter No: 10 **Comment No:** 9 **Resource:** Range

Western Watersheds

Comment:
FSH 2209.13 93.3f requires:

"There is a two-part decision to be made for authorizing livestock grazing. The first part is whether livestock grazing should be authorized on all, part, or none of the project area."

The EIS failed to provide any information at all regarding the first requirement. For instance, developed recreational sites are generally considered not suitable for livestock grazing due to their significant conflicts. The document Rocky Mountain Region - Process Paper: A Process to Determine Capability and Suitability and Standards for NEPA Display likewise discuss this issue. Significant areas within the analysis area are developed recreation sites and should not be considered part of the suitable grazing area. In fact these areas, particularly around Macintosh fen and Deerfield lake could easily be removed from the allotment boundary. And should be based on the suitability issue.

Agency Response:
The purpose of the decision framework from this handbook direction is to establish a valid decision (if a previous one does not exist) regarding the appropriateness of livestock grazing use on these eight allotments covered by the DEIS. The DEIS's Summary on Page iii elaborates on the project's main focus. Legislative direction from Congress within the 1995 Range Rescission Act is being followed by this DEIS. Per the Forest Plan, developed recreation sites may be grazed on the Black Hills National Forest if livestock management strategies in allotment management plans meet recreational objectives for the management area. All acres within the Mystic Range Project are considered suitable for livestock grazing as noted on Page 67 of the DEIS per Forest Plan and Phase II Amendment. A process to determine suitability and capability for livestock grazing use was completed for this project (see Page 67 of DEIS). The MacIntosh Fen is designated as Management Area 3.1 (Botanical Area). It is not currently authorized for livestock grazing. The Lake Shore Pasture is within the Deerfield Recreation Area and contains developed sites by the lake. The Proposed Action, Alternative C would eliminate use of the Lake Shore Pasture.

Your comments have been noted and considered regarding removing of areas around MacIntosh Fen from within the allotment boundary.

Letter No: 10 **Comment No:** 10 **Resource:** Range

Western Watersheds

Comment:
"2503. Developed recreation sites will be closed or restricted to grazing through use of fencing, as opportunities permit. However, grazing may be used as a management tool in these areas. Recreational livestock will normally be fed in designated areas. GUIDELINE"

As is universal within Forest Service grazing NEPA processes, the defining of the adaptive management process in this case is woefully inadequate. The EIS cites neither FSH 2209.13 and the R2 Quimby document, and the EIS does not actually implement the requirements of either. We request that you review the R2 Adaptive Management Guidance document which clearly defines the minimum level of adaptive management.

Agency Response:
See Agency Response to Letter 10, Comment 9 regarding the future of livestock grazing in developed sites on the south side of Deerfield Lake.

Adaptive Management is defined in Chapter 5 Glossary, Page 293. The FSH 2209.13 and the "R2 Quimby document" ("A Practical Approach to Adaptive Management" (With a Specific Focus on Livestock Management NEPA based Decisions)) were reviewed and actively used in the DEIS. The reference to Quimby's document was inadvertently left off, and has now been added to the document and literature citations.

Letter No: 10 **Comment No:** 11 **Resource:** Range

Western Watersheds

Comment:
FSH 2209.13 93.3g defines adaptive management as:

Adaptive management is an interdisciplinary planning and implementation process that provides for: 1) identification of site specific desired conditions; 2) definition of appropriate decision criteria (constraints) to guide management; 3) identification of pre-determined optional courses of action, as part of a proposed action, from which to adjust management decisions over time; and 4) establishment of carefully focused project monitoring to be used to make adaptive adjustments in management over time.

As stated previously, the DC's laid out laid out in table 1-2 are general and not for specific benchmark areas and as such don't meet the requirement of the FSH. Additionally, as discussed in more detail in the Quimby document, "pre-determined" means "if this… then that", not just a general 'toolbox' with everything stuffed into it. And lastly, the EIS's "monitoring plan" could hardly be called "carefully focused"

We attach the cited Quimby document with key sections highlighted. These sections need to be thoroughly reviewed as the EIS does not implement most of them.

We also include as an attachment a useful document written by the US Fish and Wildlife Service on how to write goals and objectives. This document meshes closely with the R2 document discussed above.

Virtually every so-called "tool" the Forest Service wishes to have as part of adaptive management, has been available to it for decades. Most of these tools are part of the normal permit administration process.

Agency Response:
The allotment specific monitoring plans do set timeframes, measureable standards for resource objectives and for changes in management based on an evaluation of progress or lack thereof for representative benchmarks. Design Criteria to guide management are shown in Appendix B of the DEIS. Desired conditions are compared against monitored existing conditions at upland and riparian benchmarks on a pasture by pasture, allotment by allotment basis. The identification of a suite of pre-determined adaptive options (actions) are found in Table 2-1; Alternative B and C note on an allotment by allotment basis (within Chapter 2, DEIS) what are likely options to be exercised if monitoring does not indicate progress towards desired conditions for specific situations. A monitoring plan is displayed including narrative starting on Page 48 of the DEIS.

Your comments have been noted and considered regarding your opinion that the DEIS does not implement most of highlighted sections in your attached "Quimby" document. The reference to Quimby's documents was inadvertently left off, and has now been added to the document and literature citations.

Your comments have been noted and considered regarding use of the USFWS document on writing goals and objectives.

Your comments have been noted and considered regarding "tools" available within adaptive management. Some "tools" are not readily available through the permit administration process since NEPA analysis may be required prior to approval and implementation.

Letter No:	Comment No:	Resource:
10	12	Range

Western Watersheds

Comment:
The falsity of the Forest Service's purported need for "flexibility" is clearly exposed in FSH 2209.13 – 92 which states:

"The majority of these changes can be implemented administratively, provided the changes do not fall outside the scope of the NEPA decision. Examples of actions that may be taken without further NEPA analysis include alteration of management to respond to Biological Opinions or other ESA, Clean Water Act, or other consultation requirements; changes in specific dates of grazing, class of livestock to be grazed, grazing systems, or livestock numbers based on evaluation of monitoring results; and, implementation of the LRMP through modifications to the term grazing permit.

Administrative actions to implement higher level decisions or to respond to monitoring results should be undertaken as a routine administrative action prior to initiating NEPA."

The EIS states a "new" riparian utilization standard of 4 inches will now be implemented. As clearly shown in the above cited material, implementation of LRMP requirements should have taken place 13 years ago.

Agency Response:
Administrative actions within the defined limits of the resultant NEPA-based decisions can then be implemented without additional NEPA. Since these eight allotments do not have sufficient completed NEPA to satisfy the requirements of the 1995 Range Rescission Act, the Mystic District Ranger initiated and prepared a DEIS to comply with the National Environmental Policy Act and other relevant Federal and State laws and regulations.

Per the 2006 Phase II Amendment of the Forest Plan (refer to Page II-29 that plan), residual levels will be based upon specific objectives for the location in question and will consider season of use and range condition. The DEIS analysis examined riparian areas on a pasture by pasture basis, and proposes residual levels (or remaining height of key plant species) be initially set for riparian areas in an allotment management plan (AMP) or annual letter of operating instructions (AOI) to the livestock permittee. The DEIS notes on Page 36 under "Actions Common to Both Action Alternatives that this established standard would be prescribed for riparian areas in the AOI.

Letter No:	Comment No:	Resource:
10	13	Botany

Western Watersheds

Comment:
In the species calls sections the Forest Service lists most species as "may adversely impact individuals, but not likely to result in a loss of viability on the planning area, nor cause a trend to federal listing or loss of species of viability range wide" but the document fails to provide any information regarding current populations or trends which is of course fundamental to a supportable call. For instance, if there are 30 individual plants of a particular species in the planning area or even in the forest as a whole is that a viable population? Would affecting 6 of those individuals not likely result in a loss of viability, assuming viability currently exists? This information is not provided.

Agency Response:
The EIS summarizes the Biological Evaluation in the project file which utilizes the monitoring plan addressing status and trend of each species.

Population viability is a Forest Planning issue and as such is outside the scope of this analysis.

Letter No:	Comment No:	Resource:
10	14	Range

Western Watersheds

Comment:
The EIS fails to discuss actual use within the allotments. Actual use is critical because frequently actual use is significantly lower than permitted use. Therefore the analyses of current conditions must be based on the fact of actual use not permitted use. For instance if 1000 head are permitted on a particular allotment but the 20 year average is only 500 head then current conditions are, of course, the result of actual use half that of permitted use. So analyses based on full permitted use would be vitiated. Such information is fundamental to a valid NEPA process.

Agency Response:
Authorized use for each allotment is displayed on Page 65 of the DEIS. Actual use in most cases has been the same as allowed by the permit for these eight allotments. Chapter 3, Range, starting on Page 75 contains some statements for each allotment regarding any deviation from permitted use. Livestock numbers and season of use can be modified on an annual basis to adapt to climatic or administrative needs (such as non-use for personal convenience or resource protection (such as drought effects on forage and water supplies), or follow variable numbers/variable season direction.

Letter No:	Comment No:	Resource:
10	15	Wildlife

Western Watersheds

Comment:
Much of the analysis area is crucial winter range but the EIS fails to provide any differing utilization rates for these areas.

Agency Response:
Forest Plan Standard 2505 establishes proper use or residual levels of vegetation (utilization) for all management areas forest-wide. Monitoring will determine whether adjustments in actual use is needed to meet management area objectives for big game winter range.

Letter No:	Comment No:	Resource:
10	16	Range

Western Watersheds

Comment:
The EIS describes that range improvements throughout all the allotments as often in poor condition. The EIS states this is causing problems. Maintenance of range improvements is a permit term and is required in each AOI as a precondition for turnout. When you add these together, the only rational conclusion is that the Forest Service has never enforced these requirements. Why would anyone think all of a sudden that the FS will?

Agency Response:
In Chapter 3 of the DEIS, Range, each respective allotment's range improvements are discussed with regards to current status and overall condition starting on Page 78. As a general statement for all allotments, much of the current infrastructure was constructed 30-40 years ago. Some deterioration is occurring from age. Permittees are required to maintain existing structures as part of on-going permit administration, and reconstruction work has been occurring on some allotments to completely replace worn out aged improvements. Some permittees have invested recently in additional, new structures to affect better livestock control or improve distribution.

Letter No:	Comment No:	Resource:
10	17	Hydro/Soils

Western Watersheds

Comment:
While the EIS fails to discuss the issue, most of the current water developments are within riparian areas or directly adjacent to streams. This is an important issue that needs to be discussed. In addition, no information whatsoever is provided regarding the location of the proposed water developments. The maps provided as an appendix likewise failed to provide any information that would allow for a site-specific analysis of the impacts of the proposed developments. Knowing much of this area, frequently riparian areas are fairly thin strips between fairly steep slopes. This would lead to the conclusion that most of the water developments proposed will be very near or within riparian areas. The document provides no information on this critical topic.

Agency Response:
Livestock water developments help reduce the impacts to the riparian/stream by providing off stream water. Alternative C provides adaptive options for constructing off stream water developments to reduce and/or eliminate impacts to riparian/streams (DEIS pg. 47).

Forest Plan Standard 1304 states; 'As opportunities arise and need dictates, relocate or implement mitigation measures for roads, trails, watering tanks, ponds, water catchments, and similar facilities currently located with the Water Influence Zone.' As water developments are constructed or reconstructed, locations outside the water influence zone along with locations outside hardwood stands will be given first considerations.

Proposed water developments in Alternative C (including any reconstructed or additional structures from adaptive management) must comply with Forest Plan Standards 1304 (noted in preceding paragraph) and 2207 (locate livestock/wildlife watering sites outside of hardwoods unless no other option exists). These standards direct range improvement placement and are re-enforced by Regional Water Conservation Practices Handbook (WCP) Standard 3 as noted in Appendix B-2, Design Criteria. More detailed maps are found in the project file associated with the Range Specialist Report. You are correct that some of the project area terrain is as you described, but there are also areas of broad valleys and more moderate terrain. Any new or adaptive water developments were located to meet standards as noted for Forest Plan and the WCP Handbook.

Letter No:	Comment No:	Resource:
10	18	Range

Western Watersheds

Comment:
As is often the case with NEPA processes implementing adaptive management, we found no evidence within the NEPA document that the range of actions proposed as adaptive management had been actually analyzed for impacts or effectiveness. Further, we found no specific monitoring or measurable triggers or timelines which are necessary to define the adaptive management process. Adaptive management is solely based on monitoring as its foundation yet the Forest Service provided no commitment to conduct this monitoring.

Agency Response:
In Chapter 2 of the DEIS, Alternatives Considered Including the Proposed Action (starting on Page 35), alternatives considered in detail is explained. Alternatives Considered but Eliminated From Further Detailed Study is explained starting on Page 58 of the DEIS. The Range Specialist Report contains a detailed discussion of analyzed adaptive options. Chapter 3, Affected Environment and Environmental Consequences contains similar discussions for other resources.

Included within Chapter 2 (starting on Page 48) is a discussion of specific short-term (Implementation) and long-term (Effectiveness) monitoring, measureable triggers, and statements on frequency of monitoring by site (benchmark) for riparian and upland locations. Tables 2-2 and 2-3 display each type of monitoring plan starting on Page 50.

Letter No:	Comment No:	Resource:
10	19	Hydro/Soils

Western Watersheds

Comment:
The impact section regarding water quality ignores the issue of E. coli contamination.

Agency Response:
Discussion of Fecal Indicator Bacteria has been added to the document.

Letter No:	Comment No:	Resource:
10	20	Range

Western Watersheds

Comment:
FSH 2209.13 94.2 requires:

"The evaluation of a proposed action's environmental effects must include the potential effects of all adaptive management options that may be implemented at some future point in time. For example if one potential option is to fence off a riparian area, the effects of that fence must be evaluated even if that management option may never actually be implemented."

This was not done in the EIS.

We found no map or description of key areas nor areas meeting or no meeting desired conditions.

Again for the short or long-term monitoring we found no commitment, locations, triggers or measurable objectives.

Agency Response:
The potential effects of all adaptive options (even if never implemented) are discussed with Chapter 3, Affected Environment and Environmental Consequences, (Range, et al) starting on Page 63. Each respective resource evaluated the effects of proposed and adaptive options within Alternative B and C. Additionally, the Range Specialist Report contains a detailed discussion of analyzed adaptive options.

A definition of "key areas" is found in the DEIS, Chapter 5's Glossary. Additional text has been added to Page 71 under Forage Utilization to clarify the use of key areas in this project area. The map scale used in this DEIS limits display of key area locations; the district's allotment monitoring files have detailed maps.

Specific short and long term monitoring plans displaying key area information, monitoring sites (benchmarks), triggers, and measurable objectives are indicated in Table 2-2 and 2-3 starting on Page 51 of the DEIS.

Letter No:	Comment No:	Resource:
10	21	Wildlife

Western Watersheds

Comment:
The MIS section fails to comply with the extensive case law regarding management and analysis of MIS species. We request that they Forest Service read through this wide range of case law and correct its analysis in order to comply with NEPA and NFMA.

Agency Response:
Analysis of the effects of the Mystic Range Project on MIS species is found on pages 132-160 of the DEIS. For each species, the conclusion is made that applicable Standards would be met, Objective 238 would be worked toward and that the population is likely to persist on the Black Hills National Forest.

Letter No:	Comment No:	Resource:
10	22	Range

Western Watersheds

Comment:
The EA states that general capability and suitability determinations were made at the Forest Plan level, but ignores the requirements of FSH 2209.13 – 91 which states:

"Although an area may be deemed suitable for use by livestock in a LRMP, a project level decision evaluating the site-specific impacts of the grazing activity, in conformance with the National Environmental Policy Act (NEPA), is required in order to authorize livestock grazing on specific allotment(s)"

Although the NEPA document states that "the project's main focus is to determine whether or not livestock grazing should continue on the proposed allotments", but nowhere within the NEPA document was there any examination whether livestock should not be continued. Even in areas such as developed recreation sites where the Forest plan specifically states livestock grazing should not occur no analysis of continuing livestock grazing in these areas was done.

Agency Response:
An examination of whether livestock grazing should cease was conducted with Alternative A – No Action. This alternative would not re-authorize livestock grazing, and the current term grazing permits would be cancelled after completion of a two year notification period (Page 35 of DEIS).

Additionally, Suitable and Capable rangelands are discussed (Page 67 of DEIS). While the Forest Plan and subsequent amendment classify the project area as entirely suitable for livestock grazing, the MacIntosh Fen is dedicated for botanical area management. No other changes in range suitability were needed based on the DEIS. Range capability can be a useful tool at the project level to identify where forage is available, and how management can affect use of that forage. Capable acres for these allotments were initially developed using the latest GIS data available (available in the project file). Factors such as tree canopy cover, vegetative type and production, slope and aspect were all used to determine acres that were capable for grazing. However, range capability is a modeling tool only and may not portray an accurate assessment of on the ground conditions. Capability modeling output, examinations of annual monitoring and long-term trend data, as well as field site visits were used to conclude that current stocking rates are within range of grazing capacities for 5 ½ allotments, and that 2 ½ allotments are overstocked and may be exceeding grazing capacities.

Alternative A – No Action (Chapter 2 starting on Page 35) describes a transition where no livestock grazing would be reauthorized. See response to letter 10, comment 9 regarding the future of livestock grazing in developed sites on the south side of Deerfield Lake.

Letter No:	Comment No:	Resource:
10	23	Range

Western Watersheds

Comment:
Stunningly, the NEPA document shows that 145 miles of fence, 219 water developments and 9 miles of pipeline currently exist within the allotments in question. This is a stunning density of fences and water developments in the Forest Service proposes more, but provides no logic why such an incredibly high level of investment has resulted in the current degraded conditions. Nor why more of the same would result in resolution of these issues. This violates NEPA.

Agency Response:
See Agency Response to Letter 10, Comment 6 regarding the effectiveness of various range improvements. The project's range infrastructure is one of historic development, so the number of improvements in place is not unexpected based on past range improvement programs noted in past AMPs for this project. The positive effects from various reconstructed or new improvements are discussed in Chapter 3, Affected Environment and Environmental Consequences (starting on Page 63).

Letter No:	Comment No:	Resource:
10	24	Range

Western Watersheds

Comment:
The NEPA document states that "initially this would be 4" for key species (University of Idaho, 2004)" but nothing within the University of Idaho's stubble height review recommended a foreign stubble height. In fact it does just the opposite stating that a stubble height objective alone is insufficient and not a good management objective. In fact, in one of only 2 places discussing a specific height, it cites Clary and Leininger "15 to 20 cm (6-8") may be required to limit streambank trampling and to reduce willow browsing". Nearly every description of degraded riparian conditions within the allotments in question mentioned excessive streambank trampling and willow browsing. This is an abuse of science.

Agency Response:
Page 70 of the DEIS references the Caribou National Forest's Riparian Grazing Implementation Guide and also the University of Idaho's 2004 Stubble Height Study Report. Stubble height is an annual monitoring tool or indicator to aid in meeting resource management objectives. Clary and Leininger (2000) proposed a 10 cm (4inch) stubble height as a starting point for improved riparian grazing management, and they acknowledged that in some instances 7 cm (2.75 inches) may provide adequate protection. They also state that other sites may require 15 to 20 cm stubble height. Stubble height is an annual indicator of grazing use in riparian areas and is used in combination with long-term monitoring of vegetation and channel parameters.

Two riparian benchmark sites are moving towards desired conditions, while the other six locations are not moving towards desired conditions. Alternative C, Proposed Action is designed to move all locations to an improved condition as explained on Page 108 of the DEIS.

Letter No:	Comment No:	Resource:
10	25	Hydro/Soils

Western Watersheds

Comment:
The Forest Service's GTR-INT-263 specifically states "a 6 step planning process for praising riparian zones has been suggested (in part from Dwyer and others 1984): 1) determine what factor, such as bank instability or loss of woody plants, is the primary concern, 2) determine site potential in capability, 3) determine the suitability of the affected sites for livestock grazing, 4) determine the kind in class of livestock in duration and intensity of livestock grazing best suited to the area, 5) determine the best grazing strategy, and 6) apply the proper grazing intensity in keeping with animal distribution patterns" this was not done.

The same reference states "special situations such as critical fisheries habitats or easily eroded stream banks may require stubble heights of greater than 6 inches". It further goes on to state "degraded riparian areas may require complete rest to initiate the recovery process. In systems requiring long-term rest, the rest. Will be highly variable depending on the situation. It may be as short as one year or it may be 15 years or longer. Recovery of degraded stream bank form usually will require more time than the recovery of plant community composition, in some cases much more time, particularly if the channel has become incised and confined." It continues "however, no rotation system will allow recovery or maintenance of the riparian system unless all livestock are removed after the use period. In any event, rest rotation or any other conventional grazing system should not be considered the sole answer to riparian grazing needs."

This document on page 3 lists "suggested initial actions" based on ecological status and channel type. It states that for "B channel types with medium to fine easily eroded soil materials and most C channel types: apply rest until the ecological status improves". This is where many of the streams within the project area fall. It continues for areas with habitats were threatened, endangered or sensitive species "or where a stream banks/channels are highly erodible: the herbaceous stubble height criterion may need to be increased to greater than 6 inches"

BLM researcher Lewis H. Myers conducted a review of her case for grazing systems and their success in improving riparian conditions stated that "insist upon strict grazing system compliance. A few cattle remaining in a pasture after the prescribed use. Can negate the benefit of a good system. Stray animals invariably spend the bulk of their time in stream bottoms. 90% compliance with a grazing system is not adequate."

Agency Response:
GTR-INT-263 was published in 1989. Since then new methods have been created to assess and monitor riparian areas. The method that the Mystic Ranger District is using is MIM (Multiple Indicator Monitoring). This tool provides an efficient and effective approach to monitoring streambanks, stream channels and riparian vegetation. In 2008, MIM benchmarks were established in select riparian areas for seven of the eight allotments covered by the project area. The eighth allotment, Porcupine, does not have appreciable riparian areas and what is present has exclosure fencing in place. Suitability and capability of rangelands is addressed on Page 67 of the DEIS. Forage utilization and Desired Condition are elaborated on Pages 28, 36, and 71.

Stubble heights for this project are initially set at 4inches (starting point) by the IDT, based on the recommendations from the University of Idaho's 2004 Stubble Height Study Report. If monitoring shows that the riparian/stream are not improving and trending towards desired conditions, additional adaptive management option(s) may be implemented, one of which could be increasing stubble height. This is covered on Pages 36-37 for Actions Common to Both Action Alternatives. Deferred rotation strategy is part of the Proposed Action, Alternative C; rest rotation is not an initial action but can be exercised as an Adaptive Option (Table 2-1, Page 47) if needed to apply pasture rest if long-term monitoring (Table 2-2, Page 51) shows no improvement . GTR-INT-263 also states the while a grazing system is helpful, the level of utilization occurring on site is the most important consideration, hence the stubble height requirement. Additionally, the GTR states that specially designed grazing systems that control the degree and timing of livestock use in the riparian area can be highly beneficial.

The DEIS calls for movement of livestock before upland and/or riparian benchmarks are exceeded (Page 37).

Letter No:	Comment No:	Resource:
10	26	Range

Western Watersheds

Comment:
Forest Service researcher William S. Platts in Compatibility of Livestock Grazing Strategies with Fisheries 1989 found that deferred-rotation to be only “fair” at restoring degraded riparian conditions. It also found this system rated as 4 on a scale of 1 to 10.

In the recently issued BLM/FS publication TR 1737-20 Grazing Management Processes and Strategies for Riparian and Wetland Areas, which states "He (Myers 1989a) found that successful treatments averaged only 12.5 days whereas on successful treatments averaged 33.4 days" discussing the duration of hot season grazing used within riparian areas. This document also goes into detail regarding the development of riparian objectives and monitoring programs which have been ignored in the current process.

Agency Response:
Your comments have been noted and considered regarding Platts’ article on the ability of current (1989) grazing strategies to meet fisheries needs. His conclusions are based on references cited and his personal observations. He also concluded that the most promising strategies include additional options such as reducing intensity of use on streamside forage, controlling timing of forage use, and giving full consideration of riparian management objectives. These Platts options were considered in the formation of Alternatives B and C.

Myers article was considered in development of the alternatives for this DEIS. The DEIS addresses riparian objectives (desired conditions – Page 29) and a specified monitoring plan (Page 51) using MIM protocol (Management Indicator Measures).

Letter No:	Comment No:	Resource:
10	27	Range

Western Watersheds

Comment:
The EIS states "if monitoring does not indicate progress towards desired conditions, it may be necessary to change proper allowable use percent utilization by weight from 50% to 45%, and/or increase residual riparian stubble height to 6 inches." Unfortunately, the desired conditions laid out in the NEPA document are so general as to provide little useful information. In addition, no rate of change has been defined. And thirdly the absurdity of monitoring with a confidence level that would be able to differentiate 50% from 45% which would require probably 100 data points which would never happen.

Agency Response:
Changing the proper allowable use percent utilization by weight from 50% to 45% is a Forest Plan Guideline as displayed in Appendix B-3 of the DEIS. This applies to areas rated as “Unsatisfactory Condition” and with a Season of Use of “Deferred Rotation.” Clary and Leininger (2000) recommend higher stubble heights if progress towards desired conditions is not forthcoming. Desired conditions are shown on Page 29 of DEIS.

Your comments have been noted and considered regarding confidence level of ocular use estimation monitoring; methods used are from the approved 1996a Rangeland Analysis and Management Training Guide.

Letter No:	Comment No:	Resource:
10	28	Range

Western Watersheds

Comment:
Even though the forest plan requires the development of a drug management policy this was not done within the document.

Agency Response:
Your comment has been noted; a drug management policy is beyond the scope of this analysis.

Letter No:	Comment No:	Resource:
10	29	Botany

Western Watersheds

Comment:
While management area 3.1 Botanical Areas cover only a tiny fraction of the forest, the NEPA document fails to provide information regarding why livestock grazing is currently compatible with this use.

Agency Response:
Forest Plan Standard 3.1-2501 states “Allow livestock grazing if it does not conflict with the values for which the botanical area was designated.” Grazing could be allowed in these areas if beneficial for the resource. For example, early season grazing could be used to control infestations of Canada thistle.

See Agency Response to Letter 10, Comment 9.

Letter No:	Comment No:	Resource:
10	30	Wildlife

Western Watersheds

Comment:
57% of the entire area has a "big game winter range emphasis" but no site-specific utilization or other management objectives have been provided to meet these needs.

Agency Response:
Forest Plan Standard 2505 establishes proper use or residual levels of vegetation (utilization) for all management areas forest-wide. Monitoring will determine whether adjustments in actual use are needed to meet management area objectives for big game winter range.

Letter No:	Comment No:	Resource:
10	31	Range

Western Watersheds

Comment:
A total of 1333 acres are in developed recreation complexes yet despite the clear force plan direction that these not be grazed they remain so within the analysis area.

Agency Response:
Please see Agency Response to Letter 10, Comment 9, 2nd paragraph regarding the future of grazing within the Deerfield Recreation Area.

Letter No:	Comment No:	Resource:
10	32	Hydro/Soils

Western Watersheds

Comment:
While the general desired conditions for riparian areas is to "maintain riparian plant communities that provide overhanging vegetation…" nothing within the document provides direction to achieve this. Obviously a minuscule 4 inch stubble height could never provide "overhanging vegetation". Similarly issues with streambank alteration or mentioned repeatedly yet know annual streambank alteration requirements or triggers have been implemented. Without having an annual alteration trigger you will not be reaching streambank stability long-term goals. This is an obvious deficiency.

Agency Response:
Riparian plant communities that provide overhanging vegetation will be achieved by moving livestock at appropriate times. The triggers to move livestock to the next pasture are riparian stubble height and utilization standards (FP Standard 2505). Long-term monitoring with MIMs will determine if the riparian plant communities are at desired condition or moving towards the desired conditions. If conditions are not moving toward the desired conditions, the triggers will be changed and/or adaptive management measures will be implemented until desired condition are met or condition are moving that direction.

Streambank stability is a long-term monitoring item and is monitored using MIMs. Monitoring annual alteration is not needed to achieve the streambank stability goals. The key to reach the streambank stability goal is to move livestock at the appropriate time; riparian stubble height and upland vegetation utilization standards are good items to annually monitor and trigger livestock movement. Short-term monitoring is displayed starting on Page 51 of the DEIS.

Letter No:	Comment No:	Resource:
10	33	Hydro/Soils

Western Watersheds

Comment:
Page 50 discusses streambank alteration but only under the "long-term monitoring" section. This needs to be moved to the short-term monitoring section and more importantly included as a trigger/requirements to move upon.

Agency Response:
Short-term monitoring of riparian stubble height and upland vegetation utilization standards are adequate measures to be used as a trigger point to annually move the livestock (Page 50 of DEIS). Long-term monitoring using the MIMs protocol will let us know if the riparian areas are moving in the desired direction. Measuring streambank alteration during MIM transects work would provide an indication of the level of impact from hoof shear at the time of reading.

Letter No:	Comment No:	Resource:
10	34	Hydro/Soils

Western Watersheds

Comment:
Table 2-2 fails to provide what the current conditions are, so for instance "increase riparian vegetation" means what?

Agency Response:
Chapter 3 of the DEIS Range Section discloses the existing conditions, including MIMs data.

See Agency Response to Letter 10, Comment 33.

Increase riparian vegetation is a general heading for that section of the table. The description that follows tells what parameters are being measured by MIMs and what values they need to be moving towards that will result in improved riparian vegetation.

Letter No:	Comment No:	Resource:
10	35	Range

Western Watersheds

Comment:
The EIS states that "both alternatives B. and C. are designed to ensure that allotments are not overstocked" but neither of these alternatives adjust numbers, AUMs, or seasons of years. All the actions discussed have been permit requirements for decades. If they have not been implemented or required of the permittees up until now we are provided with no rational basis to conclude that they will in the future.

Agency Response:
Both Alternative B and C may result in adjustments to numbers and AUMs; this is explained in Direct and Indirect Effects Common to Both Alternatives on Pages 108-109. Actual grazing use each year on a pasture by pasture basis is regulated by adherence to allowable proper use guidelines and the proposed riparian stubble height standard. Use guidelines for vegetation have been in place for years as part of permit administration; it is likely that in some pastures with riparian height standards that livestock would be moved before all allocated forage is grazed.

Letter No:	Comment No:	Resource:
10	36	Range

Western Watersheds

Comment:
Page 69 states "stocking rates should allow a safety margin to provide for low forage producing years, in trend towards objectives is another consideration." But nothing within the document requires that this stocking rate adjustment be made.

Agency Response:
The Suitability and Capability Analysis was completed to re-evaluate grazing capacity in part because some areas are not moving towards desired conditions. Capability modeling output, examinations of annual monitoring and long-term trend data, as well as field site visits were used to conclude that current stocking rates are within range of grazing capacities for 5 ½ allotments, and that 2 ½ allotments are overstocked and may be exceeding grazing capacities. This document's proposed action would require that stocking rate adjustments be made, as necessary, as described on Page 108-109.

Letter No:	Comment No:	Resource:
10	37	Range

Western Watersheds

Comment:
In the discussion of current conditions we see the use of "meeting", "moving towards desired conditions" and "not meeting" but from the information provided the "moving towards desired condition" category has been used without basis. It seems to be a catchall between the 2 other categories but nothing within the document indicates information that would lead to a rational conclusion that the conditions described are actually "moving towards".

Agency Response:
Please see Agency Response to Letter 10, Comment 8, 2nd paragraph regarding use of adjective ratings of trend. Information for each respective benchmark site, by allotment, is provided in Chapter 3, Affected Environment and Environmental Consequences, Range starting on Page 63 of the DEIS.

Letter No:	Comment No:	Resource:
10	38	Range

Western Watersheds

Comment:
We see again in the same process as we do in all R2 RANGE NEPA the citation of Knapp and Seasted. This is another example of abuse of science. If one reads even the title of this paper one realizes that it has absolutely no application to the Black Hills National Forest.

Agency Response:
Your comments have been noted and considered regarding the citation of Knapp and Seastedt. Their paper points out the strong negative impacts of plant litter production on subsequent tall prairie ecosystem functions. The general classification of the Black Hills area is known as the mixed grass prairie, but there are some potential similarities from Knapp/Seastedt citation based on local observations of allotments within the Mystic Range Project. Molinar et al (2001) note that excessive mulch accumulations can be a challenge; they state excess forage can retard forage productivity and cause unwanted changes in composition if grazing and controlled burning are not applied as management tools. Specifically, forage yields varied directly with the level of mulch in mixed grass prairies of South Dakota. Additional text and citations have been added to clarify the statements in the DEIS.

Letter No:	Comment No:	Resource:
10	39	Range

Western Watersheds

Comment:
Despite the fact that the EIS discusses various resource concerns all pointing towards overstocking of the allotments, the NEPA document provides no process to reduce permits based on actual move dates. From what we can gather no changes in permitted use will be done.

Agency Response:
This DEIS's Proposed Action (Alternative C) would require that permit reduction be made, as necessary, as described on Pages 109 and 110. Any potential change in permitted use would be based on monitoring results of the rangeland resource condition and trend. The purpose of any adjustments in a permit would be to balance grazing use with movement towards desired conditions.

This process does not apply to year to year changes in actual use needed to comply with utilization by weight and riparian stubble height standards. The riparian stubble height requirement could have an immediate effect on actual use in some pastures.

Letter No:	Comment No:	Resource:
10	40	Range

Western Watersheds

Comment:
Page 1 of 9 states that "improvement is also based on the new riparian stubble height requirement that requires cattle are moved to the next pasture before this threshold is exceeded." But earlier in the documents it only states that livestock would be moved to other areas within the pasture not out of the pasture.

Agency Response:
The page number/reference you have supplied is not found in this DEIS. The intent of the riparian stubble height requirement is to maintain and improve riparian conditions by removing livestock grazing before the standard is exceeded. Generally this means livestock would be moved to the next pasture, even if upland forage grazing use has not met the proper allowable use percentage.

Letter No:	Comment No:	Resource:
10	41	Hydro/Soils

Western Watersheds

Comment:
Page 227 states that "most streams and headwater areas of streams within this allotment are meeting their beneficial uses as they are not on the South Dakota Department of Natural Resources 303D list of impaired streams". This statement is false and misleading. Absence of evidence is not evidence of absence. Without providing information on level of monitoring that is taking place within these streams, the Forest Service cannot claim that they are meeting their beneficial uses. Just because they are not on the 303D list means nothing. This baseless logic is repeated throughout the rest of this section. Nearly every riparian area discussed in this section fail to comply with Watershed Conservation Practices Handbook requirements but later on page 232 the document states "compliance with the Forest Plan and WCP Handbook standards is expected to keep these effects to an acceptable level" both of these sets of requirements have been in place for 15 years or longer and yet few of the riparian areas within the analysis area comply. Yet we are expected to believe that now all of a sudden they will.

Agency Response:
The language on page 227 has been updated in the FEIS to state: It is the responsibility of the State DENR to determine which streams to list as 303D impaired, and which are not meeting beneficial uses.

The Forest Plan standards which include WCPs have never been fully incorporated into the allotment management plans. This is why none of the alternatives being analyzed is 'Current Management". Current management was considered but eliminated from detailed study. All action alternatives meet Forest Plan Standards and monitoring (short-term and long-term) will assure Forest Plan compliance.

Letter No:	Comment No:	Resource:
10	42	Hydro/Soils

Western Watersheds

Comment:
The same page states "floodplains would not be impacted from grazing. Grazing or the lack of grazing has no direct or indirect effects on floodplains because no change occurs to the physical features of the floodplain". This statement is clearly false from hundreds of research papers. Look for instance at RMRS-GTR-54 or Belsky Survey of Livestock Influences 1999 as just a few.

Agency Response:
Floodplains are the flat areas along the stream. Grazing affects the vegetation along the stream and not the physical features. For example roads can fill floodplains affecting flood flows. Grazing does not affect the physical features and flood flows are allowed to spread out across the floodplain where as a road that has filled in the floodplain will change the characteristic of the flood because the flood flows will not be allowed to spread out. Therefore, grazing does not affect the physical feature of the floodplain.

Reviewing the cited literature does not support the claim that the physical features of the floodplain are affected by grazing. The two papers cited are summarized below.

RMRS-GTR-54 – "Management for Enhancement of Riparian and Wetland Areas of the Western United States: An Annotated Bibliography". This reference reviewed 1,905 papers and the paper was searched for references to floodplain'. There were 87 different papers that mentioned 'floodplain'. Two of those mentioned grazing. One was talking to floodplain wetlands and the impacts that overgrazing can have on the wetlands and floodplain is only mentioned because it was talking about wetlands on the floodplain. The second paper references the need for management strategies to consider full floodplain function. The others that referenced floodplains had no reference to grazing.

Belsky – This paper covers riparian and stream habitats and does not mention floodplains in the paper.

Letter No:	Comment No:	Resource:
11	1	Plan

Biodiversity Conservation Alliance

Comment:
I. The Mystic Range Project must comply with the National Forest Management Act (NFMA) and the 2000 Settlement Agreement between BCA, et al., and the U.S. Forest Service (USFS).

On August 1, 2000, BCA and USFS entered into a binding legal agreement by which USFS agreed to develop the Phase II Amendment of the 1997 Revised BHNF Plan "to ensure compliance with the requirements of NFMA, its implementing regulations and agency policy, and all inadequacies identified in the Chief's appeal decision of October 12, 1999 for the remainder of the life of the Forest Plan Revision." Settlement Agreement 9(a), Civ. No. 99-N- 2173 (Aug. 1, 2000). The implementing regulations in place at the time of the Settlement Agreement were the 1982 regulations. On May 30, 2006, BCA filed an appeal of the Phase II Amendment based on USFS' failure to comply with NFMA and the 1982 implementing regulations or the Chief's 1999 appeal decision, among other specific claims. The Chief of the Forest Service decided that appeal on November 1, 2006, by affirming the Phase II Amendment despite its legal inadequacies.

Paragraph 14(g) of the 2000 Settlement Agreement states that "Plaintiffs retain the right to enforce the terms of this agreement pursuant to the terms of this paragraph." Settlement Agreement 14(g). BCA followed the terms of the agreement when it filed its appeal of the Phase II Amendment. In previous administrative appeals, USFS has asserted Paragraph 14(i) of the 2000 Settlement Agreement against BCA. That paragraph states "[t]his Agreement, and the rights and obligations created by it, shall expire and be of no further effect or validity upon the promulgation of the Phase II Forest Plan amendment." Settlement Agreement 14(i). This clause in the Agreement presumes, of course, compliance with the Agreement's terms in the Amendment's promulgation, which did not occur. USFS further has asserted that Paragraph 12(c) precludes the use of the 2000 Settlement Agreement terms "in any future litigation or negotiations with respect to any matter whatsoever." Settlement Agreement 12(c). However, the same paragraph qualifies this limitation to allow use of the Settlement Agreement terms "to enforce this agreement pursuant to paragraph 14(g)." Id. BCA has not yet achieved enforcement of the agreement, and "reserve[s] the right to petition . . . a United States District Court Judge for the purposes of interpreting or enforcing the terms of this Agreement." Settlement Agreement 14(g).

USFS now proposes the Mystic Range Project, a project that must adhere to the 1997 Revised Forest Plan as amended by the Phase II Amendment. However, because the Phase II Amendment itself is illegal and does not comply with the terms of the 2000 Settlement Agreement or the applicable 1982 implementing regulations, as BCA explained in its 2006 appeal, any site-specific BHNF projects authorized pursuant to it are illegal if they do not meet the requirements of the Settlement Agreement. As such, the illegal flaws of the Phase II Amendment define the scope of any site-specific project authorized under its auspices, including the Mystic Range Project, and require consideration as USFS develops a Final EIS. The specific provisions of the 1982 regulations, case law precedent, and scientific studies noted below must be accounted for as USFS goes forward with the Mystic Range Project.

Agency Response:
Section 9(a) of the Settlement Agreement outlined what the Phase II Amendment must contain: (i) amendment of "current management direction – including forest-wide standards and guidelines – with appropriate public involvement to ensure compliance with" legal requirements for amendment to "address all of the issues identified in paragraphs 2, 3, and 4 of this settlement agreement, including northern goshawk, Management Indicator Species (MIS), and Research Natural Areas;" (ii) "The Regional Forester shall be the deciding officer for the Phase II Forest Plan amendment; and (iii) "Pursuant to 36 C.F.R. § 217.7(b)(2), the Chief will be the reviewing officer." Biodiversity Associates v. Laverty, Civil Action No. 99-N-2173, §9(a) (D. Co. 2000). Section 1(d) required the forest to prepare an EA or EIS to address mountain pine beetles and fire hazard in the Beaver Park Roadless Area. Id. at §1(d).

The Phase II Amendment addressed the northern goshawk, MIS, candidate RNAs, the forest's response to the mountain pine beetle infestation, and the forest's response to wildfires. ROD for Phase II Amendment of 1997 Revised Land and Resource Management Plan – Black Hills National Forest, pp. 1-2, 3, 5, 6, 7, 8, 9, and 20. Section 14(i) of the Settlement Agreement states that the provisions of the Settlement Agreement "and the rights and obligations created by it, shall expire and be of no further effect or validity upon the promulgation of the Phase II Forest Plan amendment…" Biodiversity Associates v. Laverty, Civil Action No. 99-N-2173, §14(i). The forest promulgated the Phase II Amendment upon issuance of the ROD and the FEIS in October 2005. BCA had the opportunity to challenge and did challenge the Phase II Amendment in 2006. That appeal affirmed the Phase II Amendment. That appeal is now exhausted, and the Phase II Amendment is part of the forest plan. As such, a challenge to the validity of the Phase II Amendment is beyond the scope of this project.

Letter No:	Comment No:	Resource:
11	2	Wildlife

Biodiversity Conservation Alliance

Comment:
II. The FEIS must ensure viable populations of wildlife on the Black Hills National Forest.

A. The 1982 regulations regarding wildlife viability and Management Indicator Species apply to the Mystic Range Project.

NFMA requires the Secretary of Agriculture to promulgate forest planning regulations that "specify[] guidelines for land management plans . . . [to] provide for diversity of plant and animal communities based on the suitability and capability of the specific land area." 16 U.S.C. § 1604(g)(3)(B) (2010). To meet this statutory requirement, the 1982 planning regulations direct USFS to manage habitat "to maintain viable populations of existing native and desired nonnative vertebrate species in the planning area." 36 C.F.R. § 219.19 (1999). The provision goes on to define a "viable population . . . as one which has the estimated numbers and distribution of reproductive individuals to insure its continued existence is well distributed in the planning area." Id. To accomplish this, USFS must provide habitat "to support, at least, a minimum number of reproductive individuals and that habitat must be well distributed so that those individuals can interact with others in the planning area." Id.

Furthermore, § 219.19(a)(1) requires USFS to identify and select as management indicator species (MIS) "certain vertebrate and/or invertebrate species present in the area" in order to monitor the "effects of management activities." Following such selection based on appropriate criteria, USFS must monitor population trends of MIS and determine relationships to habitat changes. 36 C.F.R. § 219.19(a)(6). Also, "[p]lanning alternatives shall be stated and evaluated in terms of both amount and quality of habitat and of animal population trends of [MIS]." 36 C.F.R. § 219.19(a)(2) (emphasis added). The 1982 planning regulations have never been overturned by a federal court, a clear indication they legally satisfy Congress' intent in enacting NFMA.

The 2000 Settlement Agreement requires USFS to analyze population trend data for Management Indicator Species (MIS) under the 1982 planning regulations at 36 C.F.R. § 219. Despite the USFS' previous assertions that the Settlement Agreement does not mention specific provisions of the 1982 regulations, the 1982 regulations were the relevant planning regulations in effect at the time USFS entered into the Agreement and governed both the development of the 1997 Revised Forest Plan and the Phase II Amendment.

USFS' reliance on the transition provision of the 2005 planning regulations in the Record of Decision for the Phase II Amendment to escape its MIS obligations is disingenuous. BCA entered into the 2000 Settlement Agreement in good faith with a shared understanding of USFS obligations toward MIS based on the 1982 regulations. Furthermore, the District Court for the Northern District of California struck down the 2005 regulations as unlawful under the National Environmental Policy Act (NEPA), the Endangered Species Act (ESA), and the Administrative Procedure Act (APA), rendering them invalid. Citizens for Better Forestry v. U.S. Dep't of Agric., 481 F.Supp.2d 1059 (N.D. Cal. 2007).

Instead, the 1982 provisions of the planning regulations requires that "[p]opulation trends of the management indicator species . . . be monitored and relationships to habitat changes determined" in order to satisfy NFMA. 36 C.F.R. § 219.19(a)(6) (1999). USFS must conduct "inventories" that "include quantitative data making possible the evaluation of diversity in terms of its prior and present conditions." Id. § 219.26. USFS "must evaluate planning alternatives for projects that affect the selected management indicator species 'in terms of both amount and quality of habitat and of animal population trends of the management indicator species.'" Forest Guardians v. U.S. Forest Serv., Civ. No. 00-714 JP/KPM-ACE (D. N.M. 2001) (quoting 36 C.F.R. § 219.19(a)(2) (1999). This stems from the prescription that forest plans must contain "[m]onitoring and evaluation requirements that will provide a basis for periodic determination and evaluation of the effects of management practices." 36 C.F.R. § 219.11(d)(1999).

The Phase II Amendment Record of Decision audaciously claims not to "impose an obligation to maintain viability at the project level," despite courts' opposite determinations. Phase II Amendment Record of Decision, p. 7 (2005). The fact that most species' range "extends beyond the scale of any particular project" does not relieve USFS from its monitoring and analysis duties at the site-specific level. Phase II ROD, p. 8. Instead, USFS must demonstrate it undertook the necessary steps to collect and assess targeted population trend data to determine whether a particular project will cause a species to be rendered unviable. USFS' assertion that "the 1982 regulation did not require that viability be maintained at the geographic and temporal scale of a single project nor did it require monitoring of MIS population trends at the scale" is unsupported by case law.

Agency Response:
Population viability is a Forest planning issue and as such is outside the scope of this analysis.

Letter No:	Comment No:	Resource:
11	3	Wildlife

Biodiversity Conservation Alliance

Comment:

A. The 1982 regulations regarding wildlife viability and Management Indicator Species apply to the Mystic Range Project.

USFS has asserted against BCA that the 1982 NFMA planning regulations do not apply to projects implemented under the 1997 BHNF Plan, despite a wealth of precedent to the contrary from the Tenth Circuit Court of Appeals and District Court for the District of Colorado and other federal jurisdictions. In Utah Environmental Congress v. Bosworth, the Tenth Circuit noted preliminarily that "[i]ndividual projects must comply the NFMA's enacting regulations." Utah Environmental Congress v. Bosworth, 372 F.3d 1219, 221 (10th Cir. 2004) (citing 16 U.S.C. 1604(i)). The Tenth Circuit further held that 36 C.F.R. § 219.19 (1999), which governs USFS actions relating to wildlife viability and MIS, applies to the authorization of site-specific projects, such as the TMP. Utah Environmental Congress, 372 F.3d at 1224-25. Site-specific projects must comply with forest plans, which must comply with planning regulations, which must comply with NFMA, the Tenth Circuit reasoned. Id. Following this logic, each tier of national forest management must comply with every higher tier, and the Tenth Circuit applied §219.19 to a site-specific project.

Similarly, the District Court for the District of Colorado held "that unless it is technically infeasible and not cost-effective, the Forest Service has an obligation to collect and analyze quantitative population data, both actual and trend, for MIS." Colorado Wild v. U.S. rest Serv., Civ. No. 03-Z-2592 (PAC) (D. Colo. 2004). The court reiterated "this requirement applies at both the forest-plan level and the project level." Id. Other district courts agree "[t]he unambiguous language of the MIS regulations requires collection of population data." Sierra Club v. Glickman, 974 F. Supp. 905, 936 (E.D. Tex. 1997). Under both binding and persuasive precedent, § 219.19 applies to the Mystic Range Project.

In light of the invalidation of the 2005 and subsequent 2008 regulations, USFS asserts the "best available science" standard drawn from the 2000 planning regulations (published after the 2000 Settlement Agreement) applies to site-specific projects. See Federal Register notice at http://www.fs.fed.us/emc/nfma/includes/2009_12_18_2000RuleFed_Reg_Notice.pdf; 36 C.F.R. § 219.35(a) 2001). Relying on this standard leads to non-compliance with the 1997 Revised BHNF Plan, developed under the 1982 regulations, and all site-specific projects must comply with the Forest Plan, as well as the terms of the 2000 Settlement Agreement. While use of a "best available science" standard sounds good for forest ecology, in effect it allows USFS to avoid ensuring wildlife viability or meeting its specific obligations regarding MIS in accordance with the 2000 Settlement Agreement. It allows USFS to arbitrarily opt not to seek up-to-date data and instead rely on obsolete research that barely scratches the surface of what actually is occurring on the ground across the BHNF.16U.S.C.§1604(g)(3)(B).

Agency Response:

The fact that the Revised Forest Plan was promulgated under the 1982 planning rule does not mandate use of that rule under subsequent project decisions.

Under the 2000 Rule, as amended, the authorized officer must ensure that the project is consistent with the Forest Plan, and find that the best available science was used 36 CFR 219.35(a) (2004). Use of the 2000 planning rule does not, as the commentor allege, lead to non-compliance with the Revised Forest Plan, as amended.

The 2000 Settlement Agreement has been expired and of no effect since October 2005. As such, no provision of the Settlement Agreement has any bearing on this project. Therefore, all assertions regarding the operation of the Settlement Agreement are outside the scope of the Mystic Range Project.

Letter No:	Comment No:	Resource:
11	4	Wildlife

Biodiversity Conservation Alliance

Comment:
B. The FEIS must provide thorough consideration and protections for MIS.

Page 132 of the DEIS refers back to the Phase II Amendment FEIS to avoid providing up-to-date data regarding the status of MIS in the planning area. The DEIS says "MIS are evaluated based on observations and/or presence of suitable habitat" in the planning area. Wildlife populations, as USFS acknowledges, are dynamic and subject to fluctuations due to a myriad of factors. Relying on data collected over half a decade ago fails to satisfy the purpose of having MIS. MIS essentially serve as proxies for other species that occupy similar habitat ecosystems. Without actual, current population data or viability calculations, this proxy purpose offers no way to confirm compliance with NFMA's diversity mandate.

Some courts prohibit using a habitat-as-proxy ("proxy-on-proxy approach") except "where both the Forest Service's knowledge of what quality and quantity of habitat is necessary to support the species and the Forest Service's method for measuring the existing amount of that habitat are reasonably reliable and accurate." Native Ecosystems Council v. Tidwell, Civ. No. 06-35890 3718-19 (D. D.C. 2010) (citing Native Ecosystems Council v. U.S. Forest Serv., 428 F.3d 1233, 1250 (9th Cir. 2005). In order for the proxy-on-proxy approach to pass judicial muster, it must "reasonably ensure[] that the proxy results mirror reality." Native Ecosystems Council, Civ. No. 06-35890, 3719 (citing Gifford Pinchot Task Force v. U.S. Fish & Wildlife Serv., 378 F.3d 1059, 1066 (9th Cir. 2004). Other courts (notably in the Tenth Circuit) prohibit the use of "habitat trend data" as a proxy for population inventories outright, based on the plain language of the 1982 regulations. Forest Guardians v. U.S. Forest Serv., Civ. No. 00-714 JP/KPM-ACE (D. N.M. 2001); Sierra Club v. Martin, 168 F.3d 1, 6 (11th Cir. 1999).

The DEIS does not demonstrate that either up-to-date population counts and viability calculations or a justifiable proxy-on-proxy approach satisfies USFS' legal obligations regarding MIS. Without baseline data and non-obsolete on-the-ground monitoring, USFS has not shown compliance with NFMA's diversity mandate or implementing regulations, let alone the 2000 Settlement Agreement or NEPA's "hard look" requirement.

Agency Response:
CEQ guidance states that the agency should "prepare analytic rather than encyclopedic environmental impact statements" and "emphasize the portions of the environmental impact statement that are useful to decision makers and the public and reduce emphasis on background materials" (40 CFR 1500.4). In response to this guidance, much of the information and documentation used to develop an EIS is kept in the project file and is available to the public upon request.

Under the 2000 Rule, as amended, the authorized officer must ensure that the project is consistent with the Forest Plan, and find that the best available science was used 36 CFR 219.35(a) (2004). The development of the Mystic Range Project and the analysis within the DEIS is based on the best available science.

Letter No:	Comment No:	Resource:
11	5	Wildlife

Biodiversity Conservation Alliance

Comment:
Neither has USFS honored its own policies. While the Phase II Amendment does not explicitly require population monitoring and USFS argues the 1982 regulations pertaining to MIS do not apply, the agency retains the concept of MIS yet then ignores the concept's purpose. USDA Departmental Regulation 9500-4 reiterates direction to USFS to manage habitat "to maintain at least viable populations" of "all existing native and desired non-native plants, fish, and wildlife species." USDA Departmental Regulation 9500-4. Specifically, the USDA regulation commands USFS to conduct "[m]onitoring activities . . . to determine results in meeting population and habitat goals." Id. The Forest Service Manual echoes this notion: "Conduct monitoring of plans and projects . . . ." FSM 2621.5.

Agency Response:
USDA Departmental Regulation 9500-4 was revised in 2008. The revised regulation does not include direction to maintain viable populations of existing species. The revised regulation states "A goal of the Department is to improve, where needed, fish and wildlife habitats, and to ensure the presence of diverse, native and desired non-native populations of wildlife, fish and plant species, while fully considering other Department missions, resources, and services."

The Forest monitors implementation and achievement of the Forest Plan, including MIS objectives, according to the Forest Plan Monitoring Guide, available on the Black Hills NF web page. The Forest monitors bird MIS populations through the Monitoring the Birds of the Black Hills Program under an agreement with the Rocky Mountain Bird Observatory (RMBO). The Forest worked with the University of Wyoming and developed a protocol to monitor beaver food caches on the Black Hills. The beaver protocol was first implemented in 2007. The Forest uses SDGFP data for monitoring deer and mountain sucker populations. The Forest worked with Rocky Mountain Research Station, SDGFP, and University of Missouri to develop a protocol for monitoring ruffed grouse habitat occupancy. The results of these monitoring efforts are reported in the Annual Monitoring and Evaluation Report, which is available in the Black Hills NF web site.

Letter No:	Comment No:	Resource:
11	6	Wildlife

Biodiversity Conservation Alliance

Comment:
We direct USFS' attention to the study by Traill, L.W., et al., showing "[t]he science of more than 30 years of empirical and genetic research on the viability of wild-living populations thus implies that the number of individuals (required to avoid a turning point toward extinction) is greater than generally appreciated or implemented within conservation management." Titled Pragmatic population viability targets in a rapidly changing world, Biol. Conserv. (2009). The authors contend conservationists often manage below a biologically reasonable extinction threshold." Id. "[A]ny conservation project that is serious about the long-term survival . . . of a species," the authors determine, "must aim for a meta-population of thousands of individuals." Id.

In the context of the Mystic Range Project, USFS must demonstrate how, in conjunction with other land managers, this "site-specific" project actually contributes to the maintenance of such viable meta-populations, through both localized population monitoring and habitat connectivity emphasis beyond the arbitrary boundaries of a project's scale. "[M]ost populations presently exist as fragmented sub-populations within a larger meta-population," the authors acknowledge, and this reality rings especially true for the BHNF. Id. Thus, "successful conservation depend[s] on genetic exchange among units to maintain high genetic diversity." Id.

A separate study defined "a minimum viable population size as one with a 99% probability of persistence for 40 generations." Reed, D.H., et al., Estimates of minimum viable population sizes for vertebrates and factors influencing those estimates, Biol. Conserv. 113 (2003) 23-34. The authors of this study "estimate[d] that in order to ensure long-term persistence of vertebrate populations, sufficient habitat must be conserved to allow for approximately 7000 breeding age adults." Id. at 30. The authors acknowledge the problems with managing for such large populations, as "continuous blocks of land capable of supporting populations of 7000 large vertebrates, especially carnivores, is not available." Id. at 31. "Thus," the authors recognize, "the need to coordinate networks of smaller populations to ensure viable populations through the use of corridors, or managed immigration, should be a high priority." Id.

Agency Response:
Traill et al. (2009) and Reed at al. (2003) were reviewed.

Management agencies, including the Forest Service rarely have perfect data needed for a population viability analysis (population size, mortality rate, natality rate, survival rate, etc.) as suggested by Reed et al. (2003) and Traill et al. (2009). The Forest focuses on habitat abundance and quality, and specific population trend indices for evaluations of persistence.

MIS were selected during the Phase II Forest Plan Amendment. The MIS were not selected because there is a persistence problem. They were selected based on several criteria, one of which is that they are relatively abundant and easy to monitor. The issue of MIS and other species persistence was addressed at the Forest scale during the Phase II Forest Plan Amendment. The Phase II Amendment determined that MIS and other emphasis species are likely to persist on the Forest if the Forest Plan is implemented as designed. As stated in the FEIS, the Mystic Range Project is consistent with the Forest Plan and therefore species are likely to persist.

Monitoring of MIS habitat and populations is done at the Forest scale and is reported in the annual Monitoring and Evaluation Report available on the Black Hills NF web site. The Mystic Range EIS discusses the effects on MIS and discussed these effects in the context of the Forest-wide habitat and population trends. The EIS also discusses how the project contributes to the MIS objectives (Objective 238).

Letter No:	Comment No:	Resource:
11	7	Wildlife

Biodiversity Conservation Alliance

Comment:
The DEIS for the Mystic Range Project fails to clarify how USFS intends to provide corridors or allow for managed immigration to accommodate viability on the larger temporal and spatial scale. Population viability analysis may not be an exact science, but it "is the method that most capably brings all the factors considered important to population persistence under one umbrella." Id. Merely tiering back to the flawed Phase II Amendment blatantly avoids assessing the current situation and planning accordingly to account for all factors involved in wildlife viability.

Agency Response:
Population viability is a Forest planning issue and as such is outside the scope of this analysis.

Letter No:	Comment No:	Resource:
11	8	Wildlife

Biodiversity Conservation Alliance

Comment:
No matter how USFS tries to avoid the viability and MIS standards of the 1982 regulations, the terminology and purpose of these concepts pervades throughout each tier of resource management for the National Forest System, and USFS has not satisfactorily addressed how it intends to comply with its obligations to viability in general and MIS specifically in the DEIS for the Mystic Range Project. In the FEIS, USFS must respond to and correct its inadequacies based on the above-mentioned case law, statutory and regulatory provisions, and scientific studies. The public demands and the law requires (via NFMA, NEPA, the Administrative Procedure Act, etc.) intellectual honesty and transparency from USFS, not mere lip service to wildlife viability and MIS that avoids making reasoned decisions supported by evidence fully disclosed in the record.

Agency Response:
See Agency Response Letter 11, Comment 3. The 2000 planning rule is in effect (July 15, 2009 letter from Joel Holtrop, Deputy Chief of National Forest System, to Regional Foresters).

Letter No:	Comment No:	Resource:
11	9	Wildlife

Biodiversity Conservation Alliance

Comment:
Specifically, the DEIS acknowledges grazing as "a serious threat to grasshopper sparrow habitats." DEIS, p. 145. The DEIS later states "beneficial effect" from grazing for this species' nesting and forage, but again acknowledges reduced cover, parasitism, changed grassland composition, and reduced prey from the action alternatives, as well as trampling concerns. Id., p. 146-47. Still, USFS asserts the acceptability of such adverse impacts because they somehow fall within the parameters of the Phase II Amendment, despite the almost certain degradation of habitat and direct mortality under the action alternatives presented. If USFS insists on allowing grazing in the project area, the FEIS should consider a broader range of alternatives proposing fewer impacts to this species. We note that the grasshopper sparrow is also a Region 2 Sensitive Species, so besides mere monitoring of habitat and population trends, USFS should be conserving and enhancing the species' habitat under Objective 221.

Agency Response:
The DEIS (page 145) states "Overgrazing in mixed- and short-grass prairies is a serious threat to grasshopper sparrow habitats." On the same page, the DEIS also states "However, when grazing was restricted to light to moderate levels, there was little effect to grasshopper sparrow densities (Slater 2004)." On page 146, the DEIS states "this species evolved with sporadic grazing by ungulates … which created a patchy mosaic of short and tall grass. Light to moderate grazing has had a beneficial effect on nesting and forage quality for this species. Therefore, the potential exists that with no livestock grazing, nesting and forage quality along with grasshopper sparrow abundance could decline. Studies have shown that grasshopper sparrows avoid tall dense grassland areas(Slater 2004)."

Letter No:	Comment No:	Resource:
11	10	Wildlife

Biodiversity Conservation Alliance

Comment:
Additionally, the mountain sucker serves as an MIS. The DEIS directly states "[t]he Forest-wide population trend for mountain sucker is one of decline." DEIS, p. 199. In light of this, USFS should consider more carefully how to meet Objective 238d, rather than assume the action alternatives will have a "neutral effect" because of the species' "limited occurrence in the analysis area." Id. Any occurrence in the analysis area should warrant more review than the DEIS offers, especially if this MIS is in decline. USFS owes the public a "harder look" at the effects of grazing and its associated activities (structural improvements, sedimentation, etc.) on this MIS if the public is going to trust USFS' assertion that "the mountain sucker [is] likely to persist for the next 50 years" in light of the decline in population.

Agency Response:
The mountain sucker is also designated as a Rocky Mountain Region sensitive species. To avoid redundancy, the direct, indirect and cumulative effects to the mountain sucker were analyzed in the Biological Evaluation. These effects are summarized in the DEIS (pages 197-200) and in Appendix D. The Regional Supplement (2600-2009-1) to the Forest Service Manual (FSM 2670) provides direction for conducting Biological Evaluations. We believe that the level of analysis is commensurate with the risk associated with the action and the vulnerability of the species involved given the limited distribution and occurrence of the mountain sucker and the minimal amount of suitable habitat occupied by the mountain sucker in the analysis area. This is consistent with the FSM Regional Supplement.

Appendix B (pages B-1 thru B-3 and B-7) and Appendix E of the DEIS disclosed measures to protect aquatic and riparian habitat and subsequently the mountain sucker.

Letter No:	Comment No:	Resource:
11	11	Wildlife

Biodiversity Conservation Alliance

Comment:
C. The FEIS must provide thorough consideration and protections for Region 2 Sensitive Species and Species of Local Concern (SOLC).

Page 186 to 187 of the DEIS states a "biological assessment/biological evaluation (BA/BE) would be completed . . . for the final EIS." To help the public better understand the implications of the alternatives presented, the DEIS should have presented more clear information on the effects of R2 Sensitive Species and Species of Local Concern. Instead, the DEIS refers to evaluations done for the Phase II Amendment regarding population viability to presume persistence of these species over the next 50 years "if standards and guidelines are followed, and if conditions move toward Forest Plan objectives," (emphasis added). For both Species of Local Concern and Sensitive Species, Objective 221 directs USFS to "conserve or enhance habitat" and maintain long-term persistence forest-wide. USFS has not demonstrated how the action alternatives presented will satisfy Objective 221, other than a blanket statement that "[a]ll alternatives would be consistent with Objective 221." DEIS, p. 174.

First, the nature of fluctuating wildlife populations renders evaluations done over half a decade ago for the Phase II Amendment obsolete. In Appendix D, for every single R2 Sensitive Species, the DEIS asserts the action alternatives are "not likely to result in a loss of viability" despite expected adverse impacts to individuals. Such assertions lack reasoning, as the DEIS fails to provide calculations of populations necessary for viability or clearly show which MIS serves as proxy for any given Sensitive Species or SOLC.

Agency Response:
The BA/BE analyzes only Region 2 sensitive species. Species of Local Concern have been discussed on pages 160-186 of the DEIS. Both action alternatives would be consistent with Forest Plan direction and move toward meeting Forest Plan goals and objectives, therefore the MRP would conserve and maintain habitat for Region 2 sensitive species and Species of Local Concern.

Determinations of impacts for Region 2 sensitive species is dictated by Forest Service Manual 2672.42 (Standards for Biological Evaluations), which states "For Region 2 sensitive species make a determination of:

(1) No impact;
(2) Beneficial impact;
(3) May adversely impact individuals, but not likely to result in a loss of viability in the Planning Area, nor cause a trend toward federal listing; or
(4) Likely to result in a loss of viability in the Planning Area, or in a trend toward federal listing." Determinations are made for each species, ranging from "no impact" to "likely to result …" depending on the effects of the alternatives. The "planning area" referred to in the determinations is the entire forest, as a unit (16 U.S.C. 1604 (f).

Letter No:	Comment No:	Resource:
11	12	Wildlife

Biodiversity Conservation Alliance

Comment:
Nor does the DEIS refer to reasonably recent baseline data demonstrating the current status of species' populations. On page 160 of the DEIS, USFS discusses its analysis of SOLC. "If a species is known or suspected to occur in the project area or if suitable but unoccupied habitat is present or adjacent to the area," the DEIS states, "then the species has been evaluated with respects to effects of the proposed project activities." DEIS, p. 160. The public thus gleans from the DEIS that USFS assumes SOLC can merely move out of the project's way, with no evidence to support that will occur. This does not provide a "hard look" at the significant impacts, but avoids such a "hard look." Without a more thoughtful analysis, the public is unable to discern whether the proposed project will comply with NFMA, its implementing regulations, the Forest Plan, or the Settlement Agreement (particularly regarding the northern goshawk), let alone NEPA's "hard look" requirement.

Agency Response:
Species of Local Concern have been discussed on pages 160-186 of the DEIS.

Region 2 Sensitive Species are discussed on pages 168-169, as well as in Appendix D of the DEIS.

The Mystic Range Project EIS tiers to the Revised Forest Plan, as amended. Chapter 3 discloses the environmental effects (direct/indirect/cumulative) for each resource.

See Agency Responses to Letter 10, Comments 4-39.

Letter No:	Comment No:	Resource:
11	13	Wildlife

Biodiversity Conservation Alliance

Comment:
Second, the reliance on the Phase II Amendment's evaluations presumes USFS has complied and will comply with its legal obligations toward wildlife across the BHNF, which USFS has repeatedly demonstrated has not and will not occur, even after prompting and orders from federal courts. The DEIS repeatedly makes statements "[a]ssuming Forest Plan Standards are met in the future . . . there would be adequate habitat to maintain a viable population" of various species, consistently referring back to the Phase II Amendment FEIS. See DEIS, p. 153. Setting aside the illegal flaws of the Amendment, assumptions of compliance on the part of USFS do little to assure the public any alternatives will avoid irreversible impacts to habitat and species populations. What if conditions do not move toward objectives for any number or reasons? USFS should assess action alternatives with fewer impacts to allow for variability in climate, catastrophic events, and its own potential failures in predicting the outcomes of its resource-intensive management practices. This will offer the public a more reasonable range of alternatives to satisfy NEPA.

Agency Response:
Both annual and long-term monitoring will determine whether conditions are moving toward objectives, and provide the basis for future modifications in livestock grazing.

Letter No:	Comment No:	Resource:
11	14	Wildlife

Biodiversity Conservation Alliance

Comment:
The action alternatives presented also place much of the responsibility in the hands of the permittees to ensure habitat will be conserved or enhanced. "Movement toward meeting desired condition that would improve habitat for riparian dependent SOLC species would depend upon the permittees' commitment to keep livestock away from riparian areas," the DEIS says. DEIS, p. 174. At what point will USFS determine whether the permittees have upheld their commitment? The FEIS should clearly state how USFS will ensure compliance, through monitoring, enforcement, or otherwise.

Agency Response:
See Agency Response to Letter 10, Comments 5 and 11.

Letter No:	Comment No:	Resource:
11	15	Wildlife

Biodiversity Conservation Alliance

Comment:
Third, the DEIS does not demonstrate compliance with several Forest Plan Standards. USFS has not shown adherence to Standard 3204 (to protect known raptor nests during the structural improvements Alternative C proposes), nor compliance with Standard 3111 (to minimize additional human-caused noise within one-half mile of goshawk nests during similar activities). Essentially no analysis is given to impacts to northern goshawk, which reinforces frustration over the species' elimination as an MIS in the Phase II Amendment, despite promises in the Settlement Agreement to provide more substantive protections for it. Similarly, it is not clear whether Standards 3104 and 3106 regarding water developments and ground-disturbing activities in riparian areas or wetlands have already been fully accounted for in the DEIS.

Agency Response:
The northern goshawk is addressed in the Mystic Range Project BA/BE, located in the project file. A summary of the effects to the northern goshawk is provided in Appendix D of the DEIS.

Additional language has been added to FEIS regarding FP Standards 3104 and 3106.

Letter No:	Comment No:	Resource:
11	16	Hydro/Soils

Biodiversity Conservation Alliance

Comment:
Also, Standard 1301 allows only those actions that maintain or improve long-term stream health and riparian ecosystem condition in the water influence zone. Will the structural improvements and grazing allowed in this zone truly maintain or improve stream health? How can USFS guarantee this and ensure compliance with this standard? An explanation of the need for each proposed water development should be provided in detail in the FEIS. Salting to coerce cattle movement patterns should not be allowed within 100 feet of streams or wetlands. Riparian area buffers should be created to protect the water influence zone within 100 feet of streams and wetlands. Fencing should only be used for excluding cattle from riparian areas, not along highways, unless the fencing is wildlife-friendly so as not to impede movement of game species. Open range signs along roads should help avoid cattle-vehicle accidents.

Agency Response:
For the action alternatives, grazing would continue along some streams in the water influence zone; structural improvements would be avoided if possible. Compliance with standard 1301 would be obtained through monitoring. The monitoring would be riparian stubble height for short-term and MIMs for long-term trend. Livestock would be moved to the next pasture when the stubble height is met. If stream and riparian conditions do not improve, as monitored by the MIM protocol, the stubble height may be increased or adaptive managements options would be implemented until stream and riparian conditions improve.

Salting – The Term Grazing Permit states in Part 3, Special Terms and Conditions, Section 2, Cattle Management Standards, Sub-section b, states, "Salt no closer than ¼ miles from water."

Alternative C includes fencing of some riparian areas and other actions designed to reduce effects to riparian area. Alternative B less so.

Alternative B does not include fencing along high speed roads, whereas Alternative C would require such fencing. The effects of these two approaches is presented on pgs 111 - 113 in the DEIS.

Letter No:	Comment No:	Resource:
11	17	Wildlife

Biodiversity Conservation Alliance

Comment:
Finally, the action alternatives do not comply with Forest Plan Standard 3103 to manage SOLC snail colonies "to retain favorable site conditions and to avoid/minimize the effects of land management activities to protect SOLC snails and their habitat." DEIS, p. 176. Both action alternatives will likely lead to mortality from livestock trampling, vegetation reduction, and riparian habitat degradation. In Alternative C, it seems USFS to think the adverse impacts from structural improvements and the benefits from the same even out to remain consistent with Objective 221, but the agency offers no actual analysis other than the standard "adherence to Forest Plan standards…" line. DEIS, p. 178.

Agency Response:
Both action alternatives are consistent with Forest Plan direction, including Standard 3103. As discussed in the DEIS (pages 177-178), some mortality is likely to occur due to livestock grazing, and associated activities. There was no assumption that benefits are equal or outweigh adverse impacts under Alternative C. See Agency Response Letter 11, Comments 11 and 12.

Letter No: 11 **Comment No:** 18 **Resource:** Wildlife

Biodiversity Conservation Alliance

Comment:
C. The FEIS must provide thorough consideration and protections for Region 2 Sensitive Species and Species of Local Concern (SOLC).

The FEIS must provide current monitoring data establishing a relevant baseline, and must determine population viability for R2 Sensitive Species and SOLC in the planning area, or at least show which MIS represent the Sensitive Species and SOLC, and provide such data for those MIS. The ROD, in turn, must implement protections for these species that ensures their viability and complies with all legal obligations mentioned above. USFS must take a "harder look" than just constantly repeating "adherence to Forest Plan standards" will satisfy its legal obligations, especially when Standard 3103 provides a direct mandate regarding SOLC snail colonies.

Agency Response:
Analysis of wildlife species for the MRP FEIS focuses on how the alternatives would influence the Forest-wide population trend (if available), the Forest-wide habitat trend, and attainment of Forest Plan objectives for MIS, R2 sensitive, and SOLC species. Trend data for all species was obtained from the FY2008 and 2009 Forest Plan Monitoring and Evaluation Reports (USDA Forest Service 2008a, 2009b) unless otherwise indicated. Viability analysis has been completed at the Forest Plan level (USDA Forest Service 2005a) and therefore is beyond the scope of this project level analysis. Adherence to utilization levels in both action alternatives would retain sufficient overstory to maintain moisture regimes, ground level temperatures, humidity, and litter adequate to maintain snail habitat.

Letter No: 11 **Comment No:** 19 **Resource:** Plan

Biodiversity Conservation Alliance

Comment:
III. The Mystic Range Project violates the Norbeck Organic Act.

Alternatives B and C for the Mystic Range Project would authorize grazing in the Palmer Gulch Allotment that include portions of the Norbeck Wildlife Preserve. The plain language of the Norbeck Organic Act places "protection of game animals and birds and . . . as a breeding place thereof" above all other management options in the Preserve. 16 U.S.C. § 675 (2010). The Tenth Circuit recognized the supremacy of this mandate over other USFS multiple-use balancing in Sierra Club-Black Hills Group v. U.S. Forest Serv., 2001 WL 892805 (10th Cir. 2001). Nevertheless, USFS proposes grazing in the Preserve to the detriment of game animals and birds, in violation of Congress' statutory mandate for the area.

Agency Response:
Alternative C includes a provision to eliminate grazing within the Norbeck Wildlife Preserve (DEIS pg. 43).

The decision on this project will be consistent with the Revised Forest Plan, as amended, and with the Norbeck Organic Act.

Letter No: 11 **Comment No:** 20 **Resource:** Wildlife

Biodiversity Conservation Alliance

Comment:
The DEIS fails to assess clearly the impacts of grazing on wildlife in the Preserve, leaving the public to ascertain USFS has elevated the multiple-use option of grazing above the protection of game animals and birds, despite statutory and judicial direction otherwise. Furthermore, such a failure violates NEPA's "hard look" requirement.

Agency Response:
Norbeck "focus species" identified by Griebel et al. (2007) to guide management of the Norbeck area in accordance with the original spirit and intent of the Norbeck Organic Act, were analyzed for the Mystic Range Project (In the DEIS see Table 3-6 on pg 187 in the Wildlife Section of Chap. 3).

The decision on this project will be consistent with the Revised Forest Plan as amended, and with the Norbeck Organic Act.

Letter No:	Comment No:	Resource:
11	21	Plan

Biodiversity Conservation Alliance

Comment:
The FEIS needs to clarify and correct several elements of the DEIS regarding MIS, Region 2 Sensitive Species, SOLC, the Norbeck Wildlife Preserve, habitat, water quality, and soil compaction, based on the case law, statutes, regulations, science, standards, and objectives noted. Selecting Alternative A would relieve the project area of the stress livestock grazing puts on the ecosystems. As the DEIS notes, "[l]ivestock grazing [does] not mimic the historical grazing patters [sic] of . . . native herbivores." DEIS, p. 145. "[N]ative ungulates [sic] movements provided a variety of successional stages and conditions," the DEIS states. Livestock grazing, in contrast, alters natural patterns to the detriment of ecosystems. Removing the stress from livestock grazing would allow the most rapid return to full ecosystem functioning, as the DEIS notes regarding Alternative A. The other two alternatives discussed in the DEIS differ very little other than the level of structural improvements proposed. The FEIS should include a fuller range of alternatives that looks at more contrasting levels of grazing. In the absence of a more reasonable range of alternatives, we support Alternative A, the no action alternative.

Agency Response:
NEPA and CEQ do not define a minimum number of alternatives that must be fully analyzed. A reasonable range of alternatives is required. The Mystic Range Project considered a total of 8 additional action alternatives in addition to Alternatives Considered in Detail. A description of these alternatives and the rationale for not analyzing them fully appears on pages 58-60 of the DEIS. This satisfies the range of reasonable alternatives required by the regulations.

See Agency Responses to Letter 11, Comments 4 – 15 and 17.

Letter No:	Comment No:	Resource:
12	1	Range

Seymour Shawn and Sherry

Comment:
I. I do not support the elimination of grazing or cancelling of permits in Alternative A.

Agency Response:
Your comments regarding not supporting Alternative A have been noted and considered.

Letter No:	Comment No:	Resource:
12	2	Range

Seymour Shawn and Sherry

Comment:
II. I do support the Alternative B. I believe it could be beneficial to graze the Mc Intosh Fen for 7 days in the spring and 7 days in the fall.

Agency Response:
Your comments and interest in managed livestock grazing of the MacIntosh Fan have been noted and considered.

Letter No:	Comment No:	Resource:
12	3	Range

Seymour Shawn and Sherry

Comment:
III. Alternative C gives some possible options.

Agency Response:
Your comments regarding options available with Alternative C have been noted and considered.

Letter No:	Comment No:	Resource:
13	1	Plan

Merlin/Frank Bloom

Comment:
I strongly believe that cattle grazing on the forest service is vital to the cattle industry.

Agency Response:
Comment noted.

Letter No:	Comment No:	Resource:
13	2	Botany

Merlin/Frank Bloom

Comment:
Not only does the cattle grazing help the ecosystem but they help replenish the plant and grasses.

Agency Response:
Comment noted. Grazing can have several benefits including increased species diversity, increased spatial heterogeneity, and promoted biodiversity.

Letter No:	Comment No:	Resource:
13	3	Range

Merlin/Frank Bloom

Comment:
Proposal C in the Environmental Impact Study is the best choice.

Agency Response:
Your comments in support of Alternative C have been noted and considered.

Letter No:	Comment No:	Resource:
14	1	Hydro/Soils

US Environmental Protection Agency

Comment:
Wetlands: In your April 9, 2010 response letter to our scoping comments for the project, you note that "[o]verall, no effects to wetlands areas are anticipated due to Design Criteria and BMPs." To clarify this point, we recommend that additional information be provided in the DEIS regarding the acreage of wetlands impacts for each alternative by allotment. The currently degraded condition should not be used as the baseline for assessing continued degradation that may result from future grazing. In addition, close coordination with the U.S. Army Corps of Engineers (USACE) is necessary to determine applicability of any Clean Water Act Section 404 regulatory requirements or oversight. The results of this coordination should be discussed in the Final EIS.

EPA notes Executive Order (EO) 11990 - Protection of Wetlands (May 24, 1977) states in pertinent part: "Section 1. (a) Each agency shall provide leadership and shall take action to minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands in carrying out the agency's responsibilities for (1) acquiring, managing, and disposing of Federal lands and facilities; and (2) providing Federally undertaken, financed, or assisted construction and improvements; and (3) conducting Federal activities and programs affecting land use, including but not limited to water and related land resources planning, regulating, and licensing activities. (b) This Order does not apply to the issuance by Federal agencies of permits, licenses or allocations to private parties for activities involving wetlands on non-Federal property." USFS should consider and document how EO 11990 will be carried out with regard to this project.

Agency Response:
Wetland acreage from the NWI is presented in EIS. Alternative C includes fencing of some riparian areas and other actions designed to reduce effects to riparian area. Changes implemented through monitoring are expected to maintain proper utilization levels and stubble height. Adaptive management actions are intended to maintain and improve wetland conditions by reducing or eliminating livestock use.

Section 404 of the Clean Water Act (33 USC 1344) The basic premise of the law is that no discharge of dredged or fill material can he permitted if a practicable alternative exists that is less damaging to the aquatic environment or if the nation's waters would be significantly degraded. (http://www.wetlandswatch.org/laws_regs.asp). No dredge or fill material will occur with any alternative.

Impacts to wetlands will be minimized under both Alternatives B and C with the implementation of stubble and utilization standards, and further minimized under Alternative C's adaptive improvements. No wetlands will be impacted or lost due to discharge of dredged or fill material. Since wetlands will be maintained on the allotments, the intent of EO 11990 will be implemented.

Letter No:	Comment No:	Resource:
14	2	Hydro/Soils

US Environmental Protection Agency

Comment:
Surface Water: The project area includes three streams- Rapid Creek, Spring Creek, and Victoria Creek -that are considered impaired. All three streams have impaired reaches that are not meeting their beneficial use of coldwater permanent fish life propagation due to high temperatures from natural sources (although grazing or other USFS activities may be playing a role). One of these streams, Spring Creek, has impaired water quality due to fecal coliform bacteria as identified in the Total Maximum Daily Load (TMDL). The Spring Creek TMDL for Fecal Coliform recommends that "livestock access to streams should be reduced, and livestock should be provided sources of water away from streams." Alternative B does not meet the intent of this TMDL.

Agency Response:
Comment noted. As stated in the DEIS, pages 242 – 243 "The implementation strategy, Livestock access to streams should be reduced, and livestock should be provided sources of water away from streams…" Alternative C does meet the intent of the TMDL better than Alternative B.

Letter No:	Comment No:	Resource:
14	3	Hydro/Soils

US Environmental Protection Agency

Comment:
We recommend that a table be provided to clearly identify the streams of the project area that are classified as "coldwater streams." Appendix B, Design Criteria, Mitigation Measures, and Monitoring, includes a requirement applicable to all South Dakota coldwater streams. Specifically, when water flow is present, the discharge of dredged or fill material shall not take place between October 15 and April 1. This requirement is intended to meet the USACE, South Dakota Regional Condition, for any adaptive management actions that would need to be authorized under a Clean Water Act Section 404 Nationwide Permit (NWP). The regional condition is intended to meet NWP #3 to protect spawning areas and specifically to protect fall spawning brook or brown trout. Again, close coordination with the USACE is necessary to determine applicability of any Clean Water Act Section 404

Agency Response:
Beneficial Uses tables are located in the 'Soil and Watershed Specialist Report' held in the project record. This project does not plan or propose to discharge any dredge or fill material under any alternative. See Agency Response to Letter 14, Comment 1.

Letter No:	Comment No:	Resource:
14	4	Hydro/Soils

US Environmental Protection Agency

Comment:
In addition, EPA is concerned with the limited water quality data presented in the DEIS. As you know, grazing has the potential to degrade water quality through increased sedimentation and loading of nutrients and pathogens. We recommend that you include requirements for monitoring the following water quality parameters: fecal coliform and total bacteria counts, nutrient concentrations, and temperature.

Agency Response:
From Carlson, Joan. 2010. Livestock Grazing ad Bacterial Water Quality. USDA Forest Service, Rocky Mountain Regional Office:

"Designing a monitoring program to determine bacterial water quality of a wildland stream and the influence of livestock grazing on bacteria in the stream is a challenge. Fecal indicator bacteria concentrations vary wildly in space and time. Data interpretation is complicated by analytical errors, survival of fecal indicator bacteria in the sediments and re-suspension, effects of storms and runoff events, and the contribution from wildlife or human sources. Special analytical techniques are required in order to determine the source of the fecal indicator bacteria in a sample. These techniques are not quantitatively reliable and are expensive.

And then there is the "so what?' question, given the issues surrounding the applicability of the current standards to wildland streams, nonpoint sources, animal sources and the infrequency of primary contact recreation use (if it occurs at all) in remote wildland streams.

Monitoring is not free and should only be done where there is sound reason to believe that livestock grazing is a risk to public health and where additional information is needed to make better decisions."

BMPs are used to control nonpoint source pollution. A memorandum of understanding between the South Dakota DENR and Forest Service recognizes SD DENR objectives in the South Dakota Nonpoint Source Management Program. Implementation of BMPs will bring the project into compliance with the South Dakota Nonpoint Source Management Program, applicable sections of the South Dakota Codified Law and the federal Clean Water Act.

Letter No:	Comment No:	Resource:
14	5	Range

US Environmental Protection Agency

Comment:
We are pleased with the wide range of adaptive management options that may be exercised under Alternatives B and C, as warranted by monitoring results. In general, we support broad consideration of adaptive management options, such as exclusions and upland water developments, whenever feasible to protect streams, wetlands, and riparian corridors. We also recommend protection of stream corridors through use of a minimum 100 foot buffer, particularly where grazing may be contributing to pathogen and temperature concerns. We recommend that the Final EIS specify both positive and negative potential impacts of each adaptive management option.

Agency Response:
Your comments in support of a wide range of adaptive management options have been noted and considered. Some of the proposed range improvements are intended to enhance protection of streams, wetlands, and riparian corridors. Additional fencing is proposed for Slate Creek on the Redfern Allotment to restrict livestock access (Page 45 of DEIS). An adaptive option to construct exclosure fencing around Heely Creek, Deerfield Allotment is retained as noted on Page 43. The positive and negative aspects of each adaptive management option are discussed in the Range Specialist Report.

Letter No:	Comment No:	Resource:
14	6	Range

US Environmental Protection Agency

Comment:
In addition, an explanation should be provided regarding the general timing of adaptive management implementation given that effectiveness monitoring would only occur every 5-10 years. We recommend that shorter timeframes be considered if undesirable results are encountered sooner than 5-10 years. Also, long-term goals should be established for achieving positive trends and desired conditions for currently degraded streams and riparian areas.

Agency Response:
The general timing of adaptive management implementation for both action alternatives is described on Page 46 of the DEIS. The decision to implement new adaptive options or adjust existing is warranted by monitoring results (short-term (year to year) and long-term (depending on study ranges from three to eight years (example on Page 52)). Interpretations of results of short-term monitoring are used to improve or adjust Annual Operating Instructions in cooperation with the permittees. Long-term trend changes by their nature are generally not detected by frequent monitoring; a range of duration is built into the monitoring plan (starting on Page 51 of DEIS) to allow for areas which may respond faster or slower to livestock effects. Long term goals for achieving desired conditions are expressed in the monitoring plan and Table 1-2, Desired Conditions for Vegetative Communities within the Project (Page 29).

Letter No:	Comment No:	Resource:
14	7	Range

US Environmental Protection Agency

Comment:
A firm commitment to effectiveness monitoring should be included in the Final EIS. Adaptive management cannot be employed without the full implementation of its associated monitoring schedule. Consequently, an environmentally conservative default management plan should be defined in case adequate resources for monitoring are not secured.

Agency Response:
The Forest Service's commitment to all aspects of monitoring, including permittee cooperation with short-term monitoring is expressed on Page 48 of the DEIS.

Your comments in support of developing an "environmentally conservative default management plan" have been noted and considered. As stated in the DEIS on Page 48, budgets, personnel, and resource conditions would determine the scope and degree of rangeland monitoring activities.

Letter No:	Comment No:	Resource:
14	8	Range

US Environmental Protection Agency

Comment:
The DEIS indicates that short-term implementation monitoring is largely the responsibility of the permittee. The Final EIS should include a discussion of how the Annual Operating Instructions will ensure compliance with these monitoring requirements. Also, as noted above, EPA recommends requirements for annual monitoring of water quality, especially given the impaired water quality listing of Spring Creek, in part due to fecal coliform from livestock. Such data may also be a valuable aid in assessing potential relationships between pathogen contamination and temperature issues.

Agency Response:
The Annual Operating Instructions (AOI) for each specific allotment would document the short-term monitoring requirements for a permittee's compliance and this is elaborated on Page 36 -37 of the DEIS for both action alternatives. The AOI comes from annual meetings with the permittees, and is based on the decision made in the Final EIS.

Water quality monitoring is currently occurring on Spring Creek and selected tributaries for the Spring Creek TMDL. It is being accomplished this year as part of the Spring Creek 319 Project. This monitoring is designed to get a picture of what is happening in the whole watershed. Just doing a water quality monitoring program for the allotments would only give a small snapshot of the watershed and would be meaningless. With the amount of private land within the watershed a whole watershed sampling program makes more sense.

Letter No:	Comment No:	Resource:
14	9	Fire/Fuels

US Environmental Protection Agency

Comment:
The project area is near the populations of Rapid City, Hill City, and Custer, as well as a mandatory Class I federal area (Wind Cave National Park) and a Sensitive Class II area (Black Elk Wilderness). Table 3-9 of the DEIS indicates that 23,608 acres of prescribed fires have been recently approved for projects in the same area. These prescribed fires are occurring presently on most allotments (or have been completed). It is unclear whether this large amount of acreage is being (or was) burned simultaneously or in smaller treatment blocks; however, at any given time, we recommend the use of small, scattered treatment blocks to minimize adverse impacts to air quality. Appendix C- Past, Present, and Foreseeable Activities in the Mystic Range Project- does not include quantification of present and foreseeable prescribed bum activities.

Agency Response:
The Mystic Ranger District expects to continue implementation of previous NEPA decisions or additional proposed prescribed burning treatments across the District in smaller scattered treatment blocks. This strategy ensures favorable burning conditions, effective smoke management mitigations and air quality compliance in population centers and sensitive (Class I and Class II) air sheds.

Smoke modeling and management is a specific part of each burn plan and very site specific parameters are designed for each burn block based on specific fire behavior and environmental parameters to mitigate potential smoke impacts to sensitive air sheds and population centers. The FEIS includes additional information on smoke management and mitigations.

Letter No:	Comment No:	Resource:
14	10	Fire/Fuels

US Environmental Protection Agency

Comment:
Under Alternative C, a 5,300 acre prescribed bum is proposed for the Porcupine Allotment. This significant prescribed fire activity may cause degradation of air quality and visibility in the region. While we note that the proposed prescribed bum is dependent on securing funding, EPA is concerned that the DEIS does not contain any analysis related to direct, indirect, or cumulative air quality impacts that would be associated with such a large bum. A thorough discussion of the project's smoke impacts on nearby population centers and Class I and Sensitive Class II areas should be included in the Final EIS. We recommend that the Final EIS include: (1) appropriate smoke mitigation (including meteorological conditions favorable for mitigated prescribed fire smoke and alternatives to prescribed fire such as mechanical fuel reduction methods), modeling, and monitoring techniques; (2) the incorporation of the Interagency Prescribed Fire Planning and Implementation Procedures Guide into the Burn Plan designed specifically for this project; (3) coordination with the South Dakota Department of Environment and Natural Resources; (4) adherence to the USFS internal process for managing prescribed fire; and (5) public notification of pending burns.

Agency Response:
A site specific burn plan is required to include specific smoke mitigation techniques. FS policy and manual direction will be followed when writing the burn plan. This includes the most recent version of the Interagency Prescribed Fire Planning and Implementation Procedures Guide. There are a total of 21 required elements including smoke management, meteorological conditions and public notification requirements in this guide. The guide is used as required by policy to prepare all burn plans. These plans are then reviewed by subject matter experts to ensure all elements are fully and completely addressed before final approval of the burn plan for implementation.

Letter No:	Comment No:	Resource:
14	11	Heritage

US Environmental Protection Agency

Comment:
Although not an air quality related concern, we also note that the proposed prescribed burn has not received concurrence from the South Dakota State Historic Preservation Office. We would expect to see a discussion of any such consultation in the Final EIS.

Agency Response:
Consultation with South Dakota State Historic Preservation Office will be conducted prior to any prescribed burning within the Porcupine Allotment per the National Historic Preservation Act.

Letter No:	Comment No:	Resource:
14	12	Plan

US Environmental Protection Agency

Comment:
Consistent with Section 309 of the Clean Air Act, it is EPA's responsibility to provide an independent review and evaluation of the potential environmental impacts of this project. Based on the procedures EPA uses to evaluate the adequacy of the information and the potential environmental impacts of the proposed action, EPA is rating this DEIS as Environmental Concerns - Insufficient Information (EC-2). Because a preferred alternative was not identified in the DEIS, we are rating the DEIS based on Alternatives B and C (we do not rate the no action alternative). The "EC" rating indicates that EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. The "2" rating indicates that EPA has identified additional information, data, analyses, or discussion that should be included in the Final Environmental Impact Statement. A full description of EPA's rating system is enclosed.

Although Alternatives B and C received an EC-2 rating in this review, we do not view them as equivalent. EPA recommends Alternative C as the environmentally-preferable action alternative to mitigate water resource impacts. The construction of new range structures would provide better resource protection and better livestock distribution, allowing a move toward ultimate recovery of currently degraded streams and riparian areas. Alternative C meets the intent of the Spring Creek TMDL for Fecal Coliform bacteria, which recommends that "livestock access to streams should be reduced, and livestock should be provided sources of water away from streams." We hope that our comments regarding water resources and air quality will assist you in further reducing the environmental impacts of this project. Additionally, we look forward to seeing further detail regarding the adaptive management and monitoring plans in your Final EIS.

Agency Response:
Comments and EPA’s rating is acknowledged and Alternative C as the environmentally preferable action alternative.

Letter No:	Comment No:	Resource:
15	1	Plan

SD Department of Game, Fish and Parks

Comment:
Except for the Porcupine Allotment (comments submitted separately through the HM Team), we support Alternative C which, in our opinion, is the first BHNF allotment revision analysis that not only schedules timely improvements and monitoring, but when selected, the ROD would be the administrative tool to require adherence to better meet healthy ecosystems and Forest Plan directives. We greatly support the following: newly proposed riparian residual height requirements, bighorn sheep considerations, off-dates in Norbeck, vigilant adherence to monitoring, and employment of the Watershed Conservation Practices Handbook.

Agency Response:
Comment noted.

Letter No:	Comment No:	Resource:
15	2	Range

SD Department of Game,
Fish and Parks

Comment:
Cooperative Efforts
Please keep in mind that SDGFP is interested in partnering on wildlife and fisheries habitat improvement projects, including removal of unnecessary structures within Norbeck pursuant to our interagency Norbeck MOU.

Some SDGFP staff is trained in MIM and Robel Pole monitoring methodologies and we offer assistance to BHNF with data collection efforts.

At MIM training, the author/instructor suggested a minimum of once every 3 years to indicate upward, stable or downward trends. Table 2-3 indicates MIM will be performed every 3-6 years and cover frequency 4-8 years. If BHNF is required to have several years of "trend" data to implement adaptive management changes, it could take 18 years before BHNF has 3 data points of MIM trend data, which takes BHNF into the next round of allotment revisions and the cycle repeats itself with little to no on-the-ground riparian area improvements in the life of the Allotment Management Plan. If allotment structures are required within 3 years, so too should be quantifiable monitoring data. Thus, we again offer our assistance to BHNF with data collection efforts.

Agency Response:
Your comments regarding willingness to partner with the Forest Service to accomplish wildlife and fisheries habitat improvement projects is noted, as well as assist with removal of unnecessary structures within Norbeck.

Your comment to offer assist with MIM transects and trial test Robel Pole methodologies is noted and would be considered.

Concurrent with any new required structural improvements (Alternative C) are the implementation of the 4 inch residual riparian height standard plus continued use of the upland vegetation percent allowable use of 50% by weight guideline. Use of this standard and guideline could have an immediate effect on actual use as pointed out in Chapter 3, on Page 108 of the DEIS. Livestock may move through a pasture faster because of the stubble height requirement, and leave the allotment earlier in the season. There should be a faster rate of improvement as noted in the DEIS because of this new stubble height requirement.

The Mystic Range Project IDT agreed to a range of frequency for re-measuring transects. This is because changes in condition tend to take time. If the opportunity occurs to measure on a more frequent basis, the Forest Service would accomplish that result. The MIM texts (Burton, et al 2007) do note that riparian areas are resilient and vegetation tends to respond quickly following initial management adjustments. They also note that the period can be extended because of slower recovery rates. Since initial range structural improvements are planned to be accomplished within 1-3 years, deferring re-measurement until there is some time past allows for vegetative recovery to occur.

Letter No:	Comment No:	Resource:
15	3	Range

SD Department of Game,
Fish and Parks

Comment:
Missing Information
We apologize if we are remiss, but we cannot locate the following in the DEIS:
1. Summit Pasture in the Palmer Gulch Allotment.

Agency Response:
The Summit Pasture is located within the perimeter of the Rabbit Pasture. Its approximate legal location is T1S RE S32 SWSE. Since this pasture is approximately 20 acres in size. The map scale used in this DEIS limits display of the Summit Pasture's location; the district's allotment monitoring files have a more detailed map.

Letter No:	Comment No:	Resource:
15	4	Range

SD Department of Game,
Fish and Parks

Comment:
Missing Information
We apologize if we are remiss, but we cannot locate the following in the DEIS: 2. Tables X and 4 as stated under Desired Conditions in Table 2-3.

Agency Response:
The correct Table reference should be Table 1-2, not Tables X and 4. Table 1-2 displays desired conditions for each community type with the Project.

Letter No: 15 **Comment No:** 5 **Resource:** Range

SD Department of Game, Fish and Parks

Comment:
Missing Information
We apologize if we are remiss, but we cannot locate the following in the DEIS: 3. Reclassify Cooper Ranch from private to state land in Porcupine Allotment.

Agency Response:
All references to Cooper Ranch as privately held property will be changed to list ownership by the South Dakota Game, Fish, and Parks (Game Production Area).

Letter No: 15 **Comment No:** 6 **Resource:** Range

SD Department of Game, Fish and Parks

Comment:
Missing Information
We apologize if we are remiss, but we cannot locate the following in the DEIS: 4. Definition of IPM on page 107.

Agency Response:
IPM is an abbreviation for “Integrated Pest Management” and is used by the Forest Service to explain a comprehensive approach to treating, confining, and containing noxious weeds. IPM is a process that determines an economic or environmental threshold for managing pest populations, and prescribes the management technique to reach desired conditions. IPM includes four broad categories of techniques: biological, cultural, mechanical, and chemical. All references to IPM will be clarified, and a definition added to the DEIS’s Chapter 5 Glossary.

Letter No: 15 **Comment No:** 7 **Resource:** Range

SD Department of Game, Fish and Parks

Comment:
Missing Information
We apologize if we are remiss, but we cannot locate the following in the DEIS: 5. Identification or disclosure of key riparian species for the residual 4" cover.

Agency Response:
The Desired Conditions Table 1-2 lists more desirable riparian species which are expected to increase in benchmark sites currently less than their potential. The DEIS states residual levels (or remaining height of key plant species) for riparian areas on Page 36 of the DEIS. On Page 49 residual amounts for Carex spp. are discussed. In the handbook for MIM protocol (Burton, et al 2007), key species are selected to measure that are important to the plant community, are relatively available to livestock use, and serve as indicators of change. The IDT initially selected the key species per site during each initial transect establishment (2008); deep rooted plants were preferred because of their contribution to stability. Palatable hydric graminoids (Carex spp.) were often lacking in numbers and presence, so palatable mesic graminoids may be and were chosen instead (e.g., Poa pratensis). The IDT expects as riparian conditions improve that the key species would be changed to a riparian species.

Letter No: 15 **Comment No:** 8 **Resource:** Botany

SD Department of Game, Fish and Parks

Comment:
Missing Information
We apologize if we are remiss, but we cannot locate the following in the DEIS: 6. Adaptive Management recommendations that will specifically identify potential needs to improve conditions for botanically sensitive areas such as BA's and montane grasslands.

Agency Response:
Table 2.1 lists the Adaptive options that could help address issues/concerns for sensitive areas including Botanical Areas and Montane Grassslands. Any of these options could be used where appropriate to address specific concerns for sensitive areas.

Letter No:	Comment No:	Resource:
15	9	Range

SD Department of Game,
Fish and Parks

Comment:
Missing Information
We apologize if we are remiss, but we cannot locate the following in the DEIS: 7. Corrals should not be constructed in wet meadows (DEIS page 216, effects to botanical resources).

Agency Response:
No reconstructed or new corrals are planned in wet meadows; the sentence in question on Page 216 of the DEIS will be rephrased. Design Criteria shown in Appendix B state ground disturbing activities require heritage resource and sensitive species survey, plus approval by the respective specialist.

Letter No:	Comment No:	Resource:
15	10	Range

SD Department of Game,
Fish and Parks

Comment:
Reliance on Local I Relevant Science and Non-Native Grasses
DEIS discussions on litter buildup relied on data from non-native Japanese brome (Haferkamp and Karl 1999) and inhibition of vegetation growth based on tall-grass prairie species found in Kansas (Knapp et al. 1986). Neither article is relevant to Rocky Mountain ecosystems and we believe over emphasizes livestock as the main disturbance that can achieve a reduction in thatch. Big game grazing and fire were not given equal consideration as disturbance agents inthe DEIS (some mention on page 107). As also noted in our Northern Hills Northzone 08 comments, we believe comparing native short-grass and mid-grass species in the Black Hills to tall-grass prairie species found in the deep, rich soils of Kansas is a bit of a stretch for this environmental analysis.

Agency Response:
Hafercamp citations were only used in the DEIS to explain how plant litter may initially promote seedling establishment of undesirable plants. This statement was used to explain a possible effect on the rangeland resource if Alternative A, No Action was implemented. Your comments have also been noted and considered regarding the citation of Knapp and Seastedt. Additional text and citations has been added to clarify the statements in the DEIS.

The general classification of the Black Hills area is known as the mixed grass prairie, but there are some potential similarities from Hafercamp/Knapp/Seastedt citation based on local observations of allotments within the Mystic Range Project. Additionally, Molinar et al (2001) note that excessive mulch accumulations can be a challenge; they state excess forage can retard forage productivity and cause unwanted changes in composition if grazing and controlled burning are not applied as management tools. Specifically, Molinar found forage yields varied directly with the level of mulch in mixed grass prairies of South Dakota.

Big game grazing and presence or absence of fire (wildfire, prescribed fire) is noted on Pages 106, 107, 127, 128, 129, 130, 132, and 217-220. Additionally, cumulative effects for some MIS species discuss the effects of big game grazing and fire as affecting vegetation.

Your comments have been noted and considered regarding comparing native short-grass and mid-grass species in the Black Hills to tall grass species in Kansas. We are not aware of any direct species comparison within the Mystic Range Project DEIS.

Letter No:	Comment No:	Resource:
15	11	Range

SD Department of Game, Fish and Parks

Comment:
There should be a separate discussion for brome species since they cannot be compared to each other or to native grasses. Buildup of non-native sod-formers (such as smooth brome) that were planted for soil stability along roadsides and hay pastures, require disturbance and impact native vegetation and forage quality different than annual weedy brome species. All are unpalatable or avoided by wild ungulates after flowering and curing. The discussion on annual, weedy brome species (DEIS page 105) was interesting but appears to be inapplicable since annual bromes and fires carried by their buildup were not listed as an issue of concern in the botanical analysis. In fact, the Jasper BAER report indicated many meadows did not burn due to overgrazing vs. spotty or light burn due to proper levels of residual vegetation. Please include fire data that supports the contention that annual bromes on BHNF have contributed to widespread flashy fires, similar to sage brush ecosystems or short-grass prairies of the Great Basin.

Agency Response:
A discussion of the merits of native versus non-native plant species is found in the Desired Condition paragraphs on Pages 28-30, and again starting on Page 71. There is no reference to weedy annual bromes except on Page 105 as you noted which points out there is a species (cheatgrass) known for its competitive ability to initiate new growth in areas of accumulated plant litter. The presence of cheatgrass was not raised as an issue by any party or IDT member in this project area. The DEIS is not contending that annual bromes within the project area is contributing to widespread flashy fires; text edits will be made to Page 105 clarify this section. The point expressed in Alternative A's Direct/Indirect Effects narrative is any accumulation of fine fuels, regardless of source, increases the chance of a wildfire; In this alternative no grazing by livestock would elevate fine fuel loadings and potentially fire hazard. This is supported by the analysis in the Fire/Fuels section of the DEIS on Page 218.

Letter No:	Comment No:	Resource:
15	12	Botany

SD Department of Game, Fish and Parks

Comment:
Further, it is our experience that when non-native grasses such as Timothy, smooth brome, and Kentucky bluegrass dominate botanical communities, long-term range monitoring interprets the results as vegetation stable. But no indication is given as to why a near monoculture of nonnatives is considered desirable. We appreciate the fact that these non-natives are difficult to combat, as mentioned in the DEIS. However, when contiguous stands of these species occur, it would be helpful to have them separately identified as such and not compared to native complexes.

Agency Response:
Many of these non-native grasses (Timothy, smooth brome, Kentucky bluegrass) have established themselves in Black Hills communities. However, riparian/upland utilization standards will help address this issue which can help increase the opportunity for re-establishment of native species.

Letter No:	Comment No:	Resource:
15	13	Range

SD Department of Game,
Fish and Parks

Comment:
DEIS (page 72-73) estimates palatable ratings for Timothy, smooth brome and Kentucky Bluegrass for big game in SD. Ratings for Timothy are contrary to rating provided from WY and it was not evident why the information for SD is different. These ratings are not applicable to the project and do not indicate nutritive values such as crude protein/fat or values after curing, when big game relies heavily on nutritious forage to over-winter. The correlation of willingness to consume non-natives when native species are unavailable, and the value received from them, is missing.

The DEIS goes on to suggest trials to reduce non-native grasses, which we applaud, and feel that native grasses and the forage quality values they supply should have been given more consideration in the analysis rather than reliance upon 1996 guidance from Intermountain Region 4 that qualified the information as "may not be entirely accurate for the Rocky Mountain Region so apply and review carefully before basing any management decisions on them" (August 1996, Appendix L, page L-1, R2 Rangelands Analysis and Management Training Guide).

We provided the same comments, as did Wyoming Game and Fish, to the Northern Hills Northzone 08 analysis (comments available upon request). With the various diet studies conducted on big game and their habitats in the Black Hills and surrounding region, the DEIS could have better used local and applicable science, including SAIC (2003 as referenced in the DEIS) to the discussion of non-native forage and cover for wildlife. When these non-natives are assigned high values by the DEIS, there is a perceived and skewed reliability that these species are sufficient big game forages. Additionally, most provide poor bird nesting cover at best. This type of mistaken information could be applied as "additional forage for Norbeck Wildlife use" (DEIS page 83), when in fact these species do little for big game except in the early spring and as fawn hiding cover (which native grasses also supply).

Agency Response:
The Forest Service's Fire Effects information System (http://www.fs.fed.us/database/feis/) verifies the palatability ratings for Timothy are as provided for Wyoming. The DEIS states on Page 72 that the IDT believes these are reasonable approximations for acceptable, non-native vegetation found in the project area (South Dakota). Palatability ratings per species listed indicate a willingness to consume that plant by wildlife at some point in the life cycle and season of availability of the plant. It is correct that nutritive values of these non-native plants do decline with curing, as does their desirability for use by various wildlife species. The DEIS points out that to return these vegetative areas to a "natural" state is not currently feasible for the reasons listed. While non-native plants listed are not as desirable for wildlife habitat needs, they are considered acceptable in the Desired Condition as noted on Page 28 and 72 of the DEIS.

Your comment and support for continued trials to reduce non-native grasses is noted.

Your comment regarding use of 1996 guidance from the Intermountain Region 4 as contained in the Rocky Mountain Region's Range Analysis and Management Training Guide is noted. As noted above, the IDT considered Appendix L of the Guide, reviewed the FEIS data, and decided that displayed ratings are reasonable approximations for palatability for select wildlife species.

Additional text has been added to clarify the values of various non-native plants as forage throughout the season, and indicate valued native plants as described in the 2003 SAIC report.

Your comments regarding the usefulness of non-native species for big game use and bird nesting cover is noted.

Letter No:	Comment No:	Resource:
15	14	Range

SD Department of Game,
Fish and Parks

Comment:
Desired Conditions
One purpose and need of the DEIS is to improve species composition of upland vegetation. Tables 2-3 and 2-4 mention providing for a diversity of desirable plant species but a list was not provided. DEIS (page 72-73, Table 3-2) compares range conditions but it was not clear what the DEIS strives for along that continuum from poor to excellent. Each allotment should have a goal along this continuum, which we suggest be "excellent" rather than the historic "satisfactory".

For Cover Frequency (Long-Term Monitoring page 69-70), we question what percentage or range of mix is considered botanically diverse and in what form (i.e.: grass, forb, shrub, tree, fungi, etc.).

For example, the southern end of the Rimmer Pasture (Rimmer Allotment, see our 7/13/09 letter) would offer a repeatable, measurable monitoring transect to record current vegetative condition (which has considerable bare ground and poor mix of vegetation species) and compare it against future monitoring to measure range improvement success. The DEIS seems silent on the vegetative communities in this pasture but did mention that the uplands were not meeting desired conditions (DEIS 121-122).

Native forbs and flowering plants are generally given low priority in annual range monitoring while management emphasis is placed upon unquantifiable observations for grass utilization as a trigger to move livestock. Most R2 Sensitive Species and Species of Local Concern have no botanical adaptations to repeated cropping (such as Yellow Lady's Slipper) and their persistence requires better monitoring so not to confine their distribution to small exclosures or natural barriers such as topography or very dense deadfall. The need to conduct more frequent long-term monitoring is evident for adaptive management to be successful.

Agency Response:
Examples of desirable plant species (including a diverse mosaic of plant species) are shown for each community type in Table 1-2, page 29 of the DEIS. The goal for each allotment is expressed on Page 72 of the DEIS: “Desired plant community (DPC) selection emphasizes maintaining or moving towards excellent rangeland condition…”; your comment recommending the goal for allotment range conditions of “excellent” is noted.

Regarding percentages or a range of mix that is considered botanically diverse, there is no requirement to include percentages for various plant forms. There are management indicators for soil and water/riparian sites and upland vegetation shown on Page 33-34 of the DEIS. Some approaches (but not limited to) for measuring change over time in these management indicators are (from Cover/Frequency data) for upland vegetative benchmarks are: 1) the percentage of bare ground; 2) the percentage of noxious weed and undesirable plants 3) the total number of desirable plant species present (by grass, forb, and shrub categories) (diversity). The third approach would be examined for the percent cover by species and category and record the gain or loss in native versus non-native species over time.

Chapter 3, Affected Environment and Environmental Consequences, Range, Page 94 of the DEIS discusses the Rimmer Pasture and explains the past grazing history and vegetative conditions associated with Rimmer #2 cover/frequency transect site.

Triggers for livestock movement would be based on allowable percent utilization of upland vegetation and residual riparian stubble height. Native forbs and flowering plants may be included per the Rocky Mountain Region’s rangeland analysis training guide direction for Ocular Estimates of percent utilization. The observer may record their use separate from a traditional grass specie(s) selected for observation of use. Monitoring of R2 Sensitive Species and Species of Local Concern are completed annually and is documented in the Black Hills National Forest Monitoring Report. See Page 58 of DEIS.

Letter No:	Comment No:	Resource:
15	15	Botany

SD Department of Game,
Fish and Parks

Comment:
DEIS (page 207) indicated condition of montane grasslands (Marriott 2000). This data is at least 10 years old, pre-dates both the Jasper fire and better implementation of HM on the Porcupine Allotment. While there is no specific BHNF policy on montane grasslands, it also does not preclude BHNF from elevating their importance in this analysis and on-the-ground. The DEIS should include more recent data on condition of these grasslands in order to best assess and recommend adaptive management strategies.

Agency Response:
The Best Available Science was used to address Montane Grasslands in the project area. Range monitoring occurs on all of these grasslands to help evaluate the vegetation in these areas.

Letter No: 15 **Comment No:** 16 **Resource:** Range

SD Department of Game, Fish and Parks

Comment:
Palmer Gulch and Norbeck Wildlife Preserve
We support splitting this allotment into two separate allotments, which will give required consideration to the 10th Circuit Court and Forest Plan (FP) directives for Norbeck Wildlife Preserve (NWP).

Agency Response:
Your comment and support for splitting the Palmer Gulch Allotment into two separate allotments is noted.

Letter No: 15 **Comment No:** 17 **Resource:** Plan

SD Department of Game, Fish and Parks

Comment:
The 10th Circuit Court Decision was clear in its directives for Norbeck and because the NOA supersedes NFMA, disturbance mechanisms, including livestock grazing, timber removal, and prescribed fire, when needed, could be used as tools to achieve habitat improvement. Alternative C and the ROD most closely meet this directive if implementation schedules are met. Comments also pertain to the newly formed "South Half' allotment and other NWP pastures. We support Alt. C because it best meets Standards to prevent riparian degradation.

Agency Response:
Comment noted.

Letter No: 15 **Comment No:** 18 **Resource:** Wildlife

SD Department of Game, Fish and Parks

Comment:
Further, the Hell Canyon fuels project piled for disposal, too much coarse woody debris that in the past provided micro-sites for ecosystem and hydrological functioning, and ruffed grouse drumming logs. Non-commercial conifers that could have been hinged to protect forbs and new hardwood shoots and stems have been removed. Natural barriers to wild and domestic ungulates, which provided some grazing and browsing relief, are also gone.

Therefore, it is our opinion after having spent considerable time in this area, that livestock grazing in this newly cleared woodlot will further compact moist soils, encourage sod-forming grasses such as Kentucky Bluegrass and smooth brome, exert additional herbivory on a diversity of forbs and shrubs, and negatively impact hardwood suckering. One option to restore this stand is fencing to exclude wild and domestic ungulates. We strongly urge that the DEIS include merits of protection from grazing in Alternatives Band C to avoid potentially costly NEPA actions.

Agency Response:
As discussed in the DEIS in the Range Effects section, livestock use would occur in the Palmer Pasture only between June 15 and approximately August 1. This timing and limitation of livestock presence should reduce livestock browsing of aspen regeneration. If monitoring indicates excessive browsing of regenerating hardwoods, adaptive management options available in Alternative C, including constructing temporary fencing, will be considered. Fencing, as a new structural improvement, is not an adaptive management option available in Alternative B.

Letter No: 15 **Comment No:** 19 **Resource:** Plan

SD Department of Game, Fish and Parks

Comment:
Should these ROD directives falter within the required 1-3 year timeframe, we support the DEIS's proposal to exclude grazing in these Norbeck pastures (page 43). We request interagency consultation per the Norbeck MOU to discuss options and merits of closing vs. vacating (DEIS page 104). Interagency wildlife biologists together the range staff should assess if periodic livestock grazing could be used as a tool to achieve or maintain excellent habitat conditions for game animals and birds, including the current Focus Species List.

Agency Response:
Comment noted. The Forest Service intends to work with SD GF&P per the Norbeck MOU on issues related to Norbeck.

Letter No:	Comment No:	Resource:
15	20	Wildlife

SD Department of Game,
Fish and Parks

Comment:
In the meantime, we support adherence to FP Standard 3216 for bighorn sheep prior to June 15, forage regrowth opportunities after August 1, maintaining fences, and a full suite of quantitative monitoring including stream bank alteration.

Agency Response:
Thank you for your comment.

Letter No:	Comment No:	Resource:
16	1	Range

Hogen Dale

Comment:
Each year in the end of the season actual use report I have documented the adaptive management actions and infrastructure improvements utilized that season with general and specific comments regarding range condition. Specific adaptive strategies that have been used include; delayed turn (in at least 5 to 15 years), early removal (4 to 15 seasons), reduced numbers (3 to 4 seasons), water hauling (2 to 15 seasons), and adjusted of the pre season grazing plan regarding pasture moves nearly every year. Infrastructure improvements include 2.5 miles of new fence construction…These specific actions combined with continuous "normal" herding, salt placement, and fence maintenance have resulted in a generally improving trend for the allotment..Although we have made significant improvements, there is always more that can be done.

Agency Response:
Your comments listing past “adaptive” management actions undertaken in cooperation with the Forest Service are noted. Your willingness to invest in new developments to improve the infrastructure is noted.

Letter No:	Comment No:	Resource:
16	2	Range

Hogen Dale

Comment:
Alternative A would have disastrous effects on our families ag business. The more than $16,000 in capital investment we have made in the last three years alone would be worthless, as would the public investment in all of these allotments. But even more importantly, from the public perspective, would be the loss of beneficial effects from grazing. Especially the fuels control aspect of wildfire prevention in the context of the ever-increasing forest/ residential interface, which is perhaps the most valuable and under recognized benefit of grazing.

Agency Response:
Your comments with regards to the effects of Alternative A on your family’s agricultural business, the loss of beneficial grazing effects, and the value of fuels reduction in the interface by livestock grazing are noted.

Letter No:	Comment No:	Resource:
16	3	Range

Hogen Dale

Comment:
To be sure, private commercial use of public lands carries a great responsibility for the effects of that use. The "multiple use sustained yield" principal is not only the legal, but also the moral concept that guides public land management. Grazing when responsibly managed by the permittee with active oversight by the F.S. is one of the uses that best fits this principal. Alternative B and C both achieve this goal and either would be acceptable to our family. Alternative C seems to include more specific potential future improvements, but the flexibility of adaptive management in Alternative B would probably allow adjustments to manage both expected and unforeseen future circumstances.

Agency Response:
Your comments regarding the multiple use sustained yield principal (of which livestock grazing is one of the uses) noted.

Your support of either Alternative B or C is noted. To clarify, both alternatives are adaptive management but Alternative C would allow for brand new structures to be built where as Alternative B permits only reconstruction of existing range improvements. This is explained on Page 37 of the DEIS. Alternative C would also include the adaptive option for prescribed burning projects.

Letter No:	Comment No:	Resource:
17	1	Range

Norbeck Society

Comment:
While the actions outlined in alternative C are admirable, we must point out the all of the cited goals, objectives, standards, and guidelines could have been applied at anytime since implementation of the Phase II LRMP...While some of the unacceptable conditions may be beyond the control of the Forest Service, others are not. Given the scarce nature of funding for the actions that the project proposes to implement in order to improve the situations discussed in the DEIS, it seems highly likely that there could be long delays in providing relief to the imperiled streams. The land resources would not be cared for with an appropriate timeliness.

Therefore, we recommend renewing only those grazing permits where the resources are in good shape and ready for the addition of cows – the Mystic District must let expire those grazing permits that are for areas where the resource is depleted or compromised until such time that the necessary corrections have been made that will ensure proper and sustainable use of the pasture and its related riparian assets.

Agency Response:
Allowable proper use by weight triggers for pasture moves have been part of the existing permit requirements for a long time. Both action alternatives (B and C) require a riparian stubble height requirement to be in effect immediately. It is likely that some pastures with riparian areas will trigger the riparian stubble height requirement to move well before the allowable proper use by weight of 50% is reached. This means livestock would move through the pasture rotation more quickly than in the past, and may then need to leave the allotment earlier in the season than the typical or permitted timeframe. The purpose of these two triggers is to improve resource conditions; these are explained on Page 108 of the DEIS. A comparison of the alternatives summary is shown in Table 2-4, Page 61 and 62 and displays expected effects/changes in soil, water, and vegetative resources with each alternative. An implementation schedule is noted at the top of the table which addresses your comment regarding timeline.

Your comment regarding ceasing any grazing permit where resources are not in good shape is noted. Provisions for adjusting permits are explained on Page 109 of the DEIS.

Letter No:	Comment No:	Resource:
17	2	Hydro/Soils

Norbeck Society

Comment:
...at this time, many of the streams in the project areas are classified as 'imperiled' and that the imperilment is attributable to the current grazing regime.

Agency Response:
Grazing is one of many factors that put the stream health rating 'at risk'. Other factors include roads and trails with culverts, low water crossings and encroaching prisms, cross country ATV use, railroad grades that encroach on the channel and cut off oxbows, city and residential development, septic tanks, as well as, natural conditions such as low flows, floods, and geology are some of the factors determining stream health.

Letter No:	Comment No:	Resource:
17	3	Hydro/Soils

Norbeck Society

Comment:
At present an accurate estimate of location, quantity, and quality of wetlands (including fens, seeps and springs) at the Forest level is not available. Any permit located on any part of the Mystic Range Project that has not been surveyed for fens, seeps, or springs should not be renewed in this project.

Agency Response:
There are no requirements to have a complete survey of these areas. We have an adequate inventory; impacts to these areas will be minimized through the implementation of stubble height requirements.

Mystic Range Project Area Draft Environmental Impact Statement Distribution List

Name	Group	City	State
Mr. John Persell	Biodiversity Conservation Alliance	Laramie	Wyoming
Sam Clauson, Black Hills Group Chair	Black Hills Group ~ Sierra Club	Rapid City	South Dakota
Mr. Billy Cannon, President	Black Hills Sportsmen's Club	Rapid City	South Dakota
Mr. Brian Brademeyer	Friends of Norbeck	Rapid City	South Dakota
Mr. Dale Hogen	Permittee	Newell	South Dakota
Mr. Matthew Kammerer	Permittee	Rapid City	South Dakota
Mr. & Mrs. Frank & Merlin Bloom	Permittee	Rapid City	South Dakota
Mr. Wilbur Newland Greenwood Ranches	Permittee	Belle Fourche	South Dakota
Mr. Colin J. Paterson, President	Norbeck Society	Rapid City	South Dakota
Dr. Jeff Olson		Rapid City	South Dakota
Ms. Molly O'Meara		Rapid City	South Dakota
Jim Margadant, Team Chairman	Porcupine Holistic Resource Management Team	Rapid City	South Dakota
Ms. Nancy Hilding	Prairie Hills Audubon Society	Black Hawk	South Dakota
Ms. Jean Public		Florham Park	New Jersey
Mr. Stanley Rennard	Permittee	Lusk	Wyoming
Mr. John Sanders, Sanders Ranch Partnership	Permittee	Rapid City	South Dakota
SD Dept. of Game, Fish and Parks	Black Hills Trails Office	Lead	South Dakota
Mr. & Mrs. Shawn & Sherry Seymour	Permittee	Mud Butte	South Dakota
Mr. James Sherrer		Hill City	South Dakota
Golga Stewart		Tea	South Dakota
Mr. Jonathan B. Ratner	Western Watersheds Wyoming Office	Pinedale	Wyoming

Congressional:

Senator Tim Johnson
Senator John Thune
Congresswoman Stephanie Herseth Sandlin

Native American Tribes:

Tribal Chairman	Yankton Sioux Tribe
Tribal Chairman	Crow Creek Sioux Tribe
Tribal Historic Preservation Officer	Northern Cheyenne Tribe
President	Rosebud Sioux Tribe
Tribal Chairman	Sisseton-Wahpeton Sioux Tribe
Cultural Preservation Office	Three Affiliated Tribes
Tribal Chairman	Flandreau Santee Sioux Tribe
Tribal Chairman	Cheyenne River Sioux Tribe
Tribal Chairman	Mandan Hidatsa & Arikara Tribes
Tribal Chairman	Eastern Shoshone Tribe
Tribal Historic Preservation Officer	Oglala Sioux Tribe
Tribal Chairman	Northern Arapaho Business Council
Tribal Chairman	Lower Brule Sioux Tribe
Cultural Resource Office	Lower Brule Sioux Tribe
Tribal Historic Preservation Officer	Cheyenne River Sioux Tribe
Tribal Historic Preservation Officer	Standing Rock Sioux Tribe
	Spirit Lake Sioux Tribe
Tribal Chairman	Standing Rock Sioux Tribe
	Grey Eagle Society
President	Northern Cheyenne Tribe
President	Oglala Sioux Tribe
Tribal Chairman	Cheyenne/Arapaho Tribes Of Oklahoma
Tribal Chairman	Santee Sioux Nation
	Kiowa Ethnographic Endeavor For Preservation
Tribal Chairwoman	Spirit Lake Sioux Tribe
Cultural & Heritage Program	Cheyenne-Arapaho Tribes Of Oklahoma
Rosebud Sioux Tribe	Sicangu Lakota Treaty Council Office
Tribal Planner/Director	Northern Cheyenne Tribe
Tribal Historic Preservation Officer	Rosebud Sioux Tribe
Tribal Historic Preservation Officer	Northern Arapaho Tribe

Federal, State, Local, and County Agencies:

Environmental Protection Agency, Region VIII EIS Review Coordinator
South Dakota Department of Game, Fish and Parks
Bureau of Land Management – South Dakota Field Office
South Dakota State Historic Preservation Center
South Dakota Department of Environment and Natural Resources
South Dakota Department of Transportation
Governor Office – Governor Mike Rounds
Pennington County Commissioners
Rapid City Public Library
Pennington County Highway Department

Planning and Review Advisory Council on Historic Preservation
USDA APHIS PPD/EAD
USDA Natural Resources Conservation Service
USDA National Agricultural Library Head, Acquisitions and Serials Branch
US Army Engr. Northwestern Division
USDI Office of Environmental Policy and Compliance
U.S. Coast Guard (USCG), Environmental Management CG-443
FAA Great Lakes Region
Federal Highway Administration
US Dept. of Energy, Office of NEPA Policy and Compliance
Hill City Mayor's Office – Mayor Don Voorhees
Rapid City Mayor's Office – Mayor Alan Hanks
Rapid City Chamber of Commerce
South Dakota State University – SDSU West River AG Center

United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
Denver Federal Center, Building 67, Room 118
Post Office Box 25007 (D-108)
Denver, Colorado 80225-0007

TAKE PRIDE IN AMERICA

2E
KAA
RJT

May 13, 2010

9043.1
ER 10/334

Mr. Robert J. Thompson, District Ranger
8221 South Highway 16
Rapid City, South Dakota 57702

Dear Mr. Thompson:

The Department of the Interior has reviewed the Draft Environmental Impact Statement (EIS) for the Mystic Range Project Area to Propose to Reauthorize Grazing of Domestic Livestock on Eight Allotments, Black Hills National Forest, Pennington and Custer Counties, SD, and offers the following comments:

COMMENTS

Chapter 3: Affected Environment and Environmental Consequences, Wildlife Habitat, pages 130-196

There are several bird species—including Management Indicator Species, Species of Local Concern, and Sensitive species—potentially impacted by the proposed activities, such as the Black-backed woodpecker *(Picoides arcticus), Brown creeper, (Certhia americana),* Golden-crowned kinglet *(Regulus satrapa),* Song sparrow *(Melospiza melodia), Grasshopper sparrow (Ammodramus savannarum)* , and the Ruffed grouse *(Bonasa umbellus).* It would be beneficial to the public for the final EIS to include information from the most recent USGS Breeding Bird Survey, such as species status and trends information, distribution and trend maps, and population change analysis results (Sauer et al., 2008). Based on this additional information, the impact assessment may need to be revised, and additional mitigation actions may need to be included in the final EIS.

Page 167: The DEIS identifies a number insectivorous bat species that may be impacted by the proposed activities; however, the DEIS does not include proposed mitigation actions. The document states "Although research is lacking, grazing intensities that reduces vegetation height and species diversity would likely decrease prey availability, especially if prey species require specific plants for forage and oviposition. Loss of stagnant water sources would also reduce

(6) ID: 25

insect prey availability." Suggest that the final EIS include possible mitigation activities to avoid or minimize the loss of species, and take into consideration the species-specific physiological requirements, including foraging behavior and maternity roost requirements. Suggest that the final EIS include information on species-status and trends from available scientific references, such as the Ellison et al, 2003, and include an analyses and discussion of possible impacts to the bat species.

Page 169: The DEIS states "Hibernacula, day roosts, maternity roosts, or snags should not be affected by the presence of livestock grazing." Suggest the final EIS provide a reference and discussion to support the statement.

Page 170: The DEIS identifies a number of riparian-dependent species potentially affected by the proposed activities, including the meadow jumping mouse, but minimal discussion of proposed mitigation. It would be beneficial to the public for the final EIS to propose and discuss species-specific mitigation.

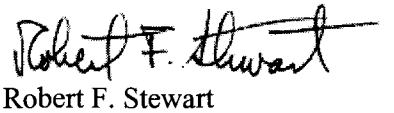
References cited

Ellison, L.E., T.J. O'Shea, M.A. Bogan, A.L. Everette, and D.M. Schneider, 2003, Existing data on colonies of bats in the United States: summary and analysis of the U.S. Geological Survey's Bat Population Database. In: O'Shea, T.J., and M.A. Bogan (eds.). Monitoring trends in bat populations of the United States and territories: problems and prospects Information and Technology Report 2003-0003. U.S. Geological Survey. 127-237 p.

Sauer, J. R., J. E. Hines, and J. Fallon, 2008, The North American Breeding Bird Survey, Results and Analysis 1966 - 2007. Version 5.15.2008: USGS Patuxent Wildlife Research Center, Laurel, MD. Available online: http://www.mbr-pwrc.usgs.gov/bbs/.

Thank you for the opportunity to review and comment on the DEIS. If you have any questions concerning these comments, please contact Gary LeCain, USGS Coordinator for Environmental Document Reviews, at (303) 236-5050 (x229) or at gdlecain@usgs.gov

Sincerely,



Robert F. Stewart
Regional Environmental Officer

cc: Katie Van Alstyne, Team Leader

"Stewart, Robert"
<Robert_F_Stewart@ios.doi.gov>

05/13/2010 11:31 AM

To ","
<comments-rocky-mountain-black-hills-mystic@fs.fed.us>
cc "Van Alstyne, Jean" <jvanalstyne@fs.fed.us>
bcc
Subject Mystic Range DEIS - DOI Comments

The Department of the Interior's comments on the subject document are attached.

If you require paper-copy or word-processor version, please so advise.

Robert F. Stewart
Regional Environmental Officer
Office of Environmental Policy and Compliance
U.S. Department of the Interior
P.O. Box 25007 (D-108)
Denver, CO 80225-0007
Voice: (303) 445-2500
Fax: (303) 445-6320
Cell: (303) 478-3373
Email: robert_f_stewart@ios.doi.gov

Mystic Range DEIS - DOI Comments.pdf

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
1595 Wynkoop Street
DENVER, CO 80202-1129
Phone 800-227-8917
http://www.epa.gov/region08

MAY 24 2010

Ref: 8EPR-N

Robert J. Thompson, District Ranger
Mystic Ranger District
Black Hills National Forest
8221 South Highway 16
Rapid City, SD 57702

RE: EPA Comments on Draft Environmental Impact Statement, Mystic Range Project, CEQ #20100114

Dear Mr. Thompson:

In accordance with our responsibilities under the National Environmental Policy Act (NEPA), 42 U.S.C. Section 4321, *et seq.*, and Section 309 of the Clean Air Act, 42 U.S.C. Section 7609, the U.S. Environmental Protection Agency Region 8 (EPA) has reviewed the April 2010 Draft Environmental Impact Statement (DEIS) for the Mystic Range Project. This DEIS was prepared by the Mystic Ranger District of the U.S. Department of Agriculture Forest Service (USFS) Black Hills National Forest to analyze potential environmental impacts associated with the reauthorization of domestic livestock grazing permits on eight allotments in the Mystic Ranger District. The project area is just west of Rapid City, South Dakota.

The USFS administers the 85,055 acres of the project area. The Mystic Range Project's main focus is to assess whether livestock grazing should continue on the proposed eight allotments, and if so, to determine any necessary revisions to current rangeland management practices. Specifically, the Mystic Ranger District analyzes current practices to determine potential improvements to livestock management, species composition of upland vegetation, streambank stability, and riparian vegetation diversity and abundance, and potential reductions in livestock-vehicle collisions.

A brief overview of the eight allotments under review indicates that all but one (Bald Horse) contain upland vegetation that is currently considered below desired conditions. In addition, there are concerns with the condition and/or trends in all but one allotment (Porcupine) regarding riparian vegetation and streambanks. Current authorized livestock use is as follows:

- The Bald Horse Allotment (27,828 acres) - The USFS currently allows 1,921 Animal Unit Months (AUMs), or 299 cow/calf pairs, under one permit. A nine pasture deferred rotation grazing system is employed during the June 1 - October 26 season of use.

(14) ID=14

- The Deerfield Allotment (7,824 acres) - The USFS currently allows 631 AUMs, or 102 cow/calf pairs, under one permit. A six pasture deferred rotation grazing system is employed during the June 6 – October 25 established season of use.
- The Palmer Gulch Allotment (14,190 acres and includes a portion of the Norbeck Wildlife Preserve) - The USFS currently allows a total of 869 AUMs, or 144 cow/calf pairs. These numbers are distributed among three separate rotations (North Rotation, South Rotation, and Winter Use) of a twelve pasture grazing system with deferred rotations under two permits. The established season of use for the North Rotation is June 1 – October 31, for the South Rotation is June 1 – October 21, and for Winter Use is October 22 – May 31.
- The Porcupine Allotment (9,858 acres) - The USFS currently allows 1,653 AUMs, or an average use equivalent to 334 cow/calf pairs, under one permit. A twelve pasture Holistic Resource Management grazing system is employed to use a mix of rest and deferred rotation for the established season of use (June 9 – October 30).
- The Redfern Allotment (11,573 acres) - The USFS currently allows 1,159 AUMs, or 195 cow/calf pairs, under one permit. A five pasture deferred rotation grazing system is employed during the June 11 – October 25 established season of use.
- The Rimmer Allotment (2,011 acres) - The USFS currently allows 175 AUMs, or 33 cow/calf pairs, under one permit. A two pasture deferred rotation grazing system is employed during the June 11 - October 10 established season of use.
- The Slate Prairie Allotment (5,896 acres) - The USFS currently allows 1,233 AUMs, or 200 cow/calf pairs, under one permit. A five pasture deferred rotation grazing system is employed during the June 1 – October 20 established season of use.
- The Tigerville Allotment (5,825 acres) - The USFS currently allows 715 AUMs, or 112 cow/calf pairs, under one permit. A six pasture deferred rotation grazing system is employed during the June 1 – October 25 established season of use.

The three alternatives analyzed in the DEIS are Alternative A (No Action), Alternative B, and Alternative C (Proposed Action). Alternative A would eliminate grazing from all eight allotments two years after the decision is made. Existing structural improvements, including fencing, water developments, and water pipelines, would be abandoned. Alternative B would reauthorize grazing on all eight allotments with no new construction of range structures. Existing improvements would be maintained or reconstructed, as needed. Alternative C would reauthorize grazing on all eight allotments and includes prescribed burning and construction of new range structures, including fences, cattle guards, and water developments. The new structures are intended to provided better resource protection, better livestock distribution, and reduce livestock-vehicle collision potential. Existing improvements would be maintained or reconstructed, as needed. Both Alternatives B and C include adaptive management options, which incorporate design criteria and best management practices (BMPs). The adaptive management options may be employed if long-term effectiveness monitoring indicates the need. The USFS has not identified a preferred alternative.

In a July 9, 2009 letter, EPA provided input during the scoping process for this project, and we appreciate that the USFS addressed many of our comments in the DEIS. As a result, our

concerns with the April 2010 DEIS have been narrowed to these remaining issues: (1) water resources; (2) adaptive management and monitoring; and (3) air quality. These concerns are the basis for the EPA rating discussed at the conclusion of this letter.

Water Resources

Wetlands: In your April 9, 2010 response letter to our scoping comments for the project, you note that "[o]verall, no effects to wetlands areas are anticipated due to Design Criteria and BMPs." To clarify this point, we recommend that additional information be provided in the DEIS regarding the acreage of wetlands impacts for each alternative by allotment. The currently degraded condition should not be used as the baseline for assessing continued degradation that may result from future grazing. In addition, close coordination with the U.S. Army Corps of Engineers (USACE) is necessary to determine applicability of any Clean Water Act Section 404 regulatory requirements or oversight. The results of this coordination should be discussed in the Final EIS.

EPA notes Executive Order (EO) 11990 - Protection of Wetlands (May 24, 1977) states in pertinent part: "Section 1. (a) Each agency shall provide leadership and shall take action to minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands in carrying out the agency's responsibilities for (1) acquiring, managing, and disposing of Federal lands and facilities; and (2) providing Federally undertaken, financed, or assisted construction and improvements; and (3) conducting Federal activities and programs affecting land use, including but not limited to water and related land resources planning, regulating, and licensing activities. (b) This Order does not apply to the issuance by Federal agencies of permits, licenses or allocations to private parties for activities involving wetlands on non-Federal property." USFS should consider and document how EO 11990 will be carried out with regard to this project.

Surface Water: The project area includes three streams- Rapid Creek, Spring Creek, and Victoria Creek -that are considered impaired. All three streams have impaired reaches that are not meeting their beneficial use of coldwater permanent fish life propagation due to high temperatures from natural sources (although grazing or other USFS activities may be playing a role). One of these streams, Spring Creek, has impaired water quality due to fecal coliform bacteria as identified in the Total Maximum Daily Load (TMDL). The Spring Creek TMDL for Fecal Coliform recommends that "livestock access to streams should be reduced, and livestock should be provided sources of water away from streams." Alternative B does not meet the intent of this TMDL.

We recommend that a table be provided to clearly identify the streams of the project area that are classified as "coldwater streams." Appendix B, Design Criteria, Mitigation Measures, and Monitoring, includes a requirement applicable to all South Dakota coldwater streams. Specifically, when water flow is present, the discharge of dredged or fill material shall not take place between October 15 and April 1. This requirement is intended to meet the USACE, South Dakota Regional Condition, for any adaptive management actions that would need to be

authorized under a Clean Water Act Section 404 Nationwide Permit (NWP). The regional condition is intended to meet NWP #3 to protect spawning areas and specifically to protect fall spawning brook or brown trout. Again, close coordination with the USACE is necessary to determine applicability of any Clean Water Act Section 404 regulatory requirements.

In addition, EPA is concerned with the limited water quality data presented in the DEIS. As you know, grazing has the potential to degrade water quality through increased sedimentation and loading of nutrients and pathogens. We recommend that you include requirements for monitoring the following water quality parameters: fecal coliform and total bacteria counts, nutrient concentrations, and temperature.

Adaptive Management and Monitoring

We are pleased with the wide range of adaptive management options that may be exercised under Alternatives B and C, as warranted by monitoring results. In general, we support broad consideration of adaptive management options, such as exclusions and upland water developments, whenever feasible to protect streams, wetlands, and riparian corridors. We also recommend protection of stream corridors through use of a minimum 100 foot buffer, particularly where grazing may be contributing to pathogen and temperature concerns. We recommend that the Final EIS specify both positive and negative potential impacts of each adaptive management option.

In addition, an explanation should be provided regarding the general timing of adaptive management implementation given that effectiveness monitoring would only occur every 5-10 years. We recommend that shorter timeframes be considered if undesirable results are encountered sooner than 5-10 years. Also, long-term goals should be established for achieving positive trends and desired conditions for currently degraded streams and riparian areas.

A firm commitment to effectiveness monitoring should be included in the Final EIS. Adaptive management cannot be employed without the full implementation of its associated monitoring schedule. Consequently, an environmentally conservative default management plan should be defined in case adequate resources for monitoring are not secured.

The DEIS indicates that short-term implementation monitoring is largely the responsibility of the permittee. The Final EIS should include a discussion of how the Annual Operating Instructions will ensure compliance with these monitoring requirements. Also, as noted above, EPA recommends requirements for annual monitoring of water quality, especially given the impaired water quality listing of Spring Creek, in part due to fecal coliform from livestock. Such data may also be a valuable aid in assessing potential relationships between pathogen contamination and temperature issues.

Air Quality

The project area is near the populations of Rapid City, Hill City, and Custer, as well as a

mandatory Class I federal area (Wind Cave National Park) and a Sensitive Class II area (Black Elk Wilderness). In addition to health-based standards to protect ambient air quality, the Clean Air Act requires special protection of visibility in the nation's large National Parks and Wilderness Areas (identified as mandatory Class I federal areas) and establishes a national goal for "the prevention of any future, and the remedying of any existing, impairment of visibility in mandatory Class I federal areas which impairment results from man-made air pollution." EPA's implementing regulations require states to submit implementation plans that contain such measures as are necessary to make reasonable progress toward the national goal, including improvement in visibility on the worst days and prevention of visibility degradation on the best days. See 40 CFR 51.300-309. Actions by Federal Land Managers (FLMs) that lack adequate mitigation of potential visibility impacts could interfere with a state's reasonable progress goals and impede ability to meet Clean Air Act requirements.

Table 3-9 of the DEIS indicates that 23,608 acres of prescribed fires have been recently approved for projects in the same area. These prescribed fires are occurring presently on most allotments (or have been completed). It is unclear whether this large amount of acreage is being (or was) burned simultaneously or in smaller treatment blocks; however, at any given time, we recommend the use of small, scattered treatment blocks to minimize adverse impacts to air quality. Appendix C- Past, Present, and Foreseeable Activities in the Mystic Range Project- does not include quantification of present and foreseeable prescribed burn activities.

Under Alternative C, a 5,300 acre prescribed burn is proposed for the Porcupine Allotment. This significant prescribed fire activity may cause degradation of air quality and visibility in the region. While we note that the proposed prescribed burn is dependent on securing funding, EPA is concerned that the DEIS does not contain any analysis related to direct, indirect, or cumulative air quality impacts that would be associated with such a large burn. A thorough discussion of the project's smoke impacts on nearby population centers and Class I and Sensitive Class II areas should be included in the Final EIS. We recommend that the Final EIS include: (1) appropriate smoke mitigation (including meteorological conditions favorable for mitigated prescribed fire smoke and alternatives to prescribed fire such as mechanical fuel reduction methods), modeling, and monitoring techniques; (2) the incorporation of the Interagency Prescribed Fire Planning and Implementation Procedures Guide into the Burn Plan designed specifically for this project; (3) coordination with the South Dakota Department of Environment and Natural Resources; (4) adherence to the USFS internal process for managing prescribed fire; and (5) public notification of pending burns.

Although not an air quality related concern, we also note that the proposed prescribed burn has not received concurrence from the South Dakota State Historic Preservation Office. We would expect to see a discussion of any such consultation in the Final EIS.

EPA's Rating and Recommendation

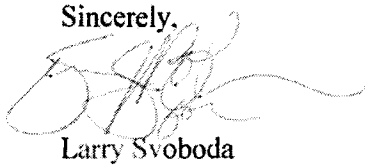
Consistent with Section 309 of the Clean Air Act, it is EPA's responsibility to provide an independent review and evaluation of the potential environmental impacts of this project. Based

on the procedures EPA uses to evaluate the adequacy of the information and the potential environmental impacts of the proposed action, EPA is rating this DEIS as Environmental Concerns – Insufficient Information (EC-2). Because a preferred alternative was not identified in the DEIS, we are rating the DEIS based on Alternatives B and C (we do not rate the no action alternative). The "EC" rating indicates that EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. The "2" rating indicates that EPA has identified additional information, data, analyses, or discussion that should be included in the Final Environmental Impact Statement. A full description of EPA's rating system is enclosed.

Although Alternatives B and C received an EC-2 rating in this review, we do not view them as equivalent. EPA recommends Alternative C as the environmentally-preferable action alternative to mitigate water resource impacts. The construction of new range structures would provide better resource protection and better livestock distribution, allowing a move toward ultimate recovery of currently degraded streams and riparian areas. Alternative C meets the intent of the Spring Creek TMDL for Fecal Coliform bacteria, which recommends that "livestock access to streams should be reduced, and livestock should be provided sources of water away from streams." We hope that our comments regarding water resources and air quality will assist you in further reducing the environmental impacts of this project. Additionally, we look forward to seeing further detail regarding the adaptive management and monitoring plans in your Final EIS.

We appreciate the opportunity to review and comment on this Draft EIS. If we may provide further explanation of our comments, please contact me at 303-312-6004, or your staff may contact Amy Platt at 303-312-6449.

Sincerely,



Larry Svoboda
Director, NEPA Compliance and Review Program
Ecosystems Protection and Remediation

Enclosure

U.S. Environmental Protection Agency Rating System for Draft Environmental Impact Statements

Definitions and Follow-Up Action*

Environmental Impact of the Action

LO - - Lack of Objections: The Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC - - Environmental Concerns: The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts.

EO - - Environmental Objections: The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU - - Environmentally Unsatisfactory: The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

Adequacy of the Impact Statement

Category 1 - - Adequate: EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2 - - Insufficient Information: The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.

Category 3 - - Inadequate: EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment February, 1987.

Platt.Amy@epamail.epa.gov

05/24/2010 01:11 PM

To comments-rocky-mountain-black-hills-mystic@fs.fed.us, kvanalstyne@fs.fed.us
cc kktu@fs.fed.us
bcc
Subject Mystic Range

Katie: It was good to talk with you last week regarding the subject project. I have attached an electronic version of our comments on the related DEIS. The hard copy was placed in today's mail. Please let me know if we can be of further assistance. Amy

(See attached file: EPA 5-24-10 Comments on Mystic Range Project DEIS.pdf)

Amy Platt, Environmental Scientist, 8EPR-N
EPA Region 8, NEPA Compliance & Review Program
1595 Wynkoop Street, Denver, CO 80202

303-312-6449 (voice), 303-312-7203 (fax)
Platt.Amy@epa.gov

EPA 5-24-10 Comments on Mystic Range Project DEIS.pdf