

Record of Decision
for
Palmer Gulch Allotment
Mystic Range Project
Final Environmental Impact Statement

USDA Forest Service
Mystic Ranger District, Black Hills National Forest
Pennington County and Custer County, South Dakota

Background

Black Hills National Forest (BHNF) personnel recently completed a Final Environmental Impact Statement (FEIS) for the Mystic Range Project. The Mystic Range Project falls under the authority and guidelines of the 1996 schedule the Forest Service provided the US Congress in response to the 1995 Rescission Act. The 1995 Rescission Act directed the Forest Service to complete environmental analysis on grazing allotments on National Forest System lands.

The Mystic Range Project generally lies within the central portion of the Mystic Ranger District, which is located in western South Dakota. The project area encompasses eight grazing allotments: Bald Horse (27,828 acres), Deerfield (7,874 acres), Palmer Gulch (14,190 acres), Porcupine (9,858 acres), Redfern (11,573 acres), Rimmer (2,011 acres), Slate Prairie (5,896 acres), and Tigerville (5,825 acres). The project area consists of approximately 85,055 acres of National Forest System lands.

This Record of Decision considers only the Palmer Gulch Allotment. The other seven allotments included in the Mystic Range Project EIS are the subject of a separate Record of Decision. The reason for two separate decisions is because of unique issues associated with the Palmer Gulch Allotment that do not affect the other seven allotments. Specifically, the Palmer Gulch Allotment includes a portion of the Norbeck Wildlife Preserve, which has additional legal and management direction from that of the other seven allotments. I feel that it is better to separate the decisions so that I can be clear on the decision and rationale as it affects the Norbeck Wildlife Preserve without needlessly complicating the decision for the other seven allotments.

The project's main focus was to determine whether or not livestock grazing should continue on the subject allotments and, if so, whether any changes may be needed to meet the Black Hills National Forest Land and Resource Management Plan, as amended (Forest Plan).

The proposed action is to reauthorize grazing of domestic livestock on all subject grazing allotments and improve livestock management as needed. The purpose of and need for the Mystic Range Project is to:

- Improve livestock management so that it is consistent with the goals, objectives, standards, and guidelines of the Forest Plan, as amended.
- Improve species composition of upland vegetation.

- Improve streambank stability.
- Improve riparian vegetation diversity and abundance.
- Reduce the risk of livestock-vehicle collisions.

The Mystic Range Project had considerable public participation during the public involvement process. A Notice of Intent (NOI) to prepare an EIS was published in the *Federal Register* on Friday, June 12, 2009. Comments received during the ensuing scoping period were used to help in defining issues, develop alternatives and analyze effects. The Notice of Availability (NOA) for comment on the DEIS was published in the *Federal Register* on Friday, April 9, 2010. Public comments were received on the DEIS through May 24, 2010. Following this period, the Final Environmental Impact Statement (FEIS) was completed and this Record of Decision (ROD) was prepared. The Mystic Range Project Interdisciplinary (ID) Team analyzed the public comments and provided agency responses to the comments on the DEIS. These comments and associated Responses are located in Appendix A of the Final EIS. No public comments on the Draft EIS generated the need for reanalysis or required major substantive changes to the document. The Final EIS includes changes to the Draft EIS such as typographical corrections, other minor editorial changes, and inclusion of additional or clarifying information made largely in response to comments received on the DEIS.

Decision

I have decided to implement Alternative C, with modifications as it relates to Norbeck Wildlife Preserve. This modification is to change the exclusion of livestock in Norbeck Wildlife Preserve from an adaptive option to a required action. Design Criteria and Mitigation Measures included in Appendix B of the FEIS, and the Implementation (short term) and Effectiveness (long term) Monitoring plan included in Tables 2-2 and 2-3 of the FEIS. This decision is summarized below and the rationale for selecting Alternative C-Modified is presented later in the ROD.

Alternative C, as presented in the FEIS, includes two approaches to addressing livestock grazing within the Norbeck Wildlife Preserve (NWP): 1) construct additional improvements along with adaptive management approaches to improve resource conditions for game animals and birds, and 2) eliminate grazing activity within the Preserve. My decision is to eliminate grazing within the NWP as it is currently being conducted. Specifically, **this decision eliminates grazing within the NWP as a part of two existing grazing permits on the Palmer Gulch Allotment.** This will be phased in over a period of three to five years--three years on the South half and five years on the North half of the allotment. This decision allows for limited trailing of cattle within the NWP in order to eliminate the hazard of herding cows along high speed roads and areas of steep topography. This decision will require either construction of fences to exclude livestock from the Preserve, or avoidance of the pasture lying totally or partially within the Preserve. This decision preserves the option of using livestock in a very targeted way to improve vegetation (e.g. reduce weeds, control smooth brome) within the NWP. Such targeted use would be conducted only in an effort to improve habitat for game animals and birds and would be used on a limited and infrequent basis.

The Selected Action requires construction of specific improvements (fences, water developments, etc.) in places to improve riparian, stream, and upland resource conditions and better distribute livestock use, and to reduce the potential for livestock-vehicle collisions on high speed roads. It also includes adaptive management options that could be implemented, if

needed, to meet desired resource conditions. General adaptive management options are presented in Table 2-1 of the FEIS. Detailed adaptive options are included for each allotment in the description for Alternative C on pages 41 to 45 in the FEIS. Both required range structural improvements and adaptive options are presented later in this ROD.

Structural range improvements will continue to be maintained annually, and reconstructed as needed. Permittees will be responsible for maintenance and reconstruction of existing improvements where needed, and removal of others that are no longer needed. The Forest Service will assist in funding material costs for reconstruction, as funding allows.

Individual Allotment Management Plans (AMP's) will be assembled from the EIS and this Record of Decision summarizing directions for goals and objectives, approximate season of livestock use, kind and class of livestock, and stocking guidelines (approximate AUMs), applicable Forest Plan standard and guidelines, anticipated rotation of livestock, planned range structural improvements including probable adaptive improvements (if exercised), and monitoring requirements.

Residual levels (or remaining height of key plant species) will be prescribed for riparian areas in Annual Operating Instructions. Initially this will be 4" for key specie(s) (University of Idaho, 2004). Proper allowable use by percent weight is 50 percent for uplands. My decision highlights and reinforces the need to move livestock to the next pasture before thresholds for upland and riparian triggers are reached, based on adherence to Forest Plan Standard 2505. Permittees are responsible for implementation (short term) monitoring and moving the livestock. The Forest Service will regularly check to ensure short-term monitoring is being conducted and livestock are being moved before exceeding thresholds. This decision also includes a new effectiveness (long-term) monitoring plan to assess upland and riparian conditions and trends (see Chapter 2 Monitoring in the FEIS). The Forest Service is responsible for this effectiveness monitoring. If monitoring indicates no progress towards desired conditions, changes may be made to the proper allowable use percent utilization by weight from 50% to 45%, and/or increase residual riparian stubble height to six inches, and/or implementation of other adaptive management options.

The actual number of livestock and season of use will be determined each year prior to grazing and will be outlined in the Annual Operating Instructions (AOI). Factors such as drought, fire, resource conditions or other specific management objectives could all influence annual livestock numbers and season of use. These variables are considered during winter meetings with each permittee to determine the upcoming grazing season's permitted use. The degree to which drought impairs the range's potential for future forage production depends on the intensity, frequency, and timing of grazing. Design criteria includes development of a drought management strategy. It is important to understand that actual conditions on the ground will determine the level and timing of use.

The location of required range structural improvements and potential adaptive options is presented in Appendix F in the FEIS. More detailed maps are held in the project record. A listing of required and potential adaptive structures is included in the attached Table 1 of this Record of Decision.

The Selected Action will continue to split this allotment between north and south, and will formalize the split by dividing it into two separate allotments. Maintenance, reconstruction, and

removal of existing improvements will occur. New structural improvements will be required under this decision, and adaptive structures are included that might or might not be constructed in the future depending on need.

North Half

The Selected Action requires constructing approximately one mile of fence to exclude livestock use in the Norbeck Wildlife Preserve in the Ford Pasture. This should not affect livestock numbers on the North Half of the Allotment because natural barriers currently exclude livestock use in most of the NWP area.

The Selected Action will operate on four pastures instead of the currently permitted five. The Sawmill Pasture is currently not grazed due to lack of private land line fencing. It will be used only for trailing livestock west of Pink Cabin Road and east of the Dump Pasture. The Dump Pasture, currently in non-use status, will be authorized for use after the permittee works with the 1880 Train to install cattleguards to prevent cattle access along the train ROW. The North Half will operate on a four pasture deferred rotation system utilizing the existing Keystone, Ford, Dump, and Samalias Pastures. Non-use of the Sawmill Pasture will result in a reduction of 22 days of use on the allotment.

New structural improvements to be constructed on the Keystone Pasture include fencing off cattle access to Old Hill City Highway and Palmer Creek with approximately 1 mile of fencing north of railroad ROW and installing one new cattleguard on Twin Springs Road, and building a water development in the southern end of the pasture. A ditch will be re-contoured and reseeded near the Battle Creek drainage on the Ford Pasture. A new fence approximately one mile in length will be constructed to exclude livestock use from the Norbeck Wildlife Preserve. This fence will be constructed after tree thinning and other work is completed in the NWP that was authorized under a recently issued decision by the Hell Canyon District Ranger. On the Samalias Pasture, livestock access will be fenced off to protect willows and a spring source located west of Samalias Trailhead, while providing a water access point for livestock; and an enclosure will be constructed around willows and a spring source located north of Rustic Ridge Guest Cabins. Approximately one half mile of fence will be built to prevent livestock use to Spring Creek in two locations.

South Half

The Selected Action eliminates grazing within the NWP over a three year time period on the South Half of the Allotment. It requires approximately three miles of fence to exclude use of the Norbeck Wildlife Preserve in the Rabbit and Palmer Pastures, and avoidance of the Sunday Pasture. The permittee might choose to not utilize the Rabbit and/or Palmer Pastures in lieu of building fences. The total effect of this decision will be an approximate 37 percent reduction in livestock grazing use on the South Half of the Palmer Gulch Allotment. During the three year phase out period, no use will be allowed in the Palmer and Sunday Pastures before June 15 to avoid conflicts with bighorn sheep lambing use; and livestock will be removed from these pastures around August 1 to allow grass/forb regrowth for winter use by wildlife.

Grazing will be eliminated on the 20 acre incidental use on-off winter use Summit Pasture. Approximately one half mile private landline fence would be constructed by the private landowner to accommodate this change and the existing fence on NFS land be removed. The

Summit Pasture will be combined into the Rabbit Pasture after the fence is constructed. The livestock enclosure proposed in Alternative C around the Fender Place pond and spring within the NWP on the Rabbit Pasture will not be constructed, as no livestock use will be authorized for that area. An enclosure fence would be constructed around the spring in the north end of the East Zimmer Pasture. The Forest Service will install steel plates to raise the water table to reduce erosion and fill incisions in the Palmer Pasture.

Adaptive options that might be pursued, if needed, would be to provide off-site temporary water tanks in drought years on the Rabbit Pasture, and fencing off riparian access to livestock if moving a temporary water tank in the Lower Bear Pasture is not effective in reducing impacts. For both the Lower and Upper Bear Pastures, an adaptive approach might be to increase pasture size to spread out grazing use by constructing approximately two miles of new fence on the east side of pastures. This would also re-locate one cattleguard and install a new cattleguard on each of these pastures.

Rationale for Selected Action

Alternative C-Modified is my Selected Action because it best meets the purpose and need for action, as determined by management direction and conditions on the allotment; and it responds well to the issues and public comments. This decision will result in maintenance or improvement of upland and riparian resources, while supporting local ranch families and communities. It also reduces the risk of livestock-vehicle collisions on high speed roads. Alternative C-Modified provides the greatest flexibility in terms of range management options. The Selected Action meets requirements under all applicable laws, regulations and policies, including the Norbeck Organic Act.

The key to my decision is how re-authorizing livestock grazing in an environmentally acceptable manner is addressed. For clarity, I provide a discussion below of my rationale in terms of Purpose and Need, Management Direction, Issues, and Public Response to the DEIS.

Purpose and Need - As stated in Chapter 1 the FEIS, the purpose of the project is to re-authorize livestock grazing on all or part of the project area and to ensure livestock grazing occurs in an environmentally acceptable manner. The underlying needs for the project include:

- Improve livestock management so that it is consistent with the goals, objectives, standards, and guidelines of the Forest Plan, as amended.
- Improve species composition of upland vegetation.
- Improve stream bank stability.
- Improve riparian vegetation diversity and abundance.
- Reduce the risk of livestock-vehicle collisions.

The Selected Action (Alternative C-Modified) responds well to the purpose and need. It re-authorizes grazing on the seven subject allotments in an environmentally acceptable manner. It is consistent with the standards and guidelines in the Forest Plan (see Management Direction below). It improves livestock management using both required actions and adaptive options, and new implementation (short-term) and effectiveness (long-term) monitoring requirements. Upland and riparian vegetation is improved through development of new water sources that will provide for better grazing distribution. Stream bank stability in addition to riparian diversity and abundance will be improved through fencing out livestock along specific stream/riparian segments,

development of new water sources to pull livestock away from streams/riparian areas, and implementation of new riparian stubble height requirements. The Selected Action reduces the risk of livestock-vehicle collisions along the Old Hill City Road by requiring fence construction to keep livestock off the roadway. Importantly, the Selected Action allows the full suite of adapted management options to reduce impacts to key areas by livestock.

Management Direction for the Non-Norbeck Portion (Forest Plan) – The Forest Plan, as amended, contains goals and objectives, desired conditions and associated management opportunities that currently are not being met in many of the allotments. It is clear that Forest Plan goals and objectives related to soil, air, watershed, wildlife habitat, scenic resources, and recreational opportunities can be negatively affected by livestock grazing. I find that the actions included in the Selected Action (Alternative C-Modified) provide a proactive approach to achieving the desired conditions embodied in Forest Plan Goals 1 - 3 and associated objectives (BHNF LRMP, pgs. I 3-15). Moving toward achievement of these Goals was a key component in development of the purpose and need for action in the Mystic Range Project.

Forest Plan Goals providing primary management emphasis and direction for the Mystic Range Project are Goals 1-3:

- Goal 1: Protect basic soil, air, water and cave resources.
- Goal 2: Provide for a variety of life through management of biologically diverse ecosystems.
- Goal 3: Provide for sustained commodity uses in an environmentally acceptable manner.

These Forest Plan Goals are supported by the Desired Conditions, Objectives, Standards and Guidelines included in Appendix E of the FEIS. The Selected Action meets Goals 1-3 of the Forest Plan Goals, based on information disclosed in the FEIS and contained in the project record.

The Selected Action protects soil and water resources (Goal 1) in a variety of ways. This includes fencing out livestock in a number of areas to protect stream, water, and soil resources, and improve water flows; developing water sources away from stream influence zones; requiring long-term monitoring utilizing MIMS transects to determine effects on stream banks and soils; and including adaptive management approaches to reduce effects to soil and water resources. The Selected Action provides for a variety of life through management of biologically diverse ecosystems (Goal 2). It includes a new riparian use standard that will reduce effects of livestock grazing on riparian communities and improve vegetative diversity, such as increasing the amount of shrub species and maintaining or increasing the size of riparian areas. Upland vegetation and diversity will be improved through better livestock distribution through construction of new fences and water developments. In-stream and fisheries habitat will be improved through fencing out livestock from specific stream reaches and improving riparian areas.

The Selected Action provides for sustained commodity uses in an environmentally acceptable manner (Goal 3). It re-authorizes grazing on the subject allotments, which is critically important to the local ranchers that depend on these allotments to make a living and to maintain their home ranches as agricultural land. For some, the loss of these grazing permits could lead to sale and residential development of their private lands. Livestock grazing in this area has occurred for well over 100 years. Grazing use was at much higher levels over most of that time than what occurs today (See Background Section, Chapter 1, of the FEIS). I understand that grazing has some effects on the natural

environment, and that it also provides some resource benefits. Based on the information presented in the FEIS and the project record, I find that the level of livestock use and required changes included in the Selected Action achieves a good balance in providing for commodity uses and providing for environmental needs.

Management Direction for the Norbeck Portion of Allotment (Forest Plan and Norbeck Organic Act)

As stated on pages 24 and 26 of the FEIS, the Norbeck Organic Act states that the area is to be managed "for the protection of game animals and birds and to be recognized as a breeding place therefore". The Norbeck area is clearly different in management direction from the rest of the Forest - a specific focus on game animals and birds for Norbeck versus an emphasis on multiple use for the remainder of the project area. My decision is based on considerations specific to effects on game animals and birds within the Preserve.

The Forest Plan includes livestock grazing as a suitable use within Norbeck (see Pages 25 through 26 of FEIS) but it does not specify the conditions for such use. The Plan states that permits can be reissued, but permitted livestock numbers are not to be increased; and it encourages the Forest Service to take advantage of opportunities to transfer forage use from livestock to wildlife. Further, the Plan provides for intermittent use of livestock grazing as a tool to improve habitat conditions, such as controlling noxious weeds (LRMP, Phase II, Page III-101; 5.4A-2505). My decision tracks Forest Plan direction as interpreted through the lens of the Norbeck Wildlife Preserve enabling legislation. Specifically, grazing use that focuses on providing game animal and bird habitat can be allowed.

The effects analysis for the Norbeck Wildlife Preserve included an analysis of twelve key game animal and bird species. The conclusion (See Wildlife Section in EIS) is that the No Action Alternative (No Grazing) is more beneficial for eight of the twelve species than are the other two alternatives. These species are generally affected either by competition for forage, effects on riparian and other habitat, or by trampling of nests or the young. There is no effect on the other four species for any of the alternatives. My decision relies heavily on the Wildlife evaluation.

The Wildlife section acknowledges that light to moderate livestock grazing can have a beneficial effect on forage quality by removing the rough dried seed heads and stems early in the season for the later benefit of elk and deer (pages 148 – 154 and 180 - 182, FEIS). Further, the Mystic Ranger District has some positive experience controlling weeds (e.g. Canada thistle) with targeted early season livestock grazing. My decision allows for the targeted intermittent use livestock grazing as a tool to improve habitat conditions, such as controlling noxious weeds, as provided for in the Forest Plan (LRMP, Phase II, Page III-101; 5.4A-2505). Such use will not be included as part of the approved grazing permit for the NWP, but instead will be evaluated on a case by case basis working in partnership with the Hell Canyon Ranger District staff and South Dakota Department of Game, Fish and Parks to determine if and where such treatments would be useful in providing improved habitat for game animals and birds.

My last decision criteria for the Norbeck Wildlife Preserve regards practical considerations for allotment management pertaining to the affected permittees. This decision will have an effect on the ongoing management of two permit holders. The permit for the South half of the Palmer Gulch Allotment will be the most affected. Several miles of fence may need constructed to keep livestock out of the Preserve, or other actions such as avoiding certain pastures altogether may

need to be taken. The permittee will need time to make these adjustments. My decision provides a three year time period to eliminate use within the NWP. Further, this decision allows limited trailing of livestock through the NWP if needed to eliminate the hazard of trailing livestock along high speed roads and areas of steep topography. The permittee on the North half of the Palmer Gulch Allotment will be affected by this decision, but by a lesser amount. The existing vegetative conditions and topography within the NWP on the Ford Pasture precludes use by livestock of nearly all the area within the Preserve. This condition will change as a result of tree thinning and other activities recently included in the Norbeck Wildlife Project Record of Decision (signed 5/27/10). The result of that decision will be to open up the vegetation within the Ford Pasture, thereby eliminating the existing natural barrier that now precludes livestock use. The permittee on the North end will need to construct a fence after the tree thinning is completed to ensure that livestock do not have access to the Preserve. The time frame for this is dependent on when the natural barrier is removed. This may be as long as five years. The fence should be in place no later than three years after the natural barriers have been removed.

Issues - There were three key issues developed from both internal and external scoping for the Mystic Range Project, as presented on pages 31 through 33 of the FEIS. These issues fit well with the Purpose and Need and Forest Plan direction presented earlier in the ROD. The three key issues include soil and water/stream/riparian, upland vegetation, and social/economics. The Selected Action (Alternative C-Modified) responds well to each of these issues.

The Selected Action is designed to reduce livestock grazing effects on soils, water, stream and riparian resources. It includes a new riparian stubble height requirement that would limit the amount of time livestock spend within riparian areas and next to streams, builds fences to exclude livestock from some riparian/stream/spring areas and obtain better livestock distribution, and constructs water developments in the uplands to encourage livestock use away from streams and riparian vegetation. It also includes new long-term effectiveness monitoring along stream/riparian habitat to determine if these actions are successfully maintaining or moving towards desired resource conditions, along with stricter requirements if the proposed actions are not being effective.

The Selected Action is designed to regulate effects of livestock grazing on upland vegetation. It requires movement of livestock before reaching upland utilization standards, construction of fences and water developments to gain better livestock distribution, and utilizes livestock as appropriate to reduce weed infestations in combination with other integrated pest management options. It also includes new long-term effectiveness monitoring of upland vegetation to determine if these actions are successfully maintaining or moving towards desired resource conditions, along with stricter requirements if the proposed actions are not being effective.

The Selected Action is designed to continue livestock grazing, subject to Forest Plan and the Norbeck Wildlife Preserve direction and desired resource conditions; and to fence off access along the Pink Cabin and Old Hill City Roads to reduce the risk of livestock-vehicle collisions. I have made it clear in meetings with permittees that actual use on the allotments may be less than that contained in the permit numbers and season of use. Actual use will be based on annual resource conditions and livestock distribution. In dry years or on pastures where livestock affect riparian areas, livestock will have to be moved earlier; in wet years, or where livestock are well distributed, they may remain the full term or potentially longer on the pasture. Use, therefore, is a function of resource conditions derived from natural events and how well the permittee manages livestock distribution.

The Selected Action includes additional costs to the permittees for construction of new fences, water developments and cattle guards. It also has effects on the permittee operating the South Half of the Palmer Gulch Allotment because of an approximate 37 percent reduction in use by removing livestock use in the NWP. I have allowed time to make operating adjustments in response to these extra costs and use changes. The Forest Service will see additional costs for long-term monitoring on stream/riparian and upland areas.

Public Comments on the DEIS– There were a number of public comments received on the Draft EIS. These ranged from comments supporting continued grazing in order to support local ranching operations and utilize existing forage, to comments that objected to grazing on public lands. Additional comments expressed concerns about grazing effects on natural resources, and expressing concerns about livestock access within the right-of-way for high speed roads. Unique comments specific to the Palmer Gulch Allotment includes objections to continued grazing within the Norbeck Wildlife Preserve. Other comments asked for clarifications and additional information.

Affected grazing permittees expressed concern about their ability to stay in business. The Selected Action provides for continued grazing but does place additional requirements on both the permittees to improve resource conditions. Some comments objected to grazing being allowed on the National Forest, and some expressed concerns that livestock grazing negatively affects stream, riparian and other wildlife habitats. Goal 3 of the Forest Plan encourages grazing as one of the multiple uses provided it can be accomplished in an environmentally acceptable manner. I fully understand the concerns expressed about livestock grazing affecting streams, riparian and other habitats, and also believe the record clearly shows that grazing, as approved in the Selected Action, will adequately protect these and other resource needs. The Selected Action includes new riparian standards and requires or provides for fencing and other actions to restrict livestock access to sensitive areas. Some comments expressed concern about fencing to restrict livestock access along high speed roads—both for and against. An important part of the decision is to require fencing along the Old Hill City Road. This is necessary to reduce the risk of livestock-vehicle collisions.

One set of comments strenuously objected to continued livestock grazing within the Norbeck Wildlife Preserve. I have given these comments serious consideration. My decision phases out and eliminates livestock grazing within the NWP portion of the Palmer Gulch Allotment.

Other Alternatives Considered

Three alternatives were considered in detail in the FEIS. Alternatives A and B are summarized below. Alternative C-Modified is the Selected Action. A detailed comparison of all the alternatives can be found in Chapter 2 of the FEIS.

Alternative A (No Action)

Alternative A is the no action alternative. Under this alternative, grazing would not be reauthorized and the current permit holders would be notified that their term grazing permits would be cancelled. All term grazing permits would be cancelled after two years, pursuant to Forest Service Handbook (FSH) 2209.13 part 16.24, and Code of Federal Regulation (CFR) 36

CFR 222.4(4)(1). The FSH and CFR regulations indicate that a two-year notification is required prior to cancelling a permit, except in emergency situations.

The no action alternative would eliminate livestock grazing on the subject allotments. Permits would not be issued for any of the affected allotments unless a subsequent NEPA analysis and decision to restock the allotments was made.

Maintenance of range developments on the allotments would no longer be the responsibility of the permittees. Developments built to facilitate livestock management, including allotment and pasture fences, livestock enclosures, stock water ponds and water developments would be abandoned. Permittees who participated in the development of range improvements would be reimbursed for their amortized share, consistent with direction in FSH 2209.13, Chapter 70. Developments built that would benefit wildlife or reduce wildlife effects to resources, such as water developments and big game enclosures would remain in place and would continue to be maintained by the Forest Service and/or cooperators. Maintenance of unassigned allotment boundary fences would be assigned to the adjacent permittee, if one is present.

The following structural improvements would be abandoned:

- Approximately 145 miles of fence.
- Approximately 219 water developments.
- Approximately 9 miles of pipeline

Spring boxes and underground pipes associated with water developments would be abandoned; pipes would be disconnected. If left in place, pipes would be capped on one or both ends to prevent water from flowing through the pipes. Unused fences would be removed as funds permit or as opportunities become available to utilize human resource labor programs such as the Youth Conservation Corp or other similar programs. All salvage materials would be stored for re-use, disposed of in a landfill, or recycled.

Alternative B

Alternative B is designed to maintain or improve resource conditions without construction of any new structural improvements such as fences, cattleguards, and water developments. Existing improvements would be maintained or reconstructed, as needed. Structural improvements that need maintained or reconstructed are presented by allotment in Appendix F of the FEIS.

Some tools for effecting change in condition and trend are adjusting the timing and duration of livestock use, and moving to the next pasture before allowable proper use by weight guidelines and/or riparian stubble height requirements are exceeded. The permittee's primary methods may be: 1) strategic salt and/or supplement placement, 2) range riding to influence animal behavior by working the livestock, and 3) culling animals that do not range out from riparian areas. The purpose of using these methods is to achieve grazing efficiency, and reduce adverse effects on soils, riparian areas, and upland vegetation within the allotments that have specific areas that are not meeting desired conditions.

Reasons for Not Selecting Other Alternatives

Alternative A – Under Alternative A (No Grazing), no livestock grazing would be permitted on any of the allotments. This alternative would require the cancellation of all grazing permits upon implementation of the decision and resolution of any appeals. Pursuant to Forest Service Handbook 2209.13, Section 16.13, this alternative could not be implemented until one year after the notification of each affected permittee (36 CFR 222.4(a)(7)(8)). Alternative A would result in the fastest improvement in rangeland and riparian resources in the short term, however it would result in the greatest negative economic impact to local ranch families and local communities. This alternative does not meet the purpose and need for the project by eliminating this source of income to local families and reducing economic diversity in local communities.

Based on the analysis in the FEIS, my knowledge of local community dynamics, and public comments on the DEIS, I also feel that there is a potential for this alternative to result in loss of open space. This is due to the dependence on grazing from National Forest system lands by some range permittees. If these permittees lose the option of grazing on Forest Service lands, it is likely that some ranching operations would no longer be economically viable. Ranchers may be forced to sell their ranchlands for residential or commercial development. Maintaining a level of grazing in an environmentally acceptable manner would reduce the likelihood of these ranches being lost to development. Management actions are available to ensure that livestock grazing can be conducted in a manner that meets resource objectives for the area (see Selected Action). I did not select Alternative A because cancellation of the grazing permits was not warranted for resource protection based on other available options, especially when cancellation could potentially threaten the livelihood of the affected permittees.

Alternative B – This alternative proposes no new structural range improvements (fences, pipelines, watering facilities). Changes in management needed to move toward the desired conditions would be accomplished through reduced days of grazing use or stocking rates or other nonstructural adaptive management actions. After reviewing the FEIS and the project record, I do not believe that Alternative B provides the best option for managing livestock in an environmentally acceptable manner. It does not allow for any new fencing or other structural improvements that are important tools for livestock management. It does not improve or protect riparian and other resource conditions as much as the other alternatives. It also does not allow for new fencing along the rights-of-way to reduce the risk of livestock-vehicle collisions on the Old Hill City Road. Finally, I did not select Alternative B because it had no provisions for dealing with livestock use within the Norbeck Wildlife Preserve and would not have contributed to meeting the needs of game animals and birds within the Preserve. For these reasons, I did not select Alternative B.

Public Involvement

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

Scoping is the process of obtaining public comments about proposed federal actions to determine the breadth of issues to be addressed. Comments on the proposed action, potential concerns, and

opportunities for managing the Mystic Range Project Area were solicited from members of the public, American Indian Tribes, other public agencies, range permittees, organizations, and Forest Service specialists.

A scoping letter was mailed to approximately 91 interested parties on June 5, 2009. This letter included a description of the project area, and overview of the NEPA process, a general explanation of the actions proposed, and an invitation to comment.

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

The project was entered into the Schedule of Proposed Actions (SOPA) in February 2009. SOPA contains a list of Forest Service proposed actions that will soon begin or are undergoing environmental analysis and documentation. It provides information so the public can become aware of and indicate interest in specific proposals (located on-line at www.fs.fed.us/sopa).

The Notice of Intent (NOI) to prepare an EIS was published in the *Federal Register* on Friday, June 12, 2009. This provided official notification that the public comment period for the Mystic Range Project Area would last for 30-days concluding July 13, 2009.

A Notice of Availability (NOA) for the Mystic Range Project Draft Environmental Statement (DEIS) was published in the *Federal Register* on April 9, 2010. This initiated the official public 45-day comment period on the DEIS. This comment period ended May 24, 2010.

During the DEIS comment period, 17 individuals, groups, or agencies submitted comment letters. Public input received during this time period was evaluated using a content analysis process. Approximately 157 comments were identified and responded to by the Mystic Range ID Team. These comments and associated responses are located in Appendix A of this FEIS. No public comments on the Draft EIS generated the need for reanalysis or required major substantive changes to the document. The Final EIS includes changes to the Draft EIS such as typographical corrections, other minor editorial changes, and inclusion of additional or clarifying information made largely in response to comments received on the DEIS.

The Environmentally Preferred Alternative

Disclosure of one or more environmentally preferable alternatives is required [Section 101 NEPA; 40 CFR 1505.2(b)]. The environmentally preferable alternative is not necessarily the alternative that will be implemented and it does not have to meet the underlying need for the project. It does, however, have to cause the least damage to the biological and physical environment and best protect, preserve, and enhance historical, cultural and natural resources.

In the case of the Mystic Range Project, I have determined that Alternative A is the environmentally preferred alternative because it would eliminate impacts from livestock to soils, water quality, and riparian vegetation.

Design Criteria and Mitigation

Design criteria and mitigation measures describe features and actions applied in the project analysis during the design of the proposed action and alternatives to reduce effects (see FEIS Chapter 2, pg.

47 and Appendix B). They include requirements such as BMP's, standards and guidelines, and standard operating procedures that are incorporated into (made part of) the action design. Design criteria will be implemented on a site-specific basis to reduce the adverse impacts of livestock grazing. These criteria will be applied during project design and implementation by both the Forest Service and range permittees. Measures listed in Chapter 2 of the FEIS are incorporated by reference into this Record of Decision.

Monitoring

Monitoring is integral to adaptive management. Monitoring must be done in order to decide when changes in management are needed. Therefore it is essential that the monitoring plan be focused on areas with resource problems, use simple but effective methods, and be conducted at the level appropriate to identify thresholds and prevent resource damage.

The monitoring activities described in Chapter 2 of the FEIS will be implemented as appropriate. Activities and their effects, including effectiveness of design criteria and any needed mitigation measures, will be monitored during and following project completion. This decision makes no changes to the referenced monitoring activities.

Legal Requirements, Regulation, and Policy

Another aspect of the process of selecting an alternative is ensuring that the planned action comply with all legal requirements and policy. The selected alternative specifically meets the following legal requirements.

Federal Laws

The National Historic Preservation Act of 1966, as amended: All surveyed and inventoried cultural sites considered eligible or potentially eligible for the National Register of Historic Places will be protected from grazing activities. New sites discovered during operations will be protected. Any identified Traditional Cultural Properties and sacred areas will be protected. The South Dakota State Historic Preservation Officer (SHPO) has been consulted concerning the proposed activities in the Mystic Range Project Area. A letter of concurrence was received for each allotment. The SHPO concurred with our determination of "No Historic Properties Affected" in a letter dated October 26, 2009. The approximate 3,500 acres of prescribed burning within the Porcupine Allotment will need SHPO concurrence.

The National Environmental Policy Act (NEPA), 1969: NEPA establishes the format and content requirements of environmental analysis and documentation. The process of preparing the Mystic Range Project EIS and ROD was completed in accordance with NEPA.

The Endangered Species Act, 1973: The project decision is in compliance with the Endangered Species Act (ESA). There are no threatened, endangered or proposed species within the Mystic Range Project Area. Therefore, no consultation was required with the US Fish and Wildlife Service. The bald eagle was recently de-listed under ESA. Potential effects to bald eagles and other sensitive species, along with documentation regarding species covered under ESA, were included in a biological assessment/biological evaluation and summarized in Appendix D of the FEIS.

The Clean Air Act Amendments, 1977: The Selected Action will be implemented to meet the National Ambient Air Quality standards through avoidance of practices that degrade air quality below health and visibility standards.

The Clean Water Act, 1982: The Selected Action will meet and conform to the Clean Water Act as amended in 1982. This act establishes a non-degradation policy for all federally proposed projects. The Selected Action is not likely to degrade water quality below standards set by the State of South Dakota. This will be accomplished through planning, application, and monitoring of Watershed Conservation Practices and other design criteria of project activities. Because this project is designed to improve upon current livestock grazing practices, no further water quality degradation is expected from the proposed project.

The National Forest Management Act (NFMA) 1976, which amends the Forest and Rangeland Renewable Resources Planning Act (RPA) of 1974: All alternatives were developed to be in full compliance and consistent with NFMA as summarized below.

Consistency with the Land and Resource Management Plan

The 1997 Black Hills National Forest Land and Resource Management Plan (Forest Plan) supported by its Final Environmental Impact Statement (FEIS), is the Forest programmatic document required by the rules implementing the Forest and Rangeland Renewable Resources Act of 1974 (RPA), as amended by the National Forest Management Act of 1976 (NFMA). The Forest Plan was amended by the Phase II Forest Plan Amendment (Record of Decision dated October 31, 2005). This amendment provides revised and new Standards and Guidelines, as well as additional protection measures applicable to a number of plant and wildlife species on the Black Hills National Forest. My decision is consistent with the Plan in that:

- Planned activities will contribute to Forest Plan, as amended, goals and objectives (FEIS, Chapter 1). Actions proposed focus on Forest Plan Goals 1 - 3 by providing commodities to support local families and communities. Other Forest Plan Goals and applicable Objectives also provide management guidance and are achieved to varying degrees.
- I have reviewed the BHNF FY 2008 Monitoring and Evaluation Reports and Region 2 MIS guidance for projects. The effects of planned activities on management indicator species are consistent with the Forest Plan. They are also consistent with the FSM 2670 policy on sensitive species and FSM BHNF supplement 2600-2005-1 on species of local concern.
- Planned activities are consistent with management area direction.
- Planned activities comply or move towards compliance with Forest Plan, as amended.

Consistency with the National Forest Management Act

The 1982 planning rule has been superseded and is no longer in effect. The Forest Service is implementing this project under the 2000 planning rule. The scope of analysis for a Forest Plan's management indicator species is determined by the Forest Plan's management direction, specifically, its standards and guidelines (Chapter II) and monitoring direction (Chapter IV). The Black Hills National Forest Land and Resource Management Plan (Forest Plan) contains no obligation to conduct project-specific monitoring or surveying for MIS (Phase II ROD, pp. 8, 20; Forest Plan as

Amended, pg. I-11, Objective 238). The Forest Plan establishes monitoring and evaluation requirements that do not require population monitoring for MIS, but rather employ habitat capability relationships (Phase II ROD, pp. 20; Forest Plan as Amended, pg. I-11, Objective 238). Effects of the proposed project to species designated as MIS by the Forest Plan, as amended by the Phase II Amendment, have been considered. Due to the scale of the proposed project in relation to habitats available across the Forest, there will be no effect on Forest-wide habitat trends for any MIS species. Project effects on MIS are discussed in the FEIS beginning on page 126. The project is consistent with, or moves toward accomplishing Objectives 201 (aspen); 238 a, b, and c (various MIS); and 239 (spruce). Similarly, project effects on Species of Local Concern (SOLC) are discussed in the FEIS beginning on page 154. The project is consistent with, or moves toward accomplishing Objectives 213 (riparian habitat) and 221 (SOLC).

Best Available Science: My decision also is based upon consideration of the best available science. I have reviewed the record which shows a thorough review of relevant scientific information, a consideration of responsible opposing views, and the acknowledgement of incomplete or unavailable information, scientific uncertainty and risk. Specifically, the record shows that extensive literature citations have been reviewed and considered by resource specialists in preparation of the EIS as evidenced by the literature cited sections in the specialist reports. In addition, the record shows that literature cited by the public during the comment period has been reviewed and considered by resource specialists on the Mystic Range Project IDT.

Administrative Review

This decision is subject to administrative review (appeal) pursuant to 36 Code of Federal Regulation (CFR) Part 215. This decision is also subject to administrative review under 36 CFR Part 251 Subpart C, by term grazing permit holders or applicants (§251.86). However, term grazing permit holders or applicants must choose to appeal under either 36 CFR 251 or 215, but not both (§251.85). Notices of Appeal that do not meet the content requirements of 36 CFR 215.14 or 36 CFR 251.90, as appropriate, will be dismissed.

Appeals filed under 36 CFR Part 215 – Appeals filed under 36 CFR Part 215, must be submitted (by regular mail) to: USDA Forest Service Region 2, Appeals Deciding Officer, 740 Simms Street, Golden, CO 80401 or (by fax) to 303-275-5134. The office business hours for those submitting hand delivered appeals are 7:30 a.m. to 4:30 p.m. Monday through Friday, excluding holidays. Electronic appeals must be submitted in .pdf, rich text format (.rtf), or Word (.doc) to appeals-rocky-mountain-regional-office@fs.fed.us Include the name of the project being appealed in the subject line. Appellants should normally receive automated electronic acknowledgement as confirmation of agency receipt of electronic appeals. If the appellant does not receive an automated acknowledgement of receipt, it is the appellant's responsibility to ensure timely receipt by other means. In cases where no identifiable name is attached to an electronic message, a verification of identity will be required. A scanned signature is one way to provide verification.

Appeals, including attachments, must be filed within 45 days from the publication date of notice of this decision in the Rapid City Journal, the newspaper of record. Attachments received after the 45 day appeal period will not be considered. The publication date in the Rapid City Journal, newspaper

of record, is the exclusive means for calculating the time to file an appeal. Those wishing to appeal this decision should not rely upon dates or timeframe information provided by any other source.

To be eligible to appeal this decision on this project, an individual or group must have provided a comment or otherwise expressed interest in this project by the close of the comment period. The notice of appeal must meet the appeal content requirements at 36 CFR 215.14.

Appeals filed under 36 CFR Part 251 Subpart C – Appeals filed under 36 CFR Part 251, must be submitted (by regular mail) to: USDA Forest Service, Black Hills National Forest, Attn: Ed Fischer, 1019 N. 5th St., Custer, SD 57730, or (by fax) to 605-673-9350, (if hand-delivery or express delivery) to 1019 N. 5th St., Custer, SD. The office business hours for those submitting hand-delivered appeals are 8:00 a.m. to 4:30 p.m. Monday through Friday, excluding holidays. Electronic appeals must be submitted in .pdf format, rich text (.rtf), or Word (.doc) to appeals-rocky-mountain-black-hills@fs.fed.us. Include the name of the project being appealed in the subject line. Appellants should normally receive an automated electronic acknowledgement as confirmation of agency receipt of electronic appeals. If the appellant does not receive an automated acknowledgement of receipt, it is the appellant's responsibility to ensure timely receipt by other means. In cases where no identifiable name is attached to an electronic message, a verification of identity will be required. A scanned signature is one way to provide verification.

Appeals must be filed within 45 days following the date on the notice of the written decision (§251.88). Attachments received after the 45 day appeal period will not be considered. Appeals filed under 36 CFR 251 Subpart C must have a copy of the appeal simultaneously sent to the Deciding Officer (§251.88) at: Deciding Officer, Mystic Ranger District, Black Hills National Forest; Attention: Robert Thompson, District Ranger, 8221 S. Hwy 16, Rapid City, SD 57702 or (by fax) to 605-343-7134.

It is the appellant's responsibility to provide sufficient activity-specific evidence and rationale, focusing on the decision, to show why the Deciding Officer's decision should be reversed (§251.90). The Deciding officer is willing to meet with the applicants and holders to hear and discuss any concerns or issues related to the decision (§251.93).

An appellant may also include in the notice of appeal a request for oral presentation (§251.97) or request for stay of implementation of the decision pending decision on the appeal (§251.91).

Implementation

Implementation of the selected alternative will occur under the authority of this Record of Decision, subject to the appropriate appeal and implementation procedures cited above. Acreages and locations are approximate and may vary slightly during implementation depending on site-specific conditions.

Pursuant to 36 CFR Part 215, if no appeal is filed within the 45 day time period, implementation of this decision may occur on, but not before, 5 business days from the close of the appeal filing period. If an appeal is received, implementation may occur on, but not before, the 15th business day following the date of the last appeal disposition.

Pursuant to 36 CFR Part 251 Subpart C, if no appeal is filed, implementation of this decision may occur on, but not before, 5 business days from the close of the appeal filing period. If an appeal is received, implementation may occur during the appeal process, unless the Reviewing Officer grants a stay (§251.91).

Contact Person

For additional information concerning this decision contact Katie Van Alstyne, ID Team Leader, Robert J. Thompson, District Ranger, phone (605) 343-1567 or Ed Fischer, Environmental Coordinator, Black Hills National Forest, 1019 North 5th Street, Custer, SD 57730.

/s/Robert J. Thompson

10/12/2010

ROBERT J. THOMPSON
Mystic District Ranger
Black Hills National Forest
USDA Forest Service

Date

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, DC 20250-9410, or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Table 1: Required Structural Range Improvements (R) and Potential Adaptive Options (A)

Allotment	Pasture	INFRA Number or Common Name	Type and Estimated Unit	Required and/or Adaptive Option	Remarks
Palmer Gulch (north half)	Dump	615011	WD - pond (1)	R	Deepen pond and re-enforce bank.
	Ford	615004	WD - pond (1)	R	Deepen pond and re-enforce bank.
		615056	WD - pond (1)	R	Deepen pond and re-enforce bank.
		615003	WD - spring	R	Re-contour and reseed old spring excavation site.
		615XXX Unnamed	Fence - 1.0 mi	R	Construct fence to restrict livestock use of Norbeck Wildlife Preserve
	Keystone	Centennial Trail at Old Hill City Road	Fence - 0.20 mi	R	Construct fence and install trail gate.
		615092	WD - spring (1)	R	Develop spring headbox, fence enclosure, and pipeline to water tanks.
		615XXX Twin Springs. Rd.	Fence - 1.1 mi.	R	Construct fence to keep livestock off Old Hill City Road.
		615XXX unnamed	CG (1)	R	Install cattleguard in conjunction with fence 615XXX extension across Twin Springs Road.
		615022	Fence - 0.5 mi.	R	Remove unused ROW fence.
	Samalias	615048	Fence - 0.3 mi.	R	Seep area needs additional protective fencing.
		615048	WD - water tank (1)	A	Reconstruct spring headbox and pipeline to water tank; remove unused old materials.
		615051	WD - pond (1)	R	Deepen pond and re-enforce bank.
		615027	WD - pond (1)	R	Deepen pond and re-enforce bank.
		615005	WD - pond (1)	R	Deepen pond and re-enforce bank.
		615XXX - Joe Dollar	WD - water tank (1)	R	Reconstruct collection point, improve fence enclosure, and install new pipeline to updated water tank.
		615XXX - H16 seep	WD - spring (1)	R	Build fence enclosure and install water gap for livestock use.
		615XXX - Spring Creek	Fence - 0.5 mi.	R	Construct additional fencing to prevent livestock access to Spring Creek.
	Sawmill	615025	Fence - 0.30 mi.	R	Remove fence since isolated NFS lands not grazed; use for trailing route only.
Palmer Gulch (south half)	East Zimmer	615081	Fence - 0.20 mi	R	Remove fence since FS Horse Pasture is not dedicated to administrative use.
		615085	WD - spring (1)	R	Construct fence to protect spring source.

Allotment	Pasture	INFRA Number or Common Name	Type and Estimated Unit	Required and/or Adaptive Option	Remarks
	Lower Bear	NFSR 302	WD -water tank (1)	R	Re-assign location of temporary water tank (used during drought) further to the southwest and away from riparian areas.
		West of US Highway 87	Fence - 1.25 mi.	A	Construct new fence to include additional grazeable acres within allotment boundary.
	Palmer	Stream structures	Plate, Spread (8)	R	Install steel plates or similar device to spread water flows and rebuild streambanks.
		615XXX Unnamed	Fence - 1.25 mi.	R	Construct fence to restrict livestock use of Norbeck Wildlife Preserve
	Rabbit	615029	Fence - 0.30 mi.	R	Lengthen existing fence where vegetative barriers have been thinned.
		615XXX Unnamed	Fence - 1.5 mi.	R	Construct fence to restrict livestock use of Norbeck Wildlife Preserve
	Summit	Formerly Special Use Permit Pasture	Fence - 0.4 mi.	R	Construct new fence on NFS/private boundary line and remove old fence entirely on NFS lands.
	Upper Bear	Southwest of US Highway 87	Fence - 2.0 mi.	A	Construct new fence to include additional grazeable acres within allotment boundary.