

Chapter 1

Purpose and Need

1.1 INTRODUCTION

The Sioux Ranger District has prepared this Environmental Assessment (EA) for the **Sioux 2003 Range Analysis Project** to evaluate the effects of livestock grazing on eleven (11) grazing allotments on the Custer National Forest-Sioux Ranger District. The allotments under analysis are in the North and South Cave Hills Land Units and the East Short Pines Land Unit ([See Map 1, page iv](#)).

1.1.1 LEGAL FRAMEWORK

The Federal Land Policy Management Act (FLPMA), as amended by the Public Rangelands Improvement Act, allows for Allotment Management Plans (AMPs) to be included in grazing permits at the discretion of the Secretary of Agriculture (43 USC 1752[d], as amended by 92 Stat. 1803 [1978]). The Secretary of Agriculture has elected to exercise this discretion, and has delegated his authority to issue regulations in the area to the Chief of the Forest Service (See 36 CFR 222.1 and 222.2).

An AMP is defined in FLPMA as a document, prepared in consultation with lessees or permittees, that applies to livestock operations on public lands, and (1) prescribes the manner in and extent to which livestock operations will be conducted in order to meet multiple use, sustained-yield, economic, and other needs and objectives, (2) describes range improvements to be installed and maintained, and (3) contains such other provisions relating to livestock grazing and other objectives found by the Secretary to be consistent with provisions of FLPMA.

Updated AMPs will be outlined in the Appendix as a subset of the preferred alternative of the Final EA. The AMPs will be comprised of the following components:

- Objectives for livestock grazing and affected resources,
- Management requirements outlining number, kind, class, and type of livestock to be grazed, and the timing and duration of grazing use; management requirements outlining allowable use standards and guidelines, herding and salting practices, and any other necessary mitigation measures from the project decision needed for the protection of resources,
- Improvements necessary to meet objectives, including scheduling, prioritization, and assignment of responsibility,
- Actions specified for monitoring if management actions are being implemented and whether they are effective in achieving objectives.

This analysis is tiered to the 1986 Final Environmental Impact Statement (FEIS) for the Custer National Forest Land and Resources Management Plan, and references the 1987 Record of Decision

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for the Custer National Forest and National Grasslands Land and Resources Management Plan (Forest Plan). The Forest Plan guides all natural resource management activities and establishes management goals, objectives, standards, and guidelines for the Custer National Forest. It describes resource management practices, levels of resource production and management, and the availability and suitability of lands for resource management.

1.1.2 PROJECT AREA DESCRIPTION

The Sioux Ranger District is located in the southeast corner of Montana and the northwest corner of South Dakota. Camp Crook South Dakota, population 65, is situated along the Little Missouri River and is the location of the Sioux Ranger District Office. The closest town with significant services is Buffalo, South Dakota, about 20 miles to the east of Camp Crook, South Dakota. Bowman, North Dakota is about 75 miles to the north, and Belle Fourche, South Dakota, is about 80 miles to the south. The Black Hills of South Dakota is about 100 miles south of Camp Crook. The Sioux Ranger District is composed of eight separate land units of Federal land and has often been described as "islands of pine in a sea of grass." This is an appropriate description as the National Forest System lands are higher elevation hills of ponderosa pine rising above rolling grasslands. The prairies are comprised of typical mixed grass prairie species while these isolated elevated land units support a variety of vegetation that includes pine forest, hardwood draws and upland and rolling grasslands. The eight land units include: Chalk Buttes, Ekalaka Hills, and Long Pines in Montana, and: North Cave Hills, South Cave Hills, Slim Buttes, and West Short Pines, East Short Pines in South Dakota.

These "islands" are a group of erosion remnants left standing above the surrounding landscape and the soils exposed at the surface are primarily Ludlow and Cannonball geologic formations. The Sioux Ranger District has large areas of clay soils and some badlands. Underlying material is siltstone or shale that weathers to fine textured surface soils. The climate for the area is Continental, with short, hot summers and long, cold winters. Moisture regimes are semi-arid, with an average annual precipitation of 14 to 16 inches per year. Elevations on the Sioux Ranger District vary from 3,121 feet at Camp Crook, South Dakota to 4,100 feet at Tri-point in the Long Pines Land Unit, Montana.

There are two classified National Landmarks on the District, the Castles, and Capitol Rock. The Castles, located in the Slim Buttes Land Unit in South Dakota, are a massive limestone uplift that resembles a medieval castle. Capitol Rock, located in the Long Pines Land Unit in Montana, is a massive white limestone uplift that resembles the Nation's capitol building. There are numerous opportunities for dispersed recreation activities such as hunting, hiking, horseback riding, mountain biking, snowmobile riding, and cross-country skiing throughout the District. There are no designated hiking trails but most of the ridges are open and provide spectacular panoramic views.

The Sioux 2003 Range Analysis project area includes the North and South Cave Hills and the East Short Pines land units. The project area is located within Harding County, South Dakota. Access to the Cave Hills land units is north from Buffalo on State Hwy 85. Harding County Roads (Cave Hills, Brown-Johnson and Tufte) and Forest Roads (#3113, #3114 and #3120) access the Cave Hills land units. Access to the East Short Pines land unit is south from Buffalo on State Hwy 85. Harding County Roads (Dillon, Mackey) and Forest Roads (#3111 and #3160) access the East Short Pines land unit.

1.2 PROPOSED ACTION IN BRIEF

The Sioux Ranger District proposes to update allotment management plans for eleven (11) domestic livestock allotments on National Forest System lands in the North and South Cave Hills and East Short Pine land units. The decision associated with this proposal and analysis will determine where livestock can graze, when grazing will occur and what specific guidelines will be established to regulate the intensity of grazing. The analysis area includes about **23,470** acres of Forest Service lands. For a detailed description of the specific actions proposed for each allotment, refer to [Chapter 2-Alternatives](#), and [Appendix B1, B2](#).

The proposal includes the following:

1. Updating the National Environmental Policy Act (NEPA) Decisions and AMP’s for eleven (11) allotments in the North and South Cave Hills Land Units and the East Short Pines Land Unit.
2. Reduction in animal unit months (AUMs) for two allotments, including a 60% reduction of AUMs for Davis Draw Allotment, and a 33% reduction in AUMs for the John Brown Allotment.
3. Authorizing the use of a total of 7,226 AUMs for all allotments.
4. Construction and reconstruction of several range improvements; including water developments, fences, and other range improvement structures.
5. Some allotments would change pasture rotations and grazing systems.

1.3 PURPOSE AND NEED FOR ACTION

The primary purpose of this project is to update the AMPs for the allotments shown in [Table I-1](#) to be consistent with management direction in the Custer Forest Plan. Additionally, this also includes compliance with the 1995 Rescission Bill, which requires Allotment Management Plans comply with the NEPA status of existing allotment management plans for each allotment. The management plans for seven (7) of the allotments are over 10 years old, one management plan is eight (8) years old, and three allotments have no current management plan. The existing plans do not always take into consideration recent changes in management concerns for upland, riparian and hardwood draw management or reflect new knowledge and understanding of ecosystems.

Table I-1: List of Grazing Allotments

Allotment Name	Land Unit	Management Areas ¹	Existing AMP Approval Date	Total Acres ²	National Forest Acres ³	National Forest Capable ⁴ Acres
Pelham-Juberg	North Cave Hills	C, E, M, N	1994	2,390	2,390	1,715
Schleichart	North Cave Hills	C, E, M, N	1980	13,175	6,070	4,070
Davis Draw	North Cave Hills	C, E, M, N	None	1,145	1,145	650
Jenkins	North Cave Hills	C, E, M, N	None	2,990	835	500

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Table I-1: List of Grazing Allotments

Allotment Name	Land Unit	Management Areas ¹	Existing AMP Approval Date	Total Acres ²	National Forest Acres ³	National Forest Capable ⁴ Acres
John Brown	South Cave Hills	B, C, M, N	None	2,160	2,160	1,560
JA Clarkson	South Cave Hills	B, C, M, N	1977	2,455	1,965	1,410
JB Clarkson	South Cave Hills	B, C, M, N	1995	2,710	2,700	1,995
Van Offern	South Cave Hills	B, C, M, N	1995	1,365	1,330	700
Box Springs	East Short Pines	C, D, M, N	1981	2,200	2,200	1,500
Dunn	East Short Pines	C, D, M, N	1969	1,800	1,800	1,165
Lone Mountain	East Short Pines	C, D, M, N	1983	1,055	875	490
Totals				33,445	23,470	15,755

¹ Forest Plan Management Area descriptions found in Chapter I, Section 1.4.

² Includes FS and Private acres. Acreage figures are rounded. Source is information in Appendix B

³ Includes all FS acres considered to be "capable" or "suitable" for livestock grazing only. Acreage figures are rounded. Source is Appendix B

This project also includes the following situations and management needs:

- Range conditions on some allotments are not meeting Forest Plan objectives to maintain range conditions at "good" or better. Currently, much of the allotment pastures are in fair to good range condition.
- Range improvements need to be maintained, reconstructed, or relocated in some allotments, including reconstruction of an estimated nine (9) water developments, removal of four (4) water developments, construction, or reconstruction on three (3) water pipelines, one segment of fence construction, and one (1) segment of fence reconstruction.
- Riparian areas are not meeting management objectives on one allotment (JA Clarkson). One segment of approximately 0.25 miles on private land within the allotment is functioning at risk.
- Hardwood draws are not meeting management objectives on some allotments. Seventy-three draws were surveyed in primary range. Of those, approximately 93% of the surveyed acres were rated "functioning - at risk", 5% were rated "unhealthy", and 2% of hardwood draws were rated "healthy". Please refer to Chapter III for detailed information concerning hardwood draws.
- Livestock, range structures, ponds, and spring developments are impacting an estimated ten (10) known heritage resource sites.

1.3.1 PROJECT OBJECTIVES

The general project objectives are listed below and include:

- Bring existing allotments into compliance with the Custer Forest Plan and the 1995 Rescission Act.

- Maintain or improve range vegetative conditions to “good” or better as noted in the Forest Plan.
- Maintain and improve the condition and location of existing and proposed range improvements.
- Maintain or restore riparian areas to desired condition.
- Maintain or restore hardwood draws to desired condition.
- Maintain or improve wildlife habitats in Management Areas with management emphasis on wildlife.
- Protect heritage sites that are affected by livestock grazing.

1.3.2 SCOPE OF THE PROPOSAL

1.3.2.1 Geographic Scope

The analysis area for this proposal includes National Forest System lands in the North and South Cave Hills land units and the East Short Pines land unit ([See Map 1, pg. iv, and Appendix A maps](#)).

The Final Settlement Agreement (4/28/95) scheduled completion of AMP analysis for these allotments by 2004. Analyzing AMP updates on a land unit basis avoids the piecemeal approach of updating AMPs on individual allotments and provides for an extensive cumulative effects analysis.

1.3.2.2 Temporal Scope

Implementation of the activities specifically identified in the Decision Notice (DN) will begin as soon as possible (2004 grazing season) and without further NEPA documentation. The subsequent AMPs are expected to guide livestock grazing practices within the analysis area for at least the next 10 years.

1.3.2.3 Administrative Scope

The decisions about activities to be implemented on the eleven (11) livestock allotments within the analysis area are being considered together in this proposal. The decision will be made on these activities concurrently because they are cumulative actions that may have potential cumulative effects on the environmental components of the analysis area.

This proposal is limited to the revision of livestock grazing direction and specified structural range improvements, as described in Chapter 2 of this document. Allotment management plans will be developed following and based on the decision, and made a part of the grazing permits. AMPs will be completed in cooperation with livestock permittees. This analysis is tiered to the FEIS for the Custer Forest Plan.

1.4 RELATIONSHIP TO THE FOREST PLAN

National Forest planning takes place at several levels: national, regional, forest, and project levels. This EA is a project-level analysis; its scope is confined to addressing the significant issues and possible environmental consequences of the project.

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The Forest Plan embodies the provisions of the National Forest Management Act (NFMA), its implementing regulations, and other guiding documents. The Forest Plan sets forth in detail the direction for managing the land and resources of the Custer National Forest. The Forest Plan is the result of extensive analysis that is addressed in the Forest Plan FEIS and the 1987 Record of Decision. Where appropriate, this EA tiers to the Forest Plan FEIS, as advised by 40 CFR 1502.20.

1.4.1 FOREST PLAN GOALS AND OBJECTIVES

The updating of the eleven (11) AMPs is proposed to respond to Forest Plan goals and objectives and to help move the allotments toward desired conditions described in the Plan. The Forest Plan includes forest-wide goals and objectives, and area-specific (land use designation) goals, objectives, and desired conditions. Applicable forest-wide goals and objectives (Forest Plan, p. 21-39) follow.

1.4.1.1 Range

- Use the AMP as the tool to implement the intent of the Forest Plan incorporating the management area goals in every allotment (Forest Plan p. 21).
- The AMPs are to include a vegetative assessment that shows the importance of the vegetation to wildlife, livestock, and the watershed (Forest Plan p. 21).
- The AMPs are to include proposed range improvements prioritization for Range Betterment Funding (RBF) for each allotment (Forest Plan p. 22).
- Use an integrated pest management approach to noxious weed treatment (Forest Plan p. 24).

The analysis will result in eleven (11) allotment management plans that will address all of the above items.

1.4.1.2 Watershed

- Manage the soil and water resources to maintain or improve quality of watershed, including soil productivity and water quality (Forest Plan p. 25).

The analysis will address soil and water issues for each allotment, and the allotment management plans will move the allotments toward the desired conditions for soil productivity and water quality.

1.4.1.3 Wildlife and Fish

- Manage the land to maintain viable populations of existing native and desirable non-native vertebrate species, promote the conservation of federally listed threatened and endangered species, and coordinate and cooperate with appropriate state, federal and private agencies in the management of habitats for major interest species (Forest Plan p. 16).

The analysis will address wildlife and fish issues for each allotment, will address federally listed threatened and endangered and sensitive species and will document coordination with state, federal and private agencies in the management of major interest species. The analysis will also address management indicator species. The allotment management plans will incorporate any decisions on vegetation management that moves the allotment toward desired conditions for wildlife.

1.4.2 FOREST PLAN MANAGEMENT

The Forest Plan uses Management Areas (MA) to guide management of the National Forest system lands within the Custer National Forest. Each designation provides for a unique combination of activities, practices, and uses. The North Cave Hills, South Cave Hills and East Short Pines land units includes seven (7) Forest Plan Management Areas. Goals, objectives, and desired conditions of each are included or summarized below. Chapter 3 of the Forest Plan contains a detailed description of each land use designation.

The Forest Plan guides all natural resource management activities and establishes management standards for the Custer National Forest. It describes resource management practices, levels of resource production and management, and the availability and suitability of lands for resource management. The proposed action and any alternatives to it must meet Forest Plan goals, objectives, standards, and guidelines. To be consistent with the Forest Plan an alternative may include the need for an amendment. Forest-wide management direction and standards are listed in the Forest Plan (p. 3-39), and Management Area direction is found in the Forest Plan (p. 41-100).

The project area contains National Forest System lands allocated to Management Areas B, C, D, E, F, M and N. Management Areas M and N are unmapped. A brief description of the goals for each Management Area is provided below.

1.4.2.1 Management Area B

The goals are to provide for livestock grazing, implement range management systems, and to facilitate mineral and energy development with consideration of other resource needs. In key wildlife areas, the habitat may not be adversely impacted by development activities. In non-key wildlife areas adverse impacts to wildlife habitat will be mitigated where feasible but not to the exclusion of range and mineral/energy activities. (Forest Plan, p. 45-48). Intensive grazing systems are preferred with the objective of improving range condition to good or better. Ecosystems may be maintained in a seral state of plant succession if it is determined that doing so better meets the management objectives for the area (Forest Plan p. 45).

1.4.2.2 Management Area C

This management area includes specific areas important for selected wildlife species (elk, bighorn sheep, raptors, grouse, and grizzly bear). The goal is to manage these key wildlife habitat area for optimum quality and diversity. Other resource activities will be modified to maintain or improve existing habitat. Livestock grazing will be modified as needed to meet wildlife habitat needs. Range improvements may be constructed in key wildlife areas in accordance with wildlife and fish habitat needs. An Integrated Control Program will control noxious weeds.

1.4.2.3 Management Area D

The goals are to maintain or improve the long-term diversity and quality of habitat for the District's selected species (whitetail deer, turkey and mule deer (Forest Plan p. 53)) as well as accommodating other resource management activities such as timber harvest, livestock grazing, and oil and gas development. Some short-term habitat impacts may be necessary to achieve long-term wildlife goals (Forest Plan p. 53-57). On key wildlife areas, range management will be aimed at mitigating adverse impacts to wildlife. On the remainder of the management area, range management practices will be consistent with the wildlife habitat needs (Forest Plan p. 54).

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1.4.2.4 Management Area E

The goals are to facilitate and encourage the exploration, development and production of energy and mineral resources from the National Forest System lands. Other resources will be considered and impacts will be mitigated to the extent possible through standard operating procedures, and on a limited basis, through special lease stipulations necessary to manage key surface resources (Forest Plan p. 58-60). Specific mitigating measures will be made to reduce impacts on livestock forage values from surface-disturbance activities (Forest Plan p. 58).

1.4.2.5 Management Area F

This includes all the developed recreation sites and access corridors to and from those sites. One site exists in the North Cave Hills Unit (Picnic Springs Campground). The goal for this MA is to provide a spectrum of recreation opportunities and settings on the Forest. Livestock grazing is not allowed in developed recreation sites, unless it can be accommodated before and after the recreation use season, and is instrumental in the management of the recreation site.

1.4.2.6 Management Area M-Riparian Areas

The goals are to protect the area from conflicting uses to provide healthy, self-perpetuating plant and water communities that will have optimum diversity and density of understory and overstory vegetation (Forest Plan p. 80-82). Riparian zones will be evaluated and mapped during the range analysis phase of an allotment management plan and the AMP will specifically address the riparian areas and identify impacts livestock will have on these areas. Management practices such as fencing, grazing deferment, burning, or planting may be tried on selected areas to determine their effectiveness in maintaining or improving the riparian zone conditions. Large-scale fencing efforts to protect riparian areas are neither practical nor planned (Forest Plan p. 81). These management areas are not currently mapped.

1.4.2.7 Management Area N-Hardwood Draws

The goals are to provide healthy, self-perpetuating plant communities that will have optimum diversity and density of understory and overstory vegetation (Forest Plan p. 83-86). Hardwood draws will be evaluated and mapped during the range analysis phase of an allotment management plan. AMPs will specifically address woody draws and identify impacts livestock will have on these areas. Management practices such as fencing, grazing deferment, burning, or planting may be tried on selected areas to determine their effectiveness in maintaining or improving the riparian zone conditions. Large-scale fencing efforts to protect riparian areas are neither practical nor planned (Forest Plan p. 83). These management areas are not currently mapped.

1.5 PUBLIC INVOLVEMENT

The Council on Environmental Quality (CEQ) defines scoping as “an early and open process for determining the scope of issues to be addressed and for identifying the significant issues related to a proposed action” (40 CFR 1501.7). Among other things, the scoping process is used to invite public participation, to help identify public issues, and to obtain public comment at various stages of the environmental analysis process. Although scoping is to begin early, it is really an iterative process that continues until a decision is made. In addition to the following specific activities, the **Sioux 2003 Range Analysis project** has been listed on the Custer National Forest Schedule of Proposed Actions

(SOPA) since the first quarter of 2000. The documentation of the scoping and public involvement is found in the project file. To date, the public has been invited to participate in the project in the following ways.

1.5.1 PUBLIC MAILING

On December 20, 2001, a letter was mailed to the public providing detailed information on the proposed action that the Sioux Ranger District was considering for the Sioux 2003 Range Analysis project. The letter requested the public to respond by providing information on any concerns they had regarding the proposal or any other comments they wanted to submit. The letter was mailed to approximately 109 individuals and groups, including federal and state agencies, tribal governments, municipal offices, and businesses. A total of fourteen (14) responses to this scoping letter were received and analyzed for issues and concerns.

A content analysis was conducted on the scoping responses from the public. The content analysis is a compilation of substantive comments from public scoping. The analysis shows how comments were used to develop the Purpose and Need, Issues, Alternatives to the proposed action, and any project design criteria. The complete content analysis documentation is found in the project record files.

1.6 ISSUES

The Council of Environmental Quality regulations for implementing the National Environmental Policy Act emphasize concentrating only on truly “significant” issues related to the proposed action (40 CFR 1500.1, 1500.4 and 1501.7). This use of “significant” is confusing because the term has a second and different legal meaning, as reflected in the Finding of No Significant Impact. Given this confusion, the term, “Key Issue” will be used to label those issues that are critically important to the Sioux 2003 Range Analysis project proposal and were used to drive alternative development.

Scoping is used to identify issues that relate to the effects of the proposed action. An issue is an unresolved conflict or public concern over a potential effect on a physical, biological, social, or economic resource as a result of the proposed action and alternatives to it. An issue is not an activity; instead, the projected effects of the proposed activity create the issue.

The analysis team reviewed the scoping comments and categorized issues into two groups: 1.) Key Issues studied in detail, and 2.) Issues not studied in detail. The complete analysis of issue identification and resolution is located in the project record.

1. Key Issues studied in detail- these are issues identified by the analysis team as important and within the scope of the project. These issues influence the analysis, suggest new alternatives, or require additional project design and mitigation features.
2. Issues not studied in detail- these are issues considered, but were determined by the analysis team to be outside the scope of the project, requests for information, or resolved through existing law, regulation or policy.

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1.6.1 KEY ISSUES STUDIED IN DETAIL

The following issues are studied in detail and are addressed through the proposed action, alternatives to the proposed action, and design criteria. An indicator for measuring each issue is presented and will be discussed in the analysis and used in the alternative comparison in Chapter 2. A brief summary of each issue and its resolution will be noted below.

1.6.1.1 Key Issue #1: Riparian Areas

There is a concern that livestock grazing could have an adverse impact on riparian area function in the analysis area. Riparian areas only account for less than 10 acres (5 linear miles) within the analysis area and that makes those limited acres of riparian habitats very important for wildlife species and vegetative diversity. Generally, riparian areas are fragile systems that are easily subject to disturbance. A lowered water table may disrupt stream flow, reduce surface water availability, and affect riparian plant species. One riparian segment in the JA Clarkson Allotment of approximately 0.25 acres is not functioning properly. The following indicators will be used to track this issue:

- **Indicator:** Riparian segments (miles) not meeting proper functioning conditions (PFC), short-term and long-term.

1.6.1.2 Key Issue #2: Hardwood Draws

There is a concern that livestock grazing could have an adverse impact on hardwood draw habitats. Hardwood draws are an important feature of the landscape as they provide food and shelter for wildlife, slow erosion, and water runoff, and furnish shade and aesthetic value to recreationists. Past and present management activities have and are affecting portions of hardwood draws. Recent surveys have noted the lack of regeneration of hardwood species and conifer encroachment. The following indicators will be used to track this issue:

- **Indicator:** Acres of hardwood draws with a rating of at-risk, not-healthy, or healthy functioning condition, both short-term and long-term.

1.6.1.3 Key Issue #3: Soils and Upland Vegetation (Grasslands)

There is a concern that livestock grazing could have an adverse impact on soils and upland vegetation, specifically upland grasslands. Management practices have altered the composition and structure of prairie plant communities and are affecting the ecological integrity in portions of the uplands. The following indicator will be used to track this issue:

- **Indicator:** Percent (%) of detrimental soil disturbance.
- **Indicator:** Range condition measured by acres in good, fair, and poor condition, both short-term and long-term.
- **Indicator:** Trend in acres of range vegetation moving toward desired conditions.

1.6.1.4 Key Issue #4: Social and Economics

There is a concern that any changes in livestock grazing that could result in the reduction of stocking rates or season of use. A reduction could have economic and social impacts on the permittees that depend on the availability of National Forest grazing allotments for their ranch operation. In addition there are other economic impacts to the county. The following indicators will be used to track this issue:

- **Indicator:** Economic impacts to permittees, measured using permittee total present value.
- **Indicator:** Economic impacts to the county, measured using possible 25% fund value.
- **Indicator:** Economic impacts to Forest Service, measured using present net value (PNV).

1.6.1.5 Key Issue #5: Heritage Sites

There is a concern that livestock grazing could have an adverse impact on identified heritage resources. The analysis area has a very rich archeological heritage. Evidence from human occupation of the Cave Hills spans the entire prehistoric Native American Indian and historic Euro-American periods. This occupation has left a wide variety of cultural site types over much of the analysis area. These sites are subject to damage and loss because of past and present management activities. The following indicator will be used to track this issue:

- **Indicator:** Heritage sites adversely impacted by grazing or range improvements.

1.6.1.6 Key Issue #6: Noxious Weeds

There is a concern that livestock grazing and associated activities could be creating an increase in noxious weeds. Livestock management activities such as corrals, water developments, salt locations, and permittee and/or Forest Service administrative vehicle access can contribute to the spread of noxious weeds. The following indicator will be used to track this issue:

- **Indicator:** Potential increase in acres of noxious weeds disturbed in acres.

1.6.1.7 Key Issue #7: TES and MIS Wildlife and Sensitive Plant Species

There is a concern that livestock grazing could be adversely impacting wildlife and aquatic species, Threatened, Endangered, or Sensitive species (wildlife and plants) and wildlife Management Indicator species. The following indicator will be used to track this issue:

- **Indicator:** Determination of effects on TES wildlife and plant species as noted in the biological evaluation for TES wildlife and plants.

1.6.2 ISSUES NOT STUDIED IN DETAIL

The following issues were considered from internal scoping and public scoping. However, these issues were determined to be requests for information or other process issues, were already resolved through existing law, regulation, or policy, or are beyond the scope of this analysis. Some are already addressed through other processes such as the Forest Plan. Each issue is discussed briefly.

1.6.2.1 Issue: Water Quality

There is a concern that livestock grazing could be adversely impacting water quality in the allotments. Livestock grazing can degrade riparian vegetation and damage stream banks and this can lead to increased sediment levels and raised fecal coliform levels. The following indicator will be used to track this issue:

- **Discussion:** There are no perennial streams in the project area. Stream flows are erratic and intermittent within and adjacent to the project area. There are no water quality limited

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segments in the project area. No impacts would occur to water quality. Therefore, this issue will not be discussed further in this analysis.

1.6.2.2 Issue: Inventoried Roadless Areas (IRAs)

There is a concern that livestock grazing may be impacting IRAs.

- **Discussion:** There are no IRAs on the Sioux Ranger District including the analysis area. Therefore, this issue will not be discussed further in this analysis

1.6.2.3 Issue: All Terrain Vehicle (ATV) Use

There is a concern that ATV use impacts resources such as soils and wildlife.

- **Discussion:** ATV use and management on public lands is determined by Forest Plan standards and guidelines and the Off-Highway Vehicle EIS as amended. ATV use of the public lands in this analysis area is outside the scope of this project analysis, and therefore, this issue will not be discussed further in this analysis.

1.6.2.4 Issue: Conifer Encroachment

There is a concern that conifer encroachment could be affecting conditions for rangelands and woody draws.

- **Discussion:** Encroachment by confers is not the result of activities proposed in this analysis. Conifer encroachment is a natural process when fire is excluded from an ecosystem. Fires reduced conifer encroachment and maintained open grasslands and meadows. This issue is outside the scope of this analysis, and therefore, will not be discussed further.

1.6.2.5 Issue: Logging

There is a concern that logging could be adversely affecting rangeland conditions.

- **Discussion:** Logging and thinning of forested stands result in the increase of forage and transitional range for livestock grazing. This is positive effect on the grazing resource, and therefore, this issue will not be discussed further.

1.6.2.6 Issue: Effects on Tree Plantations

There is a concern that livestock grazing could be affecting conifer tree plantations.

- **Discussion:** Livestock grazing impacts on conifer plantations is controlled by Forest Plan standards and guidelines. However, there are no tree plantations located in the project area. Therefore, this issue will not be discussed further.

1.6.2.7 Issue: Effects on Forests and Forest Succession

There is a concern that livestock grazing could be affecting forested stands and forest succession.

- **Discussion:** Livestock grazing impacts on forests and forest succession is controlled by Forest Plan standards and guidelines. Therefore, this issue will not be discussed further.

1.7 APPLICABLE LAWS AND EXECUTIVE ORDERS

The Proposed Action and alternatives to it must comply with the Forest Plan and applicable laws and executive orders. Shown below is a list of pertinent federal laws and executive orders pertaining to project-specific planning and environmental analysis on federal lands. Disclosures and findings required by these laws and orders are contained in Chapter 3 of this EA and/or the Decision Notice/FONSI.

- Multiple-Use Sustained-Yield Act of 1960
- National Historic Preservation Act of 1966 (as amended)
- National Environmental Policy Act (NEPA) of 1969 (as amended)
- Clean Air Act of 1970 (as amended)
- Endangered Species Act (ESA) of 1973 (as amended)
- Forest and Rangeland Renewable Resources Planning Act (RPA) of 1974 (as amended)
- National Forest Management Act (NFMA) of 1976 (as amended)
- Clean Water Act of 1977 (as amended)
- American Indian Religious Freedom Act of 1978
- Archeological Resource Protection Act of 1980
- Cave Resource Protection Act of 1988
- Executive Order 11593 (Cultural Resources)
- Executive Order 11988 (Floodplains)
- Executive Order 11990 (Wetlands)
- Executive Order 12898 (Environmental Justice)
- Executive Order 13186 (Migratory Bird Treaty Act)

1.8 DECISIONS TO BE MADE

The Environmental Assessment is not a decision document. It discloses the analysis and environmental consequences associated with implementing the proposed action and alternatives. The Sioux District Ranger is the responsible official.

Based on this analysis, the District Ranger will specifically decide the following:

- Whether or not grazing by domestic livestock can occur within the analysis area.
- If it can, it will be specified where and when grazing by domestic livestock can occur and at what levels of intensity (timing and duration) to meet the objectives.
- What structural and/or non-structural range improvements (fences, water tanks, pipelines, etc.) are needed to achieve the objectives.
- If there are any other tools to be used to move the existing condition towards the desired condition.

1 Purpose and Need

Decisions that will not be made based on this analysis are briefly discussed below.

- Who will hold a livestock-grazing permit? This is determined through administrative processes.
- Suitability for livestock grazing. This was determined through the Forest Planning process (Forest Plan FEIS pages 125-126).

If grazing is authorized, then individual AMPs will be developed to incorporate the decisions into the AMP. These AMPs will be completed and approved prior to the 2004 grazing season and will become part of the term grazing permits to be issued reflecting the Decision Notice.

Monitoring efforts will also be decided upon to ensure effectiveness of mitigation measures identified and included under special terms and conditions of the grazing permit. The permittee(s) and Forest Service will cooperatively implement and complete monitoring requirements. Modification of the existing grazing permits may occur, based on the results of monitoring.