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CHAPTER 3 MANAGEMENT AREA DIRECTION

INTRODUCTION

Management areas are defined as parts of the grassland that are managed for a particular emphasis or theme. Each management area has a prescription that outlines the Theme, the Desired Conditions, and the Standards and Guidelines that apply to it (in addition to the Grassland-wide Standards and Guidelines).

Prescriptions have been broken into eight major categories which range from least evidence of disturbance to most evidence of disturbance: For example, Proposed Wilderness (MA 1.2) would have the least amount of facilities and Rangeland with Broad Resource Emphasis (MA 6.1) would show the greatest evidence of facilities, including things like roads, oil wells, pipelines, and water developments.

Category 1	Category 2	Category 3	Category 4	Category 5	Category 6	Category 7	Category 8
Least facilities <-----> Most facilities More land use restrictions <-----> Fewer land use restrictions							

For this revision, linear, point, and small management areas were combined into other management areas, or are handled through discrete standards and guidelines. This includes campgrounds and picnic grounds (developed recreation sites), utility corridors, woody draws and riparian areas. Management areas devoted to a particular wildlife species were consolidated into “special wildlife areas.”

The eight categories of management prescriptions are described below:

Prescription Category 1

Category 1 includes Wilderness Areas and the various prescriptions used within them, and the backcountry recreation settings. Ecological processes, such as fire, insects, and disease, are essentially allowed to operate relatively free from the influence of humans. Diversity resulting from natural succession and disturbances predominates, and non-native vegetation is rare. Users must be self-reliant and should expect little contact with other people. Few, if any, human-made facilities are present. With rare exceptions, travel is nonmotorized.

Prescription Category 2

Category 2 areas are intended to conserve representative (or particularly rare and narrowly distributed) ecological settings or components. They help protect ecosystems or ecosystem components that may have important functions, ensuring the overall sustainability of larger landscapes. Human influences on ecological processes are limited as much as possible, but are sometimes evident. Types of human use vary, but generally are not intensive. Travel is generally nonmotorized. They help play an important role under an adaptive-management philosophy by serving as a "natural" reference for areas that are intensively managed for a particular objective. These areas are formally designated Research Natural Areas (RNAs).

Prescription Category 3

Ecological values in Category 3 areas are in balance with human occupancy, and consideration is given to both. Resource management activities may occur, but natural ecological processes and resulting patterns normally predominate. Although these areas are characterized by predominately natural-appearing landscapes, an array of management tools may be used to restore or maintain relatively natural patterns of ecological process. This results in some evidence of human activities. Users expect to experience some isolation from the sights and sounds of people, in a setting that offers some challenge and risk.

Prescription Category 4

The ecological values in Category 4 areas are managed to be compatible with recreation use, but are maintained well within the levels necessary to maintain overall ecological systems. Resource use for other values is not emphasized and has little impact on ecological structure, function, or composition. Sights and sounds of people are expected, and may even be desired. Motorized transportation is common.

Prescription Category 5

Category 5 areas are forested areas managed for a mix of forest products, forage, and wildlife habitat, while protecting scenery and offering recreation opportunities. Ecological sustainability is protected, while selected biological structures and compositions which consider the range of natural variability are emphasized. These lands often display high levels of investment, use, and activity; density of facilities; and evidence of vegetative treatment. Users expect to see other people and evidence of human activities. Facilities supporting the various resource uses are common. Motorized transportation is common.

Prescription Category 6

Category 6 areas are primarily non-forested ecosystems that are managed to meet a variety of ecological and human needs. Ecological conditions will be maintained while emphasizing selected biological (grasses and other vegetation) structures and compositions which consider the range of natural variability. These lands often display high levels of investment, use, and activity; density of facilities; and evidence of vegetative manipulation. Users expect to see other people and evidence of human activities. Facilities supporting the various resource uses are common. Motorized transportation is common.

Prescription Category 7

Category 7 areas are public lands intermingled with private land to such an extent that ecosystem management objectives for National Forest System lands must be tempered by other landowners' uses and objectives. Human activities have altered the natural appearance of these landscapes in most area on both the public and private lands. Sights and sounds of people predominate. Private land uses is often residential. Resource use is not planned on a sustainable basis, but many occur in concert with surrounding private land values. Motorized transportation is common.

Prescription Category 8

Ecological conditions, including processes, within Category 8 areas are likely to be permanently altered by human activities, beyond the level needed to maintain natural-appearing landscapes and ecological processes. These areas are generally small. Ecological values are protected where they affect the health and welfare of humans. Human activities are generally commercial in nature, directly or indirectly providing jobs and income. Motorized transportation is common.

1.31 NONMOTORIZED BACKCOUNTRY RECREATION

Theme

Backcountry, nonmotorized recreation areas are managed to provide recreation opportunities in a natural-appearing landscape.

Desired Conditions

A variety of un-crowded, nonmotorized, recreation opportunities are provided in a natural or natural-appearing setting. There will usually be less than 15 encounters with other parties per day. These areas may offer unique hunting opportunities away from motorized vehicles.

Improvements such as trailheads, trails, signs, bridges, fences, primitive shelters, and water developments, may be present. Existing two-track roads and old roads may be evident but will diminish over time or may become designated trails.

The number of structures and facilities to support management activities is limited. Large pasture size and unobtrusive developments promote an open, natural-appearing landscape.

Vegetation is moving toward the range of natural variability. Natural processes, such as fire, insects, diseases, rest, and grazing control vegetative composition and structure.

Standards and Guidelines

General

1. Allow uses and activities only if they do not degrade semi-primitive character of the area.

Standard

2. Reclaim disturbed lands to a condition suitable for the purposes for which the area was identified. **Standard**
3. Limit all motorized, including snowmobile use, to authorized and permitted administrative, law enforcement, search and rescue, and emergency purposes. **Standard**
4. Prohibit new road construction or existing road reconstruction or maintenance unless authorized for administrative purposes or to honor existing rights. **Guideline**

Mineral and Energy Resources

1. If access for geophysical surveys is not feasible by off-road travel, use of portable techniques is required. **Guideline**
2. Allow oil and gas leasing; however, prohibit ground-disturbing oil and gas activities. **Standard**
3. Prohibit mineral material removal. **Standard**
4. Honor all valid existing oil and gas leases. Refer to Chapter 1, Grassland-wide Directions; Goal 2.c and Section D, Oil and Gas). **Standard**

Fire

1. Prohibit use of heavy ground-disturbing equipment for fire suppression unless authorized by the district ranger. **Guideline**
2. Refer to Chapter 1, Grassland-wide Direction, Section G, for fire suppression direction.

Silviculture

1. Trees may be cut or removed under the following circumstances; however, new road construction is prohibited:

- To reduce fuel loads and fire risk, especially to adjoining private land.
- To curtail imminent threat of epidemic insect attack.
- To improve aesthetics, such as enhancing a scenic view from a prominent overlook.
- To enhance growth of rare plant species and community types.
- To maintain wildlife habitat diversity. **Guideline**

Livestock Grazing

1. Refer to Chapter 1, Grassland wide Direction, Section I, Livestock Grazing and Chapter 2, Geographic Area Descriptions.

Invasive Plant Species

1. Refer to Chapter 1, Grassland-wide Direction, Goal 1.c and Section J, Invasive Plant Species

Recreation

1. Develop necessary trailhead facilities on public land to provide adequate public parking in these areas, provide for sanitation facilities and to reduce conflicts with private landowners.

Guideline

2. Refer to Chapter 1, Grassland-wide Direction, Section K.

Heritage Resource

1. Refer to Chapter 1, Grassland-wide Direction, Section N, for additional heritage resource direction.

Scenery Management

1. Manage area to meet a Scenic Integrity Objective of High. **Guideline** (see Appendix G)

Special Uses

1. No new utility corridors or additional development within existing corridors will be permitted. Existing corridors may be maintained until they are abandoned. Valid existing rights will be honored. **Standard**

2. Prohibit new special-use facilities except for valid existing rights **Guideline**

Infrastructure

1. Prohibit construction of facilities and structures that are not visually subordinate to the landscape. **Guideline**
2. Utilize natural materials in the construction/reconstruction of facilities. **Standard**
3. For additional information refer to Chapter 1, Grassland-wide Direction, Section Q Infrastructure and Chapter 2, Geographic Area Direction.
4. Limit fence density by allowing new fence construction only to facility protection, public safety, or habitat protection or enhancement. **Guideline**
5. Within three years, perform roads analysis to determine road decommissioning and trail needs. **Standard**

2.1 SPECIAL INTEREST AREAS

Theme

Special Interest Areas (SIA) are managed to protect or enhance and, where appropriate, develop and interpret for public education and recreation, areas with unusual characteristics.

Desired Conditions

Evidence of human activities is consistent with the characteristics for which each SIA was established. Encounters between individuals or parties depend on the objectives for each SIA.

Vegetation, terrestrial, and aquatic habitats will usually, but not always, appear natural. Vegetation manipulation may be used to maintain or restore natural conditions; to protect threatened, endangered, and sensitive species; or enhance other values for which the SIA was designated.

Standards and Guidelines

General

1. Allow uses and activities that maintain and enhance the characteristics for which the SIA was designated. **Standard**
2. Reclaim disturbed lands to a condition suitable for the purposes for which the SIA was identified. **Standard**

Mineral and Energy Resources

1. When withdrawal is necessary to protect the values for which the area was designated, request withdrawal from mineral entry in conformance with Section 204 of the Federal Land Policy and Management Act of 1976 (PL 94-576). **Standard**
2. Refer to the Preface and Chapter 2, Geographic Area Direction.

Fire

1. Refer to Grassland-wide Direction, Section G, for fire suppression direction.

Livestock Grazing

1. Reference Chapter 1, Grassland-wide Direction, section I, (Livestock Grazing) and Chapter 2, Geographic Area Descriptions.

Invasive Plant Species

1. Refer to Chapter 1, Grassland-wide Direction, Goal 1.c and Section J, Invasive Plant Species

Recreation

1. Refer to Chapter 1, Grassland-wide Direction, Section K Recreation

Heritage Resource

1. Refer to Chapter 1, Grassland-wide Direction, Section N, for additional heritage resource direction.

Scenery Management

1. Manage the area to meet a Scenic Integrity Objective of High (see Appendix G). **Guideline:** Special Use

1. No new utility corridors or additional development within existing corridors will be permitted. Existing corridors may be maintained until they are abandoned. Valid existing rights will be honored (Refer to Preface, Chapter 1, Grassland-wide Direction, Section D Oil and Gas, and Appendix G) **Standard**

Infrastructure

1. For additional information refer to Chapter 1, Grassland-wide Direction, Section Q Infrastructure and Chapter 2, Geographic Area Direction.

SIA Descriptions

2.1a - Cellers SIA: This 960-acre site is characterized by a series of prehistoric camps atop a continuous ridge overlooking the surrounding terrain. This complex of more than 120 stone circles was a major prehistoric stopping point for early American Indians. Management emphasizes protecting the archeological features and increasing our understanding of the site by working in concert with contemporary American Indian tribes.

Additional Direction:

- Prohibit ground-disturbing fire control methods. **Standard**
- Prohibit geophysical operations. **Standard**
- Allow camping only if part of a scientific study. **Standard**
- Require monitoring by a professional archeologist during all soil disturbance. **Standard**
- Consult with traditional religious practitioners of federally recognized tribes before approving any projects within the area. **Standard**
- Prohibit additional structural or non-structural rangeland improvements. **Standard**
- Allow maintenance of existing structural range facilities only after it has been determined by an on-site survey there will be no damage to heritage resources. **Standard**
- Allow oil and gas leasing; however, prohibit ground-disturbing oil and gas activities. **Standard**
- Conduct on-the-ground survey for heritage resources before and during soil disturbance for development of existing oil and gas leases. **Standard**
- Prohibit mineral material removal. **Standard**

Additional Direction, cont.

- Prohibit locatable mineral operating plans that would harm scientific value of the heritage resources. **Standard**
- Prohibit new special-use facilities except for valid existing rights. **Guideline**
- Limit off road motorized vehicle use to authorized administrative purposes including , fire control, emergency services, research, permitted activities, control of invasive plants, and motorized use necessary to exercise outstanding rights. **Standard**

2.1b - Cheyenne River Zoological SIA: This 5,980-acre site provides for approximately 3,000 acres of prairie dog complex, including occupied mountain plover habitat and potential black-footed ferret habitat. About 6 $\frac{3}{4}$ miles of the Cheyenne River winds through the area, offering habitat for fish and beaver. Raptors also nest in the area. The river corridor also offers potential habitat for the Ute's lady's tresses and bald eagle winter roost sites. Management emphasis is on protecting and enhancing habitat conditions.

Additional Direction:

- Coordinate and consult with the appropriate state wildlife agency to prohibit prairie dog shooting and fur harvest within the SIA. **Standard**
- Restrict motorized travel to locations and time periods when it would not reduce the optimum habitat effectiveness of the area. **Standard**
- Allow oil and gas leasing; however, prohibit ground-disturbing oil and gas activities if they may have adverse effects on black-footed ferret reintroduction objectives. **Standard.**
- Prohibit locatable mineral operating plans that would reduce effectiveness of the habitats emphasized. **Standard**
- Prohibit new special-use facilities except for valid existing rights. **Guideline**
- Manage livestock grazing and stocking rates to achieve the most rapid development of mature cottonwood willow riparian area while promoting best habitat conditions for mountain plover breeding, nesting, and brood rearing. **Standard**

2.1c - Alkali Divide SIA: This 5,140-acre site features a high concentration of fossil remains from the late Cretaceous Period ending about 65 million years ago. The site is within the Lance Formation, which is composed of 2,600 feet of dull-gray sandy shales alternating with lenticular, light-colored sandstones and thin lignite beds. The Lance Formation has a high potential to produce a large variety of fossils ranging from microvertebrate to large dinosaurs, all of excellent research value. This is the most productive fossil-bearing site on the Thunder Basin National Grassland. Management emphasis is on interpretation, research and education of geology and paleontology.

Additional Direction:

- Prohibit ground-disturbing fire control methods. **Standard**
- Only allow collection of the paleontological resource through a permit for the purposes of research, mitigation, protection of important specimens, and other official agency duties. **Standard**

- Require monitoring by a professional paleontologist during all soil disturbance. **Standard**
- Allow maintenance of existing structural range facilities only after it has been determined by an on-site survey there will be no damage to paleontological resources. **Standard**
- Limit livestock concentration activities, such as salting, supplement feeding, dust and oil stations, temporary corrals, to designated locations where a site survey has determined no risk of damage to paleontological resources. **Standard**
- Prohibit mineral material removal. **Standard**
- Prohibit locatable mineral operating plans that would harm scientific value of the paleontological resources. **Standard**.
- Limit off road motorized vehicle use to authorized administrative purposes including , fire control, emergency services, research, permitted activities, control of invasive plants, and motorized use necessary to exercise outstanding rights. **Standard**

2.1d - Buffalo Divide SIA: This 490-acre site features a series of teepee rings that run along a grassy ridge in the watershed between the Belle Fourche and Cheyenne Rivers. Excavations conducted in the early 1990s indicated a Protohistoric occupation as a hunting camp during the summer and fall. The good preservation of the site and the presence of many associated artifacts make this site a good candidate for further research. It is eligible for the National Register of Historic Places. Management emphasis is on conservation of the heritage resources, scientific study, environmental education, and interpretation.

Additional Direction:

- Prohibit ground-disturbing fire control methods. **Standard**
- Prohibit geophysical operations. **Standard**
- Prohibit new special-use facilities except for valid existing rights. **Guideline**
- Allow camping only if part of a scientific study. **Standard**
- Require monitoring by a professional archeologist during all activities that disturb the soil. **Standard**
- Consult with traditional religious practitioners of federally recognized tribes before approving any projects within the area. **Standard**
- Prohibit additional structural or nonstructural rangeland improvements. **Standard**
- Allow maintenance of existing structural range facilities only after an on-site survey has been determined there will be no damage to heritage resources. **Standard**
- Allow oil and gas leasing; however, prohibit ground-disturbing oil and gas activities. **Standard**
- Conduct an on-ground survey for heritage resources before and during soil disturbance for development of existing oil and gas leases. **Standard**
- Prohibit mineral material removal. **Standard**
- Prohibit locatable mineral operating plans that would harm scientific value of the heritage resources. **Standard**

- Limit off road motorized vehicle use to authorized administrative purposes including , fire control, emergency services, research, permitted activities, control of invasive plants, and motorized use necessary to exercise outstanding rights. **Standard**

2.1e - Cow Creek Historic Rangeland SIA: This 14,170-acre site features naturally appearing rangelands that function in a self-sustaining ecological manner. It is intended to provide a glimpse into what rangelands were like in the pre homestead era, prior to the 1880s. The area is managed for a primitive ecological condition. Naturally appearing landscapes and an abundance of native wildlife including big game (e.g., elk, deer, and antelope) along with domestic livestock prevail. Native vegetation and ecological processes function and are basically unaffected by man, except for the introduction of domestic livestock and the basic facilities needed to maintain them.

To duplicate the open range days of early Wyoming, there will be few water developments, uneven utilization by livestock, and very large pastures. A viable livestock grazing operation will be allowed. This will require balancing the desired ecological and historical context with economic viability and type and amount of range facilities. Vegetation and physical structures will be managed/constructed to preserve and protect the primitive landscape. This will create a recreational setting similar to pre-settlement conditions.

Additional Direction:

- Maintain or increase existing pasture size. **Guideline**
- Prohibit new special-use facilities and range facilities that are not congruent with historic rangeland theme, except for valid existing rights. **Guideline**
- Allow no net gain of livestock water developments. **Guideline**
- Place new fences where they are visually subordinate to the landscape. **Guideline.**
- Encourage, but don't require, the use of salt houses for livestock salting. Design the salt houses to look like they did in the 1880s; use rustic building materials to construct them. **Guideline**
- When economically feasible, design structures to look like they did in the 1880s; use rustic building materials. **Standard.**
- Restrict construction of new roads, pipelines, facilities, or power lines to those necessary to exercise outstanding rights, such as oil and gas leases. At the end of use, new roads and facilities will be restored and/or removed to approximate pre-disturbance conditions. **Guideline.**
- Allow oil and gas leasing; however, prohibit ground-disturbing oil and gas activities for new oil and gas leasing. **Standard.**
- Limit motorized use to administrative purposes including, but not limited to, the following:
 - o Fire control
 - o Emergency public services, and the permitted activities of (a) scheduled maintenance and operation of range facilities, (b). emergency repair of livestock water facilities, (c). geo physical seismic operations when analysis of the proposed project finds that after two growing seasons there will be no evidence on the land of the project

- o Motorized use necessary to exercise outstanding rights
- o Control of invasive plants. **Standard.**
- Limit maintenance of existing roads to that only necessary to provide minimal access for the maintenance and operation of livestock facilities or to exercise outstanding rights. Reclaim unneeded existing roads or convert them to nonmotorized trails. **Guideline**

2.1f - Lance Geologic SIA: This 40-acre site is a 10-acre wash containing paleontological resources and numerous mushroom-like geologic features (hoodoos) that provide three-dimensional views of ancient sedimentary structures. This unique geologic area lies below the visual line of the prairie and cannot be seen until one is on the edge or below the wash. The geologic features in this SIA aren't found anywhere else on the Thunder Basin National Grassland. The SIA offers the opportunity for researchers to study these unique geologic features, as well as ancient depositional environments and paleontological resources. Management will emphasize the scientific and educational opportunities of the site and protection of the resource. Use by tour groups, universities, and education groups will be encouraged. Use by the general public will not be prohibited or encouraged.

Additional Direction

- Prohibit ground-disturbing activities for fire control. **Standard**
- Prohibit new special-use facilities except for valid existing rights. **Guideline**
- Prohibit all rock collecting and all collection of paleontological resources without a written permit. **Standard**
- Require monitoring by a professional paleontologist during all activities that disturb the soil. **Standard**
- Do not put signs in the area, include information in brochures directing the public to the site, or otherwise encourage dispersed recreation use. **Standard**
- Prohibit camping and campfires in the SIA. **Standard**
- Non-soil disturbing recreation and other non-soil disturbing land uses are allowed as long as damage to the geologic features will not occur. **Standard**
- Allow livestock grazing, but prohibit livestock concentration associated with salt stations, corrals, and water developments. **Standard**
- Allow oil and gas leasing; however, prohibit ground-disturbing oil and gas activities. **Standard**
- Prohibit mineral material removal. **Standard**
- Allow recreation and land uses that don't disturb the soil as long as damage to the Prohibit locatable mineral operating plans that would harm scientific values of the area. **Standard**
- Prohibit special uses in the wash containing the geologic structures. Prohibit above-ground special uses on the rest of the SIA. Buried power lines, pipelines, telephone lines, etc. outside the wash are acceptable. **Standard**
- Limit off road motorized vehicle use to authorized administrative purposes including , fire control, emergency services, research, permitted activities, control of invasive plants, and motorized use necessary to exercise outstanding rights. **Standard**

2.2 RESEARCH NATURAL AREAS

Theme

Research Natural Areas (RNAs) form a network of ecological reserves designated for non-manipulative research, education, and the maintenance of biodiversity. This prescription is applicable to both designated existing Research Natural Areas and areas proposed for RNA designation.

Desired Conditions

Maintain natural (relatively pristine/pre-European settlement) conditions by maintaining or restoring natural ecological processes. Vegetation, habitat, soil productivity, water quality, and ecological processes are in a natural condition (within the range of natural variability). Vegetation manipulation may be used to maintain the ecosystem or unique features for which the RNA was established or to reestablish natural ecological processes, such as fire and herbivory.

Standards and Guidelines

General

1. Until formal establishment, manage proposed RNAs to maintain and enhance the character and ecological values for which the areas have been identified. **Standard**
2. Reclaim disturbed lands to a condition suitable for the purposes for which the RNA was identified. **Standard**
3. Limit all motorized use, including snowmobiles, to administrative, law enforcement, search and rescue, and emergency -and scientific purposes. **Standard**
4. Close or obliterate existing roads, except where they provide necessary access for administrative or scientific purposes, or valid private access, as funding allows. **Guideline**
5. Allow uses that maintain or improve the ecological characteristics for which the RNA was designated. **Standard**
6. Require a permit for collection of all products. **Standard**

MINERAL AND ENERGY RESOURCES

1. When withdrawal is necessary to protect the values for which the area was designated, request withdrawal from mineral entry in conformance with Section 204 of the Federal Land Policy and Management Act of 1976 (PL 94-576). **Standard**
2. Allow oil and gas leasing; however, prohibit ground-disturbing oil and gas activities. **Standard**
3. Prohibit mineral material removal. **Standard**

Fire

1. Refer to Grassland-wide direction, Section G, for fire suppression direction.

Livestock Grazing

1. Do not increase animal unit months (AUMs) or developments unless determined necessary in the Research Natural Area management plan. Grazing suitability and desired vegetative conditions will be determined by the Research Natural Area management plan. **Standard**
2. Refer to Chapter 1, Grassland-wide Direction, Section I, Livestock Grazing; and Chapter 2, Geographic Area descriptions

Invasive Plant Species

1. Refer to Chapter 1, Grassland-wide Direction, Goal 1.c and Section J, Invasive Plant Species

Recreation

1. Restrict recreational use if it hinders achievement of the desired condition for the Research Natural Area. **Standard**
2. Refer to Chapter 1, Grassland-wide Direction, Section K.

Heritage Resource

1. Refer to Chapter 1, Grassland-wide Direction, Section N, for additional heritage resource direction.

Scenery Management

1. Manage area to meet a Scenic Integrity Objective of High (see Appendix G). **Guideline**

Special Uses

1. No new utility corridors or, additional development within existing corridors will be permitted. Existing corridors may be maintained until abandoned. **Standard**

Infrastructure

1. Prohibit the construction of new roads and trails, except when necessary to correct resource damage occurring from existing trails. **Standard**
2. For additional information refer to Chapter 1, Grassland-wide Direction, Section Q Infrastructure and Chapter 2, Geographic Area Direction.

Research Natural Area Descriptions

Rock Creek RNA: The 590-acre Rock Creek area is located approximately eight miles northwest of Clareton, Wyoming. It lies within the ecoregion classified as the Great Plains-Palouse Dry Steppe Province, Powder River Basin Section, Southern Powder River Basin-Scoria Hills Subsection. The area contains segments of two intermittent branches of Rock Creek flowing south in valleys approximately 100 feet deep. Slopes face mainly east or west and are gentle. The bedrock is soft sandstone with small amounts of shale, both of the Tullock Member of the Paleocene-aged Fort Union Formation. The substratum in the intermittent stream valleys is alluvium derived from the surrounding uplands. Elevation ranges between 4,450 to 4,640 feet above sea level.

The principal distinguishing features include rolling hills with vegetation of the big sagebrush/needle-and-thread plant association and the needle-and-thread/blue grama plant association, and draws supporting the silver sagebrush/western wheatgrass plant association. Barr's milkvetch, a plant species of conservation interest but with no federal status, is found in the area. Three undesirable plants occur in the area: cheatgrass, meadow brome and yellow alyssum. Elk may utilize the area. Pronghorn antelope and mule deer are common.

Only recently did this area become part of the Thunder Basin National Grassland. Livestock grazing has become an allowable use of the area. No major impacts from mineral exploration or production are expected should the area become a designated Research Natural Area. Recreational use is mostly limited to autumn hunting.

Wildlife Draw RNA: The 640-acre Wildlife Draw area is located approximately 32 miles west of Newcastle, Wyoming. It lies within the ecoregion classified as the Great Plains-Palouse Dry Steppe Province, Powder River Basin-Scoria Hills Subsection. The area contains rolling hills with several draws. Orientation of the area is north to south across a valley with a generally eastward, intermittent drainage. Elevation ranges from about 4,440 feet to 4,630 feet above sea level.

Wildlife Draw is vegetated entirely with grasslands and sagebrush shrub-steppe. Vegetation includes needle-and-thread, blue grama, western wheatgrass, hound's tongue and threadleaf sedge. Wyoming big sagebrush is widespread. Three draws contain ephemeral streams and support silver a sagebrush/western wheatgrass association. Four exotic plant species are present: cheatgrass, meadow brome, yellow alyssum and salsify. This area represents the mosaic of the following associations reasonably well: needle-and-thread/blue grama and big sagebrush/needle-and-thread.

No federally listed threatened or endangered plant or animal species are known to be present in the area. Judging by the gentle roll of the grasslands in the area, prairie dogs probably used the area at least intermittently before settlement. The narrow shape and small acreage of the area is too small to support populations of pronghorn antelope, elk and mule deer. Establishment of this area as an RNA might require a change in the current livestock grazing management.

3.63 BLACK-FOOTED FERRET REINTRODUCTION HABITAT

Theme

Black-tailed prairie dog colony complexes are actively and intensively managed as reintroduction habitat for black-footed ferrets.

Desired Conditions

Large prairie dog colony complexes are established and maintained as suitable habitat for black-footed ferret reintroductions. Land uses and resource management activities are conducted in a manner that is compatible with maintaining suitable ferret habitat.

The Forest Service works with other agencies and organizations to pursue conservation agreements or easements with adjoining land jurisdictions to achieve black-footed ferret recovery objectives. Where landownership patterns are not conducive to effective and successful prairie dog and black-footed ferret management, landownership adjustments with willing landowners may also be used to help resolve management issues.

The U.S. Fish and Wildlife Service is the regulatory agency that determines many of the conditions including when and where black-footed ferrets, an endangered species, may be released.

Standards and Guidelines

General

1. Authorize only those uses and activities that do not reduce the suitability of the area as black-footed ferret reintroduction habitat. **Standard**
2. Manage all prairie dog colonies within this Management Area as though they were occupied by black-footed ferrets, and apply all Standards and Guidelines as though black-footed ferrets occupy all colonies. **Standard**

Mineral and Energy Resources

1. Oil and gas stipulations for black-footed ferrets (Appendix D) apply to all prairie dog colonies within this management area. **Standard**

Livestock Grazing

1. Prior to the U.S. Fish and Wildlife Service authorizing a black-footed ferret release, the Forest Service will coordinate and consult with the U.S. Fish and Wildlife Service, the state wildlife agency and other agencies that conduct, authorize or fund predator control to help ensure that predator control activities on the national grassland to reduce livestock losses do not pose significant risks to black-footed ferrets. **Standard**

Fish and Wildlife

1. Use of rodenticides in a colony to reduce prairie dog populations may occur only after consultation and concurrence of the U.S. Fish and Wildlife Service. The conditions when prairie dog poisoning may be authorized are presented in Chapter 1. **Standard**
2. Relocation of prairie dogs to establish new colonies and accelerate growth of prairie dog populations in selected areas may occur only after consultation with appropriate state and Federal wildlife agencies. **Standard**

Recreation

1. To help expand and maintain suitable black-footed ferret habitat, coordinate and consult with the state wildlife agency to prohibit prairie dog shooting within black-footed ferret reintroduction habitat. **Standard**

3.65 RANGELANDS WITH DIVERSE NATURAL-APPEARING LANDSCAPES

Theme

Management emphasizes maintaining or restoring a diversity of desired plants and animals and ecological processes and functions while providing for a mix of other rangeland values and uses, with limits on facilities to support livestock grazing.

Desired Conditions

These areas have relatively few livestock grazing developments, such as fences and water tanks, resulting in a mosaic of livestock grazing patterns and diverse vegetation composition and structure. Livestock graze most areas annually, but some areas receive little or no grazing due to topography.

Riparian areas and streams will move toward properly functioning condition and have few human-caused alterations. Restored riparian areas and or streams will be evident.

Prescribed fire is used as a management tool. Wildfires are aggressively controlled. Natural outbreaks of native insects and diseases are allowed to proceed without intervention unless there is a substantial threat to high-value resources. Natural-appearing landscapes predominate; however, oil and gas development may occur and are visually subordinate to the landscape.

Standards and Guidelines

Minerals and Energy Resources

1. Allow oil and gas leasing and development. **Guideline**
2. Allow removal of mineral materials. **Guideline**
3. Refer to Chapter 1, Grassland-wide Direction, Geology and Minerals, Air, Water, Soils, Recreation, Scenery Management and Special Uses sections.

Fire

1. Refer to Chapter 1, Grassland-wide Direction, Section G, for fire suppression direction.

Livestock Grazing

1. Reference Chapter 1, Grassland-wide Direction, Section I, Livestock Grazing; and Chapter 2, Geographic Area descriptions.

Invasive Plant Species

1. Refer to Chapter 1, Grassland-wide Direction, Goal 1.c and Section J, Invasive Plant Species

Recreation

1. Refer to Recreation Grassland-wide direction Chapter 1, Section K.

Heritage Resource

1. Refer to Chapter 1, Grassland-wide Direction, Section N, for additional heritage resource direction.

Scenery Management

1. Manage area to encompass the spectrum of scenery integrity objectives. **Guideline** (see Scenic Integrity Objective maps in Chapter 2 and definitions in the glossary, Appendix G)

Special Uses

1. Locate new utilities along road corridors or within other areas already disturbed. **Guideline**
2. Refer to Chapter 1, Grassland-wide Direction, Section P, Special Uses

Infrastructure

1. When reconstructing water impoundments, consider opportunities to enhance native wildlife and plant species habitat and restoration of natural drainage patterns. **Guideline**
2. Limit fence density by allowing new fence construction only to facility protection, public safety, or habitat protection or enhancement. **Guideline**
3. For additional information refer to Chapter 1, Grassland-wide Direction, Section Q Infrastructure and Chapter 2, Geographic Area Direction.

3.68 BIG GAME RANGE

Theme

These areas are managed to emphasize deer, elk, and pronghorn habitat.

Desired Conditions

Activities and uses are managed so that big game can effectively use the area. High levels of suitability and habitat effectiveness are maintained for big game. Conflicts that cannot be mitigated are resolved in favor of big game.

Big game habitat management goals are developed by the Forest Service in consultation with states and owners of intermingled, privately owned land to minimize resource conflicts on and off National Forest System lands and to provide recreation opportunities and a diversity of plant and animal communities.

Standards and Guidelines

General

1. Allow uses and activities (e.g. recreation, grazing, mineral leasing) only if they do not degrade the characteristics for which the area was identified. **Standard**
2. Limit activities during big game wintering from December 15 through March 15 if they would reduce habitat effectiveness. **Guideline**
3. Limit activities during elk parturition from May 1 through June 30 if they would reduce habitat effectiveness. **Guideline**

Wildlife

1. Maintain big-game habitat-effectiveness at 85%. **Standard**
 - Consider road densities, forage allocations, proximity of developments, and seasons of use when determining habitat effectiveness.

Livestock Grazing

1. Modify livestock grazing forage allocation to improve conditions where big game forage and cover conditions are limiting. **Standard**
2. Where needed, alter livestock grazing systems, season of use, and stocking rates to meet big game habitat objectives. **Guideline**
3. In riparian habitats, wooded draws, and other wooded habitats, only allow those livestock grazing strategies that promote dense understory and mid-story vegetation for cover and forage. **Standard**
4. In shrublands, including big sage and silver sage plant communities, only allow those livestock grazing strategies that promote healthy herbaceous understories and productive shrubs. **Standard**
5. Do not convert shrublands to other vegetation types. **Guideline**

Silviculture

1. Do not allow cutting or removal of trees if thermal cover is less than 20 percent of the forested area. **Guideline**

Recreation

1. Permit recreation facilities needed to support recreational activities, but close them during periods when big game are present in concentrated numbers. **Guideline**

Infrastructure

1. Close roads, as needed, to prevent disturbance during the winter and during fawning/calving periods. **Guideline**

2. Construct new roads as local roads. **Guideline**

3. Prohibit new roads from crossing important forage, cover, and fawning/calving areas. **Guideline.**

4. Limit fence density by allowing new fence construction only to facility protection, public safety, or habitat protection or enhancement. **Guideline**

4.32 DISPERSED RECREATION: HIGH USE

Theme

These areas are managed for recreational opportunities and scenic qualities and are usually adjacent to high use developed recreation sites and bodies of water.

Desired Conditions

Visitors recreate in a relatively natural environment, while pursuing a variety of activities, such as camping, picnicking, hiking, fishing, and motorized vehicle use where allowed. Because of the amount and types of use, these areas offer a more social type of recreational experience. Management activities are evaluated in terms of their impact on the recreational opportunities of the area. Motorized travel may be restricted during certain times of the year.

The areas offer few conveniences for users but may have picnic tables, toilets, trash cans, fire grills, and vehicle barriers if needed to protect resources. Existing improvements, such as roads, trails, bridges, fences, oil and gas wells, and water developments, blend into the landscape where feasible.

The potential for contact with other users is moderate to high. Solitude or isolation is less important than the opportunity to participate in desired recreational activities.

Generally, these areas appear as a natural-appearing landscape over large areas, but modifications on a small scale are acceptable and blend with the area's natural features. Biological communities complement the recreational values.

Standards and Guidelines

General

1. Allow uses and activities only if they do not degrade the recreational characteristics, scenic qualities or the environment. **Guideline**

Minerals and Energy Resources

1. Allow mineral leasing and development. **Guideline**
2. Refer to Chapter 1, Grassland-wide Direction; Air, Water, Soils Geology and Minerals, Recreation, Scenery Management and Special Uses, Sections A, B, C, D, K, L, and P, respectively, for direction.

Fire

1. Refer to Grassland-wide direction, Section G, for fire suppression direction.

Livestock Grazing

1. Do not salt or supplement feed within ¼ mile of existing roads. **Guideline**
2. Refer to Chapter 1, Grassland Wide Direction, section I, Livestock Grazing; and Chapter 2, Geographic Area descriptions.

Invasive Plant Species

1. Refer to Chapter 1, Grassland-wide Direction, Goal 1.c and Section J, Invasive Plant Species

Recreation

1. Allow new OHV trail construction where resource values can be protected. **Guideline**
2. Provide developed facilities at areas of concentrated use to protect adjacent resources
Guideline
3. Refer to Recreation Grassland-wide direction Chapter 1, Section K.

Heritage Resource

1. Refer to Chapter 1, Grassland-wide Direction, Section N, for additional heritage resource direction.

Scenery Management

1. Manage area to meet a Scenic Integrity Objective of Moderate (see Appendix G-55).
Guideline

Special Uses

1. Allow construction of new utility corridors only if they do not degrade the characteristics for which the area is managed or was designated. **Standard**
2. Locate new utilities along road corridors or within other areas already disturbed. **Guideline**

Infrastructure

1. For additional information refer to Chapter 1, Grassland-wide Direction, Section Q Infrastructure and Chapter 2, Geographic Area Direction.

5.12 GENERAL FOREST AND RANGELANDS: RANGE VEGETATION EMPHASIS

Theme

These areas are managed for the sustainability of physical, biological, and scenic values associated with woody vegetation and open grassland.

Desired Conditions

These areas are dominated by open meadows, grasslands, shrublands, and areas of woody vegetation. Diversity is achieved by maintaining or enhancing hardwood and coniferous trees, shrub inclusions and other beneficial plant communities and openings. Tree densities vary within stands to create landscape-scale diversity. Fire is used to promote open, park-like timber stands. Late-successional vegetation may be found in the area.

Management emphasis is on a balance of resource uses and opportunities, such as livestock grazing, wildlife habitat, dispersed recreation, minerals management and timber harvest. Some areas produce substantial forage for livestock and wildlife. Though some areas are forested, they usually do not produce commercial wood fiber because of poor site potential.

Recreation facilities may be present. Range and other management activities are coordinated with recreation so they do not conflict with the managed use season. Signs of motorized travel, hunting, hiking, timber harvest, mining and livestock grazing may be evident. Recreation use is moderate throughout the summer and increases during hunting seasons.

See Chapter 2, Geographic Areas, for further direction.

6.1 RANGELAND WITH BROAD RESOURCE EMPHASIS

Theme

This area is primarily a rangeland ecosystem managed to meet a variety of ecological conditions and human needs. Ecological conditions will be maintained while emphasizing selected biological (grasses and other vegetation) structure and composition that consider the range of natural variability. These lands often display high levels of development, commodity uses, and activity; density of facilities; and evidence of vegetative manipulation. Users expect to see other people and evidence of human activities. Facilities supporting the various resource uses are common. Motorized transportation is common on designated roads and two-tracks.

Desired Conditions

This management area will display low to high levels of livestock grazing developments (such as fences and water developments), oil and gas facilities, and roads.

Livestock will graze most areas annually, but a spectrum of vegetation structure and a high degree of biodiversity will be present. Livestock grazing intensity will vary, however moderate use will prevail over most of the MA. Natural disturbance processes, including grazing and fire, will be used to emulate the natural range of variability of vegetation structure and composition (see matrix objectives in Geographic Area direction). Rest and prescribed fire will be incorporated into the landscape.

Prairie dog colonies will increase in some areas of the MA.

When no substantial threat to high-value resources occurs, natural outbreaks of native insects and disease will be allowed to proceed without intervention.

See Chapters 1 and 2 for further direction.

8.4 MINERAL PRODUCTION AND DEVELOPMENT

Theme

These areas are managed for solid mineral operations.

Desired Conditions

Mineral operations of all types are emphasized to effectively and efficiently remove available commercial mineral resources, concurrent with other ongoing resource uses and activities. Operations include development and production of solid minerals, such as coal, bentonite, uranium and hard rock, open-pit mines, stock-piled overburden and top soil, and various ancillary facilities. Facilities and landscape modifications are visible but are reasonably mitigated to blend and harmonize with natural features. Reclamation activities restore the area to a reasonable level of its pre-mining condition. Grazing will occur, except on areas being actively being mined and areas under reclamation for bond release.

Restrictions on public use occur to ensure public safety and to avoid unreasonable interference with mineral operations. Visitors can experience frequent encounters with people, heavy equipment, and noise.