Cheyenne River Range Area Management Plan

Buffalo Gap National Grassland – Wall Ranger District

Scenery Resource Specialist Report

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Abstract

This analysis describes the existing condition of the scenic resources within the project area and evaluates the potential effects of the alternatives on scenic resources. Evaluations made in this analysis are based on the changes potentially seen in the landscape within a given viewshed from identified sensitive viewpoints, up close immediate foreground views as one drivers or walks thru the area, and the level of acceptable change for the project area. Forest Service Road 7129, approx. 1/8 mile west of Indian Creek Road, provides a primary sensitive viewpoint that looks out over approx. ½ the project area, while the rest of the road provides views primarily in the foreground along Indian Creek.

The majority of effects to the resources are short term in duration with long term benefits which would help maintain the valued landscape character and valued cultural attributes. Short term visual effects of recreation and grazing activities are often most noticeable in foreground views until growth of grasses and shrubs begin to soften the effects of this activities.

If the Range Grass monitoring & mitigation is implemented, the Proposed Action Alternative would meet the High Scenic Integrity Objective, as assigned to the project area in the Management Plan, as the effects of the proposed action are anticipated to be naturally appearing – repeating form, line, color, and texture, as are commonly found in the characteristic landscape.

No significant issues were identified for the scenic resource in the Cheyenne River Range Area Management Plan. With all the scenery project design features implemented, the activities in the Proposed Action should meet the identified High scenic integrity objectives. It is anticipated that the proposed activities would meet the assigned scenic integrity objectives - one to three growing seasons - after adaptive management actions are implemented.

The Proposed Action would be consistent with Forest Plan standards and guidelines for scenery. No negative direct, indirect, or cumulative effects to scenic resources are expected in the long term from range management. There are no irreversible or irretrievable commitments related to scenic resources from the proposed action.
Introduction

Scenery, just as any other resource, must be cared for and managed for future generations. Scenic resources vary by location and existing natural features including vegetation, water features, landform, geology, and human-made elements. All activities experienced by Grassland visitors occur in a scenic environment defined by the arrangement of the natural character of the landscape along with components of the built environment.

“Research has shown that high-quality scenery, especially that related to natural-appearing landscapes, enhances people’s lives and benefits society…Research findings support the logic that scenic quality and naturalness of the landscape directly enhance human well-being, both physically and psychologically, and contribute to other important human benefits. Specifically these benefits include people’s improved physiological well-being as an important by-product of viewing interesting and pleasant natural appearing landscapes with high scenic diversity.” (USDA-FS, 1995). National Visitor Use Monitoring on the Buffalo Gap National Grassland, which is discussed later in this report, indicates that natural and naturally appearing scenery is an important resource for the Grassland’s recreation visitors. Vegetation management practices can directly affect scenery and the perception of scenic beauty (Ribe 1989).

The terms scenic resources and scenery are used interchangeably in this analysis. This analysis describes the existing condition of the scenic resources within the project area and discloses the potential effects of the alternatives on scenic resources for consideration in determining whether to prepare an environmental impact statement.

Overview of Issues Addressed

During project scoping, the public identified no issues in regards to scenic resources. However, the interdisciplinary team identified that the proposed project activities may affect the scenic integrity of the project area. The project’s effects on scenic integrity are addressed in this analysis. The measurement indicators for this analysis are the proposed activities’ compliance with the Forest Plan established scenic integrity objectives (SIOs) for the project area and acres of treatment types in each SIO.

Regulatory Framework

The National Environmental Policy Act of 1969 (NEPA) states it is the “continuing responsibility of the Federal Government to use all practicable means to assure for all Americans, aesthetically and culturally pleasing surroundings.” NEPA also requires “A systematic and interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts into planning and decision-making which may have an impact on man’s environment.” To accomplish this, numerous Federal laws require all Federal land management agencies to consider scenery and aesthetic resources in land management planning, resource planning, project design, implementation, and monitoring.

Several USDA handbooks have been developed to establish a framework for management of scenic resources including but not limited to Landscape Aesthetics, A Handbook for Scenery Management; Agriculture Handbook 701 (USDA-FS, 1995). Forest Service Manual direction provides further clarification to utilize the Scenery Management System in Forest & Grassland and project planning and implementation, including section 2382.4, Applications to Project Management:

2. Analyze the impact of range management activities and determine methods to reduce negative impacts to associated scenery.
5. Understand how fire can be a useful tool to achieve desired scenic integrity objectives and landscape character goals.

8. Determine how scenery management techniques and principles can be used to mitigate any land altering activity or introduced elements on the land, to achieve and maintain desired scenic integrity objectives and landscape character goals.

The Buffalo Gap National Grassland has recognized the importance of scenery by providing management direction for scenic resources in the 2009 Revised Land and Resource Management Plan for the Nebraska National Forest. The Plan direction listed below pertains to the project area (USDA-FS, 2009).

**Land and Resource Management Plan Direction**

**Goal 2c:**
Improve the capability of Nation’s forests and grasslands to provide a desired sustainable level of uses, values, and services. (USDA-FS 2009, 1-6)

**Objective:**
Implement practices that will meet, or move the landscape character toward scenic integrity objectives, as described in Geographic Area direction. (USDA-FS 2009, 1-6)

**Forestwide Standards and Guidelines**

Manage activities to be consistent with the scenic integrity objective(s), as referenced by the Adopted Scenic Integrity Objective map. GUIDELINE (USDA-FS 2009, 1-25)

Scenic Integrity Objectives for management areas apply only to the area within the management area boundary. STANDARD (USDA-FS 2009, 1-25)

Rehabilitate areas that do not meet scenic integrity objectives specified for the management area. Consider the following when setting priorities for rehabilitation:

- Relative importance of the area and amount of deviation from the scenic integrity objectives.
- Length of time it will take natural processes to reduce the visual impacts so that they meet the scenic integrity objectives.
- Length of time it will take the rehabilitation measures to meet scenic integrity objectives.
- Benefits to other resource management objectives to accomplish rehabilitation. GUIDELINE (USDA-FS 2009, 1-25)

Route new roads, pipelines, gathering lines, and technically required overhead power lines in a manner to minimize visual impacts. When these facilities leave existing corridors, they should be subordinate to the landscape. GUIDELINE (USDA-FS-2009, 1-28)

New structural improvements (fences and water developments) may be constructed as needed to achieve desired condition objectives (wildlife habitat, botanical, range management, visual quality, and recreation). GUIDELINE (USDA-FS 2009, 2-64)
**Management Area Direction**

**Management Area 1.2 - Recommended for Wilderness**

Allow uses and activities only if they do not degrade wilderness characteristics. STANDARD (USDA-FS 2009, 3-6)

Reclaim disturbed lands to meet wilderness characteristics. STANDARD (USDA-FS 2009, 3-6)

Minimum Impact (Fire) Suppression Tactics, MIST, will be used to control fire within wilderness. STANDARD (USDA-FS 2009, 3-7)

Allow construction of facilities and structures that are subordinate to the landscape or in keeping with the semi-primitive/primitive character of the area. STANDARD (USDA-FS 2009, 3-7)

Utilize natural materials in the construction or reconstruction of livestock facilities. STANDARD (USDA-FS 2009, 3-7)

**Management Area 6.1 - Rangeland with Broad Resource Emphasis**

Manage area to meet scenic integrity objectives at a minimum of Moderate and Low. GUIDELINE (USDA-FS 2009, 3-33)

**Table 1. Scenic Integrity Objective by Management Area (acres)**

<table>
<thead>
<tr>
<th>MGMT AREAS</th>
<th>NAME</th>
<th>VERY HIGH</th>
<th>HIGH</th>
<th>MODERATE</th>
<th>LOW</th>
<th>VERY LOW</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.2</td>
<td>Recommended for Wilderness</td>
<td>30,473</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>6.1</td>
<td>Rangeland with Broad Resource Emphasis</td>
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<td>0</td>
<td>1916</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Project Description**

To develop a management plan for the adaptive management of six grazing allotments on the Buffalo Gap National Grassland, Nebraska National Forests and Associated Units. This management plan proposes changes in how these allotments are currently managed, so conditions will follow a progression that would eventually attain direction, as specified in the Nebraska National Forest, Land and Resource Management Plan (Forest Plan).

**Affected Environment**

In 2003, a National Visitor Use Monitoring project was conducted on the Nebraska National Forest. Recreation use on the Forest for the fiscal year was calculated at about 189,000 national forest visits. The most frequently listed main activities in the interviews we conducted were hunting (22%), Other Activity (13%), Hiking/Walking (13%) and Viewing Natural Features (11%). While participating in those main, and other main activities, 42% of the visitors Hiked /Walked, 34% spent time Viewing Wildlife, and 34% spent time Viewing Natural Features, during their visit. With regard to satisfaction of the recreation visitor’s experience, overall 71% were satisfied with their experience. With regard to ‘Scenery’ in Day Use & Overnight Developed Sites, as well as Undeveloped Areas, this item is important to visitors and
their satisfaction rating was very high (USDA FS 2003). The results of this monitoring indicate that natural and naturally appearing scenery is an important resource to the Forest’s recreation visitors.

**Landscape Character**

Landscape character gives a geographic area it’s visual and cultural image, and consists of the combination of physical, biological, and cultural attributes that make each landscape identifiable or unique. Existing landscape character may range from predominantly natural landscapes to those that are heavily culturally influenced. The landscape character units of the Nebraska National Forest are derived from an ecological framework utilizing ecological land descriptions and existing landscape uses. The landscape character descriptions of this area are in Chapter 2 of the Forest Plan. (USDA-FS 2009, 2-59) The northeast portion of the area, Indian Creek, is a bowl shaped valley with a meandering creek flowing to the west/northwest into the Cheyenne River, which then flows to the southwest. The central and southwestern portions of the project area drainages are narrow, in erosive soils that result in heavily dissected drainages that also flow into the Cheyenne River. Large juniper shrubs and trees can be found in these mid-slope gullies. From these ridges in the central portion of the project area, they gradually slope down to the Cheyenne River, which is the majority of the western edge of the project area. Cottonwood trees can be found scattered along Indian Creek & the Cheyenne River.

Land use patterns transition between naturally appearing landscapes and rural landscapes with a pastoral or agricultural character. Ranches in the area also provide for some developed and transitional land use patterns on nearby private lands.

**Existing Condition**

**Landscape Visibility**

Determining the landscape visibility and sensitivity to alteration is the next stage in the scenic assessment process. In general, the greater the number of people likely to view a landscape and the longer the duration, the more sensitive the landscape is to modification. Of particular concern are travel ways such as primary highways, trails, and waterways, as well as primary use areas such as campgrounds, visitor centers, and resort areas. Landscape visibility is affected by “1) context of viewers, 2) duration of view, 3) degree of discernable detail, 4) seasonal variations, and 5) number of viewers” (USDA-FS, 1995, 4-2).

Activities are proposed throughout the project area in Management Areas 1.2 and 6.1. The area is accessed by the public via Indian Creek Road (from Scenic, SD), then onto Forest Roads 7129 and 7176. Forest Road continues on and follows Indian Creek thru the eastern ½ of the project area. Hiking over open country provides access to the entire area.

Views from Forest Road 7129, before it descends down into the Indian Creek drainage provides an overlook that is dominated by a panorama view of the Indian Creek and Cheyenne River drainages in the Middleground and Background distance zones. Once visitors descend into Indian Creek, views are limited to Immediate Foreground, Foreground, and Middleground distance zones. Once an individual leaves their vehicle and heads out on foot, or by horseback, dominate views are within the Immediate Foreground and Foreground; when elevation is gained more distant views are more prevalent.

Portions of the planning area south and west of Indian Creek are much more remote for access, and visibility is limited to each respective drainage. Due to the dissected nature of the landscape within these drainages, views are generally limited to Immediate Foreground and Foreground views, unless the viewer is up along the rim edge - overlooking the drainage.
Scenic Integrity Objectives

Scenic integrity objectives (SIOs) are management objectives adopted from the scenic class values. Scenic integrity is a measure of the degree to which a landscape is visually perceived to be “complete.” The highest scenic integrity ratings are given to those landscapes that have little or no deviation from the character valued by constituents for its aesthetic appeal (USDA FS 1995, 2-1). Within the project area, about 94 percent of the landscape is allocated as High SIO, and about 6 percent is Low SIO. Definitions for these SIOs can be found in the methodology section of this report.

Existing Scenic Integrity

Existing scenic integrity is the current scenic condition, which is measured in degrees of deviation from the natural appearance of the landscape character type. Within Management Area 1.2, generally the existing scenic integrity of the project area is generally High, as the area generally appears as natural appearing- these are the upland areas away from the riparian areas. Along the riparian areas, including the Cheyenne River and Indian Creek, concentrated livestock use (examples include trampled and hoof-sheared banks; over-utilization of cottonwoods, willows, grasses and forbs, and erosion are more evident, dominating Immediate Foreground, and in some cases, Foreground views. In the Foreground distance zone, cow trails - evident as lines - linear patterns - across the slopes. Within Management Area 6.1, the existing scenic integrity of the project area is generally Low, as roads, fences, concentrated livestock use, and erosion dominate the view - contributing to a more managed appearance.

Desired Condition

General desired conditions for scenery can be described as the desired landscape character. Desired landscape character is defined as the appearance of the landscape to be retained or created over time (USDA FS 1995). The desired landscape character is a predominantly natural appearing landscape with scenic quality that is sustainable over the long term. A naturally appearing landscape is often achieved by mimicking natural events in scale, shape, and edge effects to blend with the surrounding landscape.

Wall Southwest Geographic Area – Buffalo Gap National Grassland:
The desired landscape condition is to maintain the undeveloped character and scenic integrity of the grasslands, intermingled prairie dog colonies, and rugged badlands. … Indian Creek area will be managed to protect its rugged, unroaded character and is recommended for Wilderness designation. (USDA-FS 2009, 2-60)

Management Area 1.2 Recommended for Wilderness:

These areas are managed to protect wilderness characteristics. Natural processes, such as fire, insects, disease, rest, and grazing control vegetation composition and structure. Large pasture size and unobtrusive structural developments promote an open, natural-appearing landscape. Generally, opportunities for primitive recreation are provided, with a moderate degree of solitude available.
There is some evidence of past and present human use, such as fences, trails, water developments and primitive roads. Existing two-track roads and old roads may be evident but through nonuse should diminish. Some of these may become designated trails. Bridges or other structures may exist to protect resources or provide safe stream crossings during normal water flow.

Use of mechanized equipment for administrative purposes will continue. Opportunities to remove or relocate structural range improvements (fences and water developments), to achieve resource management goals and objectives, will be pursued. Both directional and resource protection signs may be present.

Management Area 6.1 Rangeland with Broad Resource Emphasis:

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 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.

Environmental Consequences

Methodology

ArcMap and geographic information system (GIS) data layers were used to analyze the proposed activities in regards to recreation use, travel corridor locations, potential viewsheds from travel corridors and viewpoints, and scenic integrity objectives assigned to the area. The potential impacts to scenic resources from this project were determined based on site visits to the project area and viewpoints, review of photos of the project area, use and interpretation of GIS data, and review of research and analysis of similar projects. Evaluations made in this analysis are based on the amount of change potentially seen on the landscape in a given viewshed and the degree of deviation from the existing landscape character or the measure of the degree to which the landscape is visually perceived to be complete.

This analysis uses scenic integrity objectives (SIOs) to determine if the alternatives meet Forest Plan standards and guidelines by comparing the degree of deviation from the existing landscape character or the measure of the degree to which the landscape is visually perceived to be complete. The scenery management system, as outlined in Landscape Aesthetics, A Handbook for Scenery Management, is today’s best science to achieve high-quality scenery as an outcome of national forest ecosystem management practices. The Nebraska National Forest implemented the scenery management system in the 2009 Forest Plan, and lists scenic integrity as the state of naturalness or, conversely, the state of disturbance created by human activities or alteration. Integrity is stated in degrees of deviation from the existing landscape character in a national grassland or forest. The scenic integrity levels are: (USDA FS 2009)
High (Appears Unaltered): Retention. This level refers to landscapes where the valued landscape character appears intact. Deviations may be present but must repeat the form, line, color, texture and pattern common to the landscape character so completely and at such scale that they are not evident.

Moderate (Slightly Altered): Partial retention. This level refers to landscapes where the valued landscape character appears slightly altered. Noticeable deviations must remain visually subordinate to the landscape character being viewed.

Low (Moderately Altered): Modification. This level refers to landscapes where the valued landscape character appears moderately altered. Deviations begin to dominate the valued landscape character being viewed, but they borrow valued attributes such as size, shape, vegetative type changes or architectural styles outside the landscape being viewed. They should not only appear as valued character outside the landscape being viewed but compatible or complimentary to the character within.

The effects analysis will consider how each alternative meets the allocated SIOs. Effects caused by the No Action, Current Management, and Proposed Action alternatives were also considered in relation to the desired landscape character.

Assumptions

- Treatment location, in relation to terrain and elevation, can affect the visibility of management activities. Vegetation treatments on steep slopes, when other landforms do not block the view, can dominate the landscape.
- The duration of view or speed of travel through an area (i.e., walking or riding in a vehicle), determine how long a viewer has to study and pick out objects, forms, lines, colors, and patterns in the landscape.
- How well treatments transition from treated to untreated areas can also affect how evident a treatment is in all distance zones.
- Proposed activities, although they may have some short-term negative impacts on scenery, also may begin to move the landscape toward the desired landscape character. Effects that would move the vegetation toward the desired landscape character are beneficial to scenic resources in the long term. These beneficial effects are often realized over a long period of time but lead to the lasting sustainability of valued scenery attributes.

Spatial and Temporal Context for Effects Analysis

The scenic resource analysis considered the area within the project area boundary, unless otherwise noted. Short-term scenic effects of concentrated livestock use are often the most noticeable until the growth of grasses, shrubs, and remaining trees begin to soften the effects of heavy concentrated use. Short-term for this analysis refers to a 2 to 4-year period after management actions have been implemented. Short-term effects are especially noticeable when the viewer has an up-close view, usually in the foreground viewing distance. Long-term effects, which for this analysis is considered 5 years and beyond, and would be most evident in changes in plant specie composition.
Past, Present, and Foreseeable Activities Relevant to Cumulative Effects Analysis

Past Activities

Past actions, such as road building and livestock grazing developments, provided access to the area, which fostered dispersed recreational use of the area. Past activities include fire suppression, noxious weed control, livestock grazing and construction of range facilities, road construction and maintenance. Recreation activities include: hiking, horseback riding, dispersed recreation, and rock-hounding. Most of these past activities have formed the current recreation opportunities and most often form the viewing platform and opportunities for viewing scenery.

The effects of livestock grazing on scenic resources generally include visible fences to manage allotments, water improvements, and livestock trails. Effects of livestock grazing can have negative effects to scenic resources when lands have been continuously grazed, resulting in decreased ground cover or in areas with extensive trailing – this is most evident during drought conditions when livestock is congregating around water sources. Effects to scenery resources from the control of noxious weeds are minimal.

Weather events can have negative effects to scenic resources such as: flooding when stream banks are heavily eroded, and wildfires that blacken the landscape. Generally the effects are short-lived, but, depending upon severity, the effects can be of longer duration (ie – a high severity fire, followed by a short-duration high-intensity rainstorm, can result in heavy erosion of soil, resulting in a long-term process of vegetation naturally revegetating eroded areas).

Present Actions

Present actions within the analysis area focus primarily on livestock grazing, fire suppression, noxious weed control, road and fence maintenance, and recreation activities. Effects of these present actions are the same as those discussed under past activities.

Reasonably Foreseeable Activities

Reasonably foreseeable future activities in the analysis area are: livestock grazing, noxious weed control, road and fence maintenance, and recreation activities. Effects from weather events are the same as those discussed under past activities, impacting future management activities. Should livestock watering be developed on private lands within project area, the effects from grazing on National Grasslands could be reduced.

Alternative 1 – No Action (No Grazing)

Direct Effects

Alternative 1 proposes an end to livestock grazing and initiates no human-caused changes to the scenic quality within the project area. After grazing ceases, the speed which the surrounding vegetation will re-colonize overgrazed areas will depend upon the rainfall received, or lack thereof, during the growing season. As concentrated livestock use areas and riparian areas naturally revegetate, less color contrast of vegetation and exposed soil should be evident. The scale of the taller, un-grazed grasses and shrubs should also reduce the visibility of exposed soil, resulting in a more natural appearing landscape. In areas where currently there is little to no grazing, the visual effect of the existing plants’ texture and color should see little change.
Indirect Effects
Under Alternative 1, vegetation structure would slowly change over time through natural growth, mortality, and events such as wildfires, wildlife activity, storms, and droughts – which in turn will be a slow change in scenery attributes as well. The slow change in vegetation should provide limited additional risk to the stability of the scenic resources in the future. However, prescribed fire would not be a management tool, so the area would be dependent on wildfires to remove dead grasses and provide addition nutrients to facilitate new growth / species composition change. When a wildfire occurs, the visual impact of the blackened & killed vegetation can be quite vivid. Depending upon the time of year and weather conditions, there can be a flush of new growth changing the appearance of the area with burned grass from black to green, in a matter of days to weeks. There would be no control of invasive plants, which could result in their expansion. Many of the invasive plants are different in form, color, scale, and texture, which many visitors recognize as non-native plants that impede the beauty of the native prairie landscape.

Cumulative Effects
Because this alternative does not directly affect scenic resources, and because it does not have an additive effect to the impacts from past, present, and reasonably foreseeable activities, there are no cumulative effects for the no-action alternative.

Compliance with Forest Plan and Other Relevant Laws, Regulations, Policies and Plans
Alternative 1 would be consistent with Forest Plan goals, standards, and guidelines for scenic resources.

Summary of Effects
The scenic resources would slowly change from the existing condition, to one of a more natural appearance. This alternative would see changes to scenery initiated by natural processes only. Wildfires may cover a larger portion of the area, due to the additional fuel of the un-grazed grass, resulting in similar appear across the landscape. Invasive plants may be more evident in the landscape. Overall, this alternative would likely result in conditions that improve the valued scenery attributes and improve the stability of scenic resources.

High and Low SIOs assigned to the project area would be met approximately one to three growing season after grazing ceases in the project area.

Alternative 2 – Current Management
Alternative 2 proposes to continue livestock grazing, and other, current management practices.

Direct Effects
Alternative 2 proposes to continue current management practices of livestock grazing that initiates human-caused changes to the scenic quality within the project area. There would be minimal, if any, change in appearance of overgrazed areas. Along the riparian areas, including the Cheyenne River and Indian Creek, concentrated livestock use - examples include trampled and hoof-sheared banks; over-utilization of cottonwoods, willows, grasses and forbs, and erosion - are more evident, dominating Immediate Foreground, and in some cases, Foreground views. In the Foreground distance zone, cow trails - evident as lines - linear patterns - across the slopes. Color and textural contrasts between vegetated and non-vegetated areas will continue to be readily apparent in riparian areas.

Prescribed fire would be a management tool to remove dead grasses and provide addition nutrients to facilitate new growth / species composition change. The use of prescribed fire could curtail the extent,
and effects, of wildfire in desirable shrub communities – maintaining visual diversity in form, color, and texture in the landscape.

There would continue to be control of invasive plants, which would result in limiting their expansion. Changes in vegetation structure would occur at the current rate, resulting in maintaining the existing variety of plant species and scenic quality evident in the landscape.

Constructed features - solar pumps, wells, and associated water lines – would occur outside Management Area 1.2, as needed.

**Indirect Effects**

There would likely be limited change in the scenic quality that is currently evident from the viewpoint along Forest Road 7129 overlooking, and driving along, Indian Creek. Riparian areas will likely continue to display the effects of concentrated livestock use – color & textural contrasts; however, in drought conditions, those effects may be magnified before use can be curtailed.

**Cumulative Effects**

Past, present, and reasonably foreseeable future actions considered in this analysis are listed in the spatial and temporal context for effects analysis section of this report. Most of the past activities have formed the current recreation opportunities and settings and most often form the viewing platform and opportunities for viewing scenery.

Cumulative effects to scenic resources in the Cheyenne River project area are expected to meet the SIOs of the Forest Plan in most areas. In areas of concentrated use, particularly during drought conditions, the qualitative effect would be a decrease in natural appearing conditions within Management Area 1.2. In moderate SIO, it is expected that any noticeable deviations would remain visually subordinate to the landscape being viewed. In low SIO areas, any deviations present, although they may dominate the valued landscape character, would borrow valued landscape attributes of the characteristic landscape.

**Compliance with Forest Plan and Other Relevant Laws, Regulations, Policies and Plans**

Alternative 2 is not consistent with Forest Plan goals, standards, and guidelines for scenic resources, as it does not change from the existing conditions (ie – riparian areas) where the scenic quality is degraded and does not move toward the desired condition outlined in the Forest Plan.

**Summary of Effects**

The scenic resources would see little change from the existing condition and scenic appearance. Livestock management, use of prescribed fire, and spraying invasive species, at current levels, would result in limited to no change in scenic quality. Overall, this alternative would likely result in the same condition of the valued scenery attributes and stability of scenic resources, that currently exist.

High SIOs assigned to the project area would only be met in areas away from riparian areas, and other areas away from concentrated livestock use. In areas where concentrated use is occurring, the High SIO (assigned to this area) will not be met. Areas with a Low SIO assigned to them, should continue to meet that SIO.

**Alternative 3 – Proposed Action**

Alternative 3 proposes to continue livestock grazing, but thru a series of adaptive management actions that are based on the results of monitoring livestock distribution and resource conditions on the allotments (see EA Appendix A).
**Direct Effects**

Alternative 3 proposes to adapt the livestock grazing management practices to respond to conditions found on the ground. Adaptive management practices would include:

- **Prescribed fire** – Adjusted by season of use, and sized, to meet the Forest Plan goals, standards & guidelines within the allotment objectives. Visual effects of fire will be limited to be in scale to a portion of an allotment, and the landscape as a whole.

- **Livestock distribution** – Adjust livestock distribution by herding, entice with salt/mineral blocks, developing water sources away from riparian areas, and fencing off riparian areas. All of these methods, when employed, will reduce the visual impact of overgrazing, soil & vegetation textural & color contrasts, in riparian areas. Livestock re-distribution may result in other areas of visually evident areas of vegetation disturbance; however, they should be smaller, scattered, and less concentrated than currently found in riparian areas.

- **Rotation of use and resting areas** – Rotation of use, and resting areas, within an allotment maintains a minimum level of vegetation coverage across the landscape. The landscape as a whole should display few areas color and textural contrast from concentrated use – in that vegetation should be evident across the landform within the allotments.

In the Foreground distance zone, cow trails - evident as lines - linear patterns - across the slopes.

The above actions would be implemented to respond to undesirable conditions on the ground, and help move the allotments toward the desired conditions.

There would continue to be control of invasive plants, which would result in limiting their expansion.

Changes in vegetation structure would occur in response to changes in management. This should in turn result in improving the variety of plant species, creating a mosaic of plant structure, and scenic quality evident in the landscape.

Constructed features - solar pumps, wells, and associated water lines – would occur outside Management Area 1.2, as needed.

**Indirect Effects**

There would likely be limited change in the scenic quality that is currently evident from the viewpoint along Forest Road 7129 overlooking Indian Creek. However, when driving along Indian Creek and other riparian areas, the effects of concentrated livestock use should gradually be reduced, in turn resulting in reduced streambank erosion.

**Cumulative Effects**

Past, present, and reasonably foreseeable future actions considered in this analysis are listed in the spatial and temporal context for effects analysis section of this report. Most of the past activities have formed the current recreation opportunities and settings and most often form the viewing platform and opportunities for viewing scenery.

Cumulative effects to scenic resources in the Cheyenne River project area are expected to meet the SIOs of the Forest Plan in most areas. In areas of concentrated use, monitoring should result in changes in management to limit effects from concentrated use to being short term in duration; as a result, there should be no cumulative effects qualitatively, to the scenic resource. In high SIO areas, it is expected that any human activities would not be visually evident and would repeat naturally established form, line, color, and texture. In moderate SIO, it is expected that any noticeable deviations would remain visually
subordinate to the landscape being viewed. In low SIO areas, any deviations present, although they may dominate the valued landscape character, would borrow valued landscape attributes of the characteristic landscape.

**Compliance with Forest Plan and Other Relevant Laws, Regulations, Policies and Plans**
Alternative 3 moves the current conditions toward the Forest Plan goals, standards, and guidelines for scenic resources, thru monitoring vegetation conditions, and then responding by adjusting management actions as needed. Improvements in range conditions, likewise improve the scenic quality, as the landscape moves toward the desired future conditions.

**Summary of Effects**
The scenic resources would see scattered changes from the existing condition and scenic appearance, as adaptive management actions are implemented based on the needs within each allotment. Adaptive livestock management actions, use of prescribed fire, and spraying invasive species, would result in incremental change in scenic quality. Overall, this alternative would likely result in improved condition of the valued scenery attributes and stability of scenic resources.

High SIOs assigned to the project area would only be met when the adaptive management process is followed – where livestock distribution is achieved, and effects to riparian areas are reduced to acceptable levels. This adaptive management process will takes time to achieve a High SIO across Management Area 1.2 as assigned. Areas with a Low SIO assigned to them, should continue to meet that SIO.

**Conclusion**
The majority of effects to scenic resources are short term in duration with long-term benefits to scenic quality. Short-term visual effects of grazing and prescribed fire treatments are often most noticeable in foreground views until the growth of grasses, shrubs, and remaining trees begin to soften the effects of these activities.

No significant issues were identified for the visual resource in the Cheyenne River project area. With all the project design criteria implemented, the activities in the Proposed Action would meet the High and Low SIOs. It is anticipated that the proposed activities would meet the assigned SIOs up to three growing seasons after adaptive management actions are implemented. The proposed action would be consistent with Forest Plan standards and guidelines for scenery.

No negative direct, indirect, or cumulative effects to scenic resources are expected in the long term from these adaptive management actions. There are no irreversible or irretrievable commitments related to scenic resources from the Proposed Action.

**References**


