

Proposed Action for the  
**Santa Barbara Livestock Grazing Allotment**  
 Camino Real Ranger District  
 Carson National Forest  
 Taos County, New Mexico

August 2008

**Purpose & Need and Proposed Action**

The Camino Real Ranger District, Carson National Forest, proposes to continue authorizing livestock grazing while incorporating adjustments and improvements outlined in Table 1, on the Santa Barbara Allotment (see Figure 1). The purpose and need for revising the grazing program (i.e., authorizing a range of stocking levels, constructing drift fences and a holding pen, using herding and salting, and proposing prescribed burning) is 1) to make forage from lands suitable for grazing available to qualified livestock operators and contribute to the social and economic well-being of affected livestock operators and their families, as well as to the economy of local communities and counties; and 2) to continue to maintain healthy ecological conditions and/or improve unsatisfactory ecological conditions on the Santa Barbara Allotment.

Table 1 outlines the purpose and need, the actions proposed to achieve the purpose and need, and allotment management objectives.

**Table 1. Purpose and Need and Proposed Action**

| Pasture                 | Proposed Action   | Purpose and Need  | Objective  |
|-------------------------|---|---|--|
| Santa Barbara Allotment | <p>Authorize permitted livestock grazing with a range of stocking from 115 cow/calf units + 7 bulls to 192 cow/calf units + 11 bulls utilizing a rotational grazing system within the season 6/1-9/30.</p> <p>Use herding and salting to achieve better distribution of livestock, proper timing and intensity of grazing, and compliance with grazing schedules.</p> | <p>Livestock grazing on National Forest System lands has contributed to the local economy and the stability of northern New Mexico communities for over a hundred years. On the Santa Barbara Allotment, there is a need for forage availability to support domestic livestock and contribute to the economic diversity and social well being of surrounding communities that depend on range resources for their livelihood.</p> <p>Capacity studies have determined that the Santa Barbara Allotment can support 192 cow/calf units + 11 bulls and achieve desired conditions. A realistic stocking range is 115 + 7 – 192 + 11, to make adjustments for drought years and level of</p> | <p><u>Make forage availability to support domestic livestock and contribute to the economic diversity and social well being of surrounding communities that depend on range resources for their livelihood</u></p> <p><u>Maintain or improve range vegetation and soil conditions.</u></p> |

Livestock Grazing Management for the Santa Barbara Range Allotment – Proposed Action

| Pasture                                    | Proposed Action  | Purpose and Need   | Objective   |
|--|--|--|---|
| Upper Bottoms, Middle Fork, and West Fork  | Construct two new drift fences to separate Middle Fork from Upper Bottoms – 1 drift fence on the trail and 1 in the drainage. Reconstruct one drift fence between West Fork and Upper Bottoms. This would help to keep cattle from coming back to the Bottoms too soon, relieving some of the grazing pressure there, and reducing the instances of cattle getting into the Santa Barbara campground. Construct the drift fences with wilderness values considered and to wildlife standards.  | management intensity.<br>Livestock occasionally get into the fenced Santa Barbara CG. Drift fences separating Middle Fork Pasture from Upper Bottoms Pasture and West Fork Pasture from Upper Bottoms Pasture would help keep cattle from reaching the campground.   | <u>Provide for more effective management of cattle.</u><br><br><u>Minimize livestock conflicts with recreationists.</u>   |
| Bear Mountain, Comales, and Osha           | Implement prescribed burning within approximately 1,135 acres of the allotment at a low to moderate intensity using broadcast burning, with possible hand piling and burning. This would include approximately 36 acres in grassland, 80 acres in Gambel’s oak, 21 acres in aspen, 64 acres in Douglas-fir, 35 acres in Engelmann spruce, 670 acres in ponderosa pine, 54 acres in spruce fir, and 174 in white fir vegetation types. The intent is to implement prescribed burns within meadows and openings, not within the densely forested areas or to change forest stand structure. Timing of burns would occur during fall, summer or winter with fall ignition being most likely. Riparian buffers would include 50’ around seeps, springs, wetlands, and intermittent streams; 100’ around perennial water. | Across the western landscape, it has been recognized that meadows and open tree canopy areas have been steadily disappearing as more dense forests have been expanding. This has, in part, been a result of a century of fire suppression. There are meadows and open forest areas within the Santa Barbara Allotment which support herbaceous vegetation which provides food for both livestock and numerous species of wildlife. As these areas become encroached with trees and as open forest areas become denser, reducing sunlight to the forest floor, the growth and diversity of herbaceous vegetation in these areas is often reduced. | <u>Maintain/enhance meadows and forested openings to maintain or improve productivity of the herbaceous vegetation and the overall fire regime condition classes<sup>1</sup>.</u> |
| Lower Bottoms and Santa Barbara Campground | Construct a holding pen within the Santa Barbara campground so that if cattle do stray into the area, they can be held there for a short period of time until the permittees can move them to the correct pasture. This would be constructed under a cost share agreement with the permittees.<br><br>Consider posting the grazing schedule at the campground and at the trailhead, so users would know where cattle are supposed to be.   | Livestock occasionally get into the fenced Santa Barbara CG. In some instances, when cattle get into the campground, they are pushed from the campground into the wrong pasture (for the rotation schedule).<br><br>Some recreational users prefer not to see livestock while hiking in the wilderness. Posting the grazing schedule could allow them to choose a trail to a pasture where the cattle are not scheduled to be  | <u>Provide for more effective management of cattle.</u><br><br><u>Minimize livestock conflicts with recreationists.</u>   |

<sup>1</sup> Fire Regime Condition Class is a classification of the amount current conditions have departed from those of historical reference conditions.

| Pasture   | Proposed Action  | Purpose and Need   | Objective  |
|---|--|--|--|
|   |  | grazing at the time of their visit.  |  |
| Lower Bottoms, Bear Mountain, and Upper Bottoms | <p>Modify the “please close the gates” signs to identify when it needs to be closed and why.</p> <p>Construct hiking stiles near gates to reduce the problems of gates being left open. These would be constructed and maintained by the Forest Service.</p> | Gates are sometimes left open along hiking trails. When this happens, cattle sometimes drift out of the pasture they are scheduled to be in, making it difficult to achieve resource objectives. Hiking stiles are sometimes easier for some hikers to use than opening and closing gates. | <p><u>Provide for more effective management of cattle.</u></p> <p><u>Minimize livestock conflicts with recreationists.</u></p> |

## Existing Situation

**Location** - The Santa Barbara Allotment is located approximately 5 miles southeast of Penasco, New Mexico in the south-central portion of the Camino Real Ranger District. The project area lies in Taos County within portions of Township 20 North, Range 12 East, Sections 1-3; Township 20 North, Range 13 East, Sections 2-9; Township 21 North, Range 12 East, Sections 1-2, 11-14, 23-26, 36; Township 21 North, Range 13 East, Sections 4-10, 15-22, 27-35; Township 22 North, Range 12 East, Sections 12-14, 22-27, 35-36; Township 22 North, Range 13 East, Sections 6-9, 16-21, 28-33. New Mexico Principal Meridian. The allotment is located to the south of State Highway 518. It can be accessed by State Highway 518, and Forest Roads 116 1877.

**Setting** – The Santa Barbara Allotment contains approximately 34,262 acres within the Rio Pueblo and Rio Santa Barbara watersheds. Drainages within the Rio Pueblo watershed include Osha and Comales. Drainages within the Rio Santa Barbara watershed include Indian, Jicarita, West Fork Rio Santa Barbara, Middle Fork Rio Santa Barbara, and East Fork Rio Santa Barbara. The Rio Santa Barbara, within the Pecos Wilderness Area, was classified by the New Mexico Water Quality Control Commission as an Outstanding National Resource Water (ONRW) in September, 2005. The allotment ranges in elevation from 8,000-12,800 feet.

Recreation is a popular activity within the Santa Barbara Allotment. There are numerous developed recreation areas within the allotment, including campgrounds, trails, and trailheads. The southern half of the allotment is located within the Pecos Wilderness Area. Grazing was a permitted activity in the area prior to its designation as a Wilderness.

The Santa Barbara Allotment has been grazed by domestic livestock since before the Forest Service acquired the Santa Barbara Grant in 1935. The current Santa Barbara Allotment is a conglomeration of many other units. Previously, there was the East Fork Sheep and Goat Allotment (S&G); the Middle Fork S&G; the Santa Barbara S&G; the Comales S&G; the Santa Barbara Cattle and Horse Allotment (C&H), and the Rio Chiquito and Cebadilla units. Those allotments and units were managed in different ways over the years. Some areas were closed to grazing at times and others were removed to other allotments. The last year permitted sheep were grazed on any portion of this area was in 1972 on the East Fork S&G.

Over the years, as problems were identified, the livestock grazing management was adjusted; and as range improvements like fences and water developments were constructed, the permittees were able to intensify their management.

**Current Grazing Management** – There is a single term grazing permit issued to the Santa Barbara Grazing Association to graze livestock on the Santa Barbara Allotment. There are currently 13 members in the association. The permit is for 192 cow/calf units (c/c) + 11 bulls. The season of use is from 6/1 – 9/30. Management involves an 11-pasture (unit), modified deferred-rotation grazing system. The 11 units are not all divided by fences. The topography, natural barriers, and drift fences are effective in separating some of them. Others require herding to achieve effective separation. They are currently used in combination to make up six different areas of use:

1. Santa Barbara Hayfield
2. Santa Barbara Bottoms (Upper Bottoms/Lower Bottoms)
3. Osha/Bear Mountain/Comales
4. Indian/Jicarita Creeks
5. Middle Fork/East Fork
6. West Fork

The Santa Barbara Hayfield Pasture is often used early in the season when the higher country is not range ready yet (6/1-6/4). Livestock are then moved to the Santa Barbara Bottoms Pasture. One year the livestock will then move to West Fork, Middle Fork, East Fork Pastures, then to Indian and Jicarita Pastures, and finally to Comales, Osha, and Bear Mountain Pastures. In alternate years, they use Comales, Osha, and Bear Mountain Pastures first, move to Indian and Jicarita Pastures, and end in West Fork, Middle Fork and East Fork Pastures. The Hayfield and Santa Barbara Bottoms are not always used first each year. They are regularly used together for approximately 10 days at the end of the season for gathering cattle.

The 6/1 on date depends on range readiness and cattle can come off early due to range condition or weather. In some years various pastures have been rested, and in 1999 to 2001 the entire allotment was rested when the permitted livestock went to the Rowe Mesa grass bank as part of an arrangement to provide a rest period for the allotment. In recent years the numbers have been reduced for resource protection due to drought.

## **Management Direction**

The Carson National Forest Plan (Forest Plan) identifies the national forest system (NFS) lands within the Santa Barbara Allotment as suitable for domestic livestock grazing. The project proposal was designed to conform to Forest Plan direction, goals, and standards and guidelines, which are incorporated by reference. The allotment includes lands within Management Areas 1 - Spruce under 40% slopes, 3 - Mixed Conifer under 40% slopes, 4 - Ponderosa Pine under 40% slopes, 7 - Unsuitable Timber, 13 – Oak, 14 – Riparian, 16 - Recreation Sites, 20 - Semi-primitive, and SFNF Plan Management Area H – Wilderness Area.

The original Carson National Forest Plan did not contain specific management direction for grazing in either the Forest-wide direction or in the Management Area direction. The plan was amended in 1996 to provide direction for grazing management within habitat for the northern goshawk and the Mexican spotted owl. Since that time, general grazing management direction for the rest of the Forest has been developed by the Forest Range staff based on the effects of conservative/moderate stocking on plant physiology in terms of maintaining or increasing plant vigor and productivity in the light of frequent and recurring drought conditions in the southwestern United States (Howery 1999, FSM R3-2209.13-2006-1). Conservative stocking rates, in turn, can provide a relatively reliable operation for the rancher. The current Carson NF range management guidance includes managing for:

- Utilization levels between 20% to 40% (dry weight) at the end of the growing season. Utilization of the annual available forage would not exceed 40%.
- 4 inches of stubble height of the annual available forage in the riparian areas after livestock grazing.
- Fair to good range condition
- Stable to upward rangeland trend. (Stable trend is when the upward or downward trend is not apparent)
- Satisfactory watershed/soil conditions

**Resource Condition** – Existing range condition for the Santa Barbara allotment was determined by field visits and examination of district range analysis records, which includes Parker 3-step and paced range analysis transects.

The Parker 3-Step transects measure species composition; score vegetation rangeland condition and apparent rangeland trend; score soil condition and apparent soil trend; evaluate grass vigor; measure grass height, and record vegetation cover. Long term trend is obtained from the comparison of transects from the same location over a period of time.

**Table 2. Range Vegetation and Soil Condition & Trend**

| Cluster          | Vegetation Condition and Trend        | Soil Condition and Trend |
|------------------|---------------------------------------|--------------------------|
| 1                | Good / Downward                       | Excellent / Stable       |
| 2                | Excellent / Stable                    | Good / Stable            |
| 4                | Good / Stable                         | Good / Stable            |
| 6                | Fair / Downward<br>Forest encroaching | Excellent / Upward       |
| 7-Old Comales C1 | Fair / Downward<br>Forest encroaching | Good / Stable            |
| 8-Old Comales C2 | Fair / Downward<br>Forest encroaching | Good / Stable            |
| East Fork S&G 1  | Good / Stable                         | Good / Upward            |
| East Fork S&G 2  | Good / Stable                         | Good / Stable            |
| East Fork S&G 3  | Good / Stable                         | Good / Upward            |

| Cluster               | Vegetation Condition and Trend      | Soil Condition and Trend |
|-----------------------|-------------------------------------|--------------------------|
| Middle Fork 1         | Good / Stable                       | Good / Stable            |
| Middle Fork 3         | Fair/Downward<br>Forest encroaching | Excellent / Upward       |
| <b>Paced Transect</b> |                                     |                          |
| Hondo/ Bear Mountain  | Good / Stable                       | Fair / Stable            |
| Lower Middle Fork,    | Good / Stable                       | Good /Stable             |

## Decision Framework

The Camino Real District Ranger will issue a decision for the Santa Barbara Allotment that will include a determination of the significance of the environmental effects and whether an environmental impact statement will be prepared. The decision will also include a determination of consistency with the Forest Plan, National Forest Management Act, National Environmental Policy Act, and applicable laws, regulations, and executive orders.

If the Camino Real District Ranger determines it is not necessary to prepare an environmental impact statement, the District Ranger will decide whether cattle grazing will be allowed to continue on the allotment as proposed or as outlined under another alternative, including the no grazing alternative. If any alternative other than “no grazing” is selected, the decision will identify the class of livestock, number of livestock permitted, typical grazing season, general type of grazing system, utilization levels (grazing intensity), residual cover thresholds (stubble heights), range facilities, implementation schedules, and what monitoring and evaluation will be done. All of these items would be included in a new Allotment Management Plan and the new term grazing permit, which would be issued as part of the implementation of the decision.

## Public Involvement

The proposed project was listed in the Carson National Forest Schedule of Proposed Actions from July 2007, to the present. This list is distributed to numerous individuals and can be accessed on the Carson National Forest website and the national Forest Service website. A detailed project proposal was provided to 218 individuals, groups and agency representatives for comment during scoping in December 2007 and January 2008. Eleven responses were received. In addition, the Forest consulted with tribal contacts for 16 tribes. Two responses were received.

Using the comments from the public, other agencies, and tribes, an interdisciplinary team developed a list of issues to address.

## Issues

Comments received during the scoping period were examined for significant issues. The Forest Service separates the issues into two groups: significant issues and non-significant

issues. Significant issues were defined as those directly or indirectly caused by implementing the proposed action. Non-significant issues were identified as those: 1) outside the scope of the proposed action; 2) already decided by law, regulation, Forest Plan, or other higher level decision; 3) irrelevant to the decision to be made; or 4) conjectural and not supported by scientific or factual evidence. The Council for Environmental Quality (CEQ) NEPA regulations require the following delineation in Sec. 1501.7, "...identify and eliminate from detailed study the issues which are not significant or which have been covered by prior environmental review (Sec. 1506.3)..."

Among the topics raised during scoping, the Forest Service identified the following significant issues:

Significant Issue #1: Prescribed burning poses a risk of escape – Mitigation measures to minimize this risk are identified in a burn plan. This would be developed prior to any implementation. It would identify the resources needed and the parameters under which the burn would be conducted to achieve resource goals and to reduce risk of escape.

Significant Issue #2: When livestock are stocked on the allotment, cattle may get into the Santa Barbara Campground, diminishing the recreational experience for campers. The proposal to construct drift fences and hiking stiles can reduce the incidence of livestock returning to the lower elevations near the campground. The proposal to construct a holding pen within the campground to contain the livestock away from campers can reduce conflicts as well.

Significant Issue #3: Rio Grande cutthroat trout may be negatively affected by livestock grazing in the vicinity of trout streams. Proposed grazing guidelines of 40% utilization, 4" stubble heights, following rotational grazing systems, and salting away from waters would help protect Rio Grande cutthroat trout. Effects to Rio Grande cutthroat trout will be the indicator of this effect.

## **ALTERNATIVES, INCLUDING THE PROPOSED ACTION**

This section describes and compares the alternatives considered for management of the Santa Barbara Allotment. This section presents the alternatives in comparative form, sharply defining the differences between each alternative and providing a clear basis for choice among options by the decision maker. This chapter also identifies mitigation measures.

### **Alternatives Eliminated from Detailed Study**

#### ***Current Management:***

This alternative would authorize grazing as it is currently permitted. Under implementation of current management, stocking has ranged from 115 c/c + 7 bulls to 160 c/c + 9 bulls. The district would have authorized 192 c/c + 11 bulls with a range rider to improve distribution. The IDT determined that effects of the proposed action would be very similar to current management as far as stocking of livestock goes. Under

the current management alternative, some concerns would not be addressed, such as drifting of livestock back into the Santa Barbara Campground area. Without those improvements, it would be difficult to achieve resource goals, thus it is not a viable alternative.

A “current management” alternative was eliminated from detailed study.

***Keep current permitted livestock numbers:***

This alternative was suggested since the capacity of the allotment has the capacity to support the current permitted numbers. The IDT discussed that while there is capacity on the allotment to support the full numbers, the apparent drought cycle the area has been experiencing since 1996 affects forage production in such a way that a range of numbers is more realistic. In addition, distribution of livestock must be improved in order to fully stock the allotment and meet resource goals and objectives.

This was eliminated from detailed analysis as a separate alternative. It will be analyzed as a part of Alternative B.

***Reduce permitted numbers to no more than 115 c/c:***

It was suggested that no more than 115 c/c be permitted on the allotment based on the numbers that were stocked in 2002, since drought years may now be the “average”. The IDT discussed that the range of numbers in the proposed action, Alternative B, includes this figure of 115 c/c and 7 bulls in order to be realistic about the capacity of the allotment in drought years. Since the proposed action allows a range in stocking to address drought concerns, the effects are expected to be similar to this suggested alternative. It was therefore eliminated from detailed analysis.

***Change the kind of livestock from cattle to sheep:***

Sheep grazing ended on this allotment in the 1970’s, when permitted livestock was converted to cattle. The primary reason for this change was the condition of resources in the high elevation divides, which were being negatively impacted by sheep grazing practices. Grazing sheep in the lower elevation areas resulted in higher losses of sheep to predators and it proved not to be feasible for the sheep permittees. Another factor for not considering sheep grazing on this allotment is the presence of bighorn sheep in the Pecos Wilderness at the high elevations of this allotment. Domestic sheep pose a disease transmission threat to the bighorn population.

For these reasons this alternative was eliminated from detailed analysis.

***Change season of use:***

The IDT determined that the 6/1-9/30 grazing season is appropriate for this allotment. Range readiness guidelines are usually met by 6/1, but if they are not, the on date can be delayed until 6/15 or when the guidelines are met. The 9/30 “off date” is generally a good time to come off of the allotment, especially considering the higher elevation pastures are becoming dormant and begin receiving snow.

***Keep livestock out of riparian areas:***

The IDT noted that the topography of the allotment makes it difficult to keep livestock completely out of riparian areas (ie. unfeasible to fence out all riparian areas). Herding and salting away from riparian areas, and managing for a moderate grazing intensity, with 4” stubble heights and 40% utilization guidelines are designed to mitigate some of the effects of grazing. The No Action/No Grazing alternative will analyze the effects of keeping livestock completely out of riparian areas.

***Maintain limited use in top of East Fork and Middle Fork in high elevation areas:***

This was suggested due to these areas having been impacted by sheep grazing in the past. The IDT noted that currently these areas are in good condition with a stable trend in the open grass areas; in fair condition with a downward trend in the tree covered areas due to succession (which is not affected by livestock management). There is not a high demand for these areas by the permittees, who typically prefer to use lower elevation areas. Maintaining limited use in these areas can be incorporated into Alternative B. Since this alternative is not addressing any resource issues, it was eliminated from detailed study as a separate alternative.

***Remove livestock grazing from the Pecos Wilderness:***

This alternative was suggested for people who don't like to see cows in wilderness areas. The IDT discussed that livestock grazing was a permitted activity within this allotment and the portion of the allotment within the Pecos Wilderness prior to it's designation as a Wilderness Area and is therefore an authorized activity. It is out of the scope of this analysis to change that authorization based on that criteria. This alternative will effectively be analyzed in the no grazing alternative, where no grazing would be authorized anywhere on the allotment, but it was removed from detailed analysis as a separate alternative.

***Aggressive thinning and prescribed burning:***

It was suggested that aggressive thinning and follow-up burning should be implemented in order to restore some of the open areas on the forest. The IDT discussed that while large scale projects that open up the very dense overstory would be beneficial for forage production for both livestock and grazing wildlife, it is generally out of the scope of this project.

***Rest rotation system:***

The NMDGF suggested that a rest rotation grazing system be implemented. The IDT discussed the challenging logistics of cattle movement on the allotment, especially the high elevation wilderness pastures. There are a few pastures which would be more difficult to rest than others, but if the drift fences proposed in Alternative B were constructed, some rest could be incorporated to address specific resource issues if they arose. Under alternative B, deferred rotation is expected to be the norm, but it is proposed simply as a “rotational system”, which could be either deferred or rest or a combination as needed. Since rest rotation can be incorporated into the proposed action, a separate rest rotation alternative was eliminated from detailed study.

***Allow a let burn policy of any natural wildfires within the Pecos Wilderness:***

The NMDGF suggested that we consider an alternative that would allow a “let burn” policy of any natural wildfires within the Pecos Wilderness to move forest conditions to an early seral stage. This is out of the scope of this analysis.

**Alternatives Considered in Detail**

***Alternative A – No Action/No Grazing***

Under the No Action/No Grazing Alternative, domestic livestock grazing would not be a permitted activity on the Santa Barbara Allotment. Existing term grazing permits would be cancelled. The current permittees would no longer maintain existing range improvements (fences, developed springs, cattle guards, and trick tank water developments).

***Alternative B – Proposed Action***

Livestock grazing would continue to be authorized on the Santa Barbara Allotment, with some modifications, as follows:

- Authorize permitted livestock grazing with a range of stocking from 115 cow/calf units + 7 bulls to 192 cow/calf units + 11 bulls utilizing a rotational grazing system within the season 6/1-9/30.
- Construct two new drift fences to separate Middle Fork from Upper Bottoms – 1 drift fence on the trail and 1 in the drainage. Reconstruct one drift fence between West Fork and Upper Bottoms. This would help to keep cattle from coming back to the Bottoms too soon, relieving some of the grazing pressure there, and reducing the instances of cattle getting into the Santa Barbara campground. Construct the drift fences with wilderness values considered and to wildlife standards.
- Use herding and salting to achieve better distribution of livestock, proper timing and intensity of grazing, and compliance with grazing schedules.
- Implement prescribed burning within approximately 1,135 acres of the allotment at a low to moderate intensity using broadcast burning, with possible hand piling and burning, to maintain/enhance meadows and forested openings to maintain or improve productivity of the herbaceous vegetation and the overall fire regime condition classes. This would include approximately 36 acres in grassland, 80 acres in Gambel’s oak, 21 acres in aspen, 64 acres in Douglas-fir, 35 acres in Engelmann spruce, 670 acres in ponderosa pine, 54 acres in spruce fir, and 174 in white fir vegetation types. The areas considered for prescribed burning would be in and around open meadows; in grasslands; in forested areas where canopy openings are at least 40% or greater (canopy cover of 60% or less); aspen patches; and/or any other openings – man-made or natural. The intent is to implement prescribed burns within meadows and openings, not within the densely forested areas or to change forest stand structure. Timing of burns would occur during fall, summer or winter with fall ignition being most likely. Riparian buffers would include 50’ around seeps, springs, wetlands, and intermittent streams; 100’ around perennial water.
- Construct a holding pen within the Santa Barbara campground so that if cattle do stray into the area, they can be held there for a short period of time until the

permittees can move them to the correct pasture. This would be constructed under a cost share agreement with the permittees.

- Modify the “please close the gates” signs to identify when it needs to be closed and why.
- Construct hiking stiles near gates to reduce the problems of gates being left open. These would be constructed and maintained by the Forest Service.
- Consider posting the grazing schedule at the campground and at the trailhead, so users would know where cattle are supposed to be. In turn, this may lead to better reports of when cattle are in the wrong location. It may also allow people who’d prefer not to see cattle to use trails in the pastures where cattle are not scheduled to be grazing at that time, reducing some conflict.

## Mitigation and Monitoring

### *Mitigation Measures*

To mitigate resource impacts, the following measures would be implemented under action alternatives. The mitigation measures included here are limited to those for which the Forest Service has authority. These mitigation measures have been used on previous projects and are considered to be effective in reducing environmental impacts. With full implementation of applicable Forest Plan standards and guidelines, project design criteria, and the prescribed mitigation measures, no potentially significant adverse environmental effects would be expected to occur.

**Soil, Water and Vegetation** – the objective is to safeguard water and soil resources under sustained forage production; manage sustained forage production and forage utilization by livestock while maintaining healthy ecosystems for all resource objectives. (Best Management Practices FSH 2509.22, Chapter 20, Range Management)

- Control livestock numbers and season of use (i.e. evaluate range readiness, assure only permitted livestock enter the allotment, monitor grazing utilization, assess soil and vegetation condition and trend).
- Control livestock distribution (i.e. salting, riding, existing fences and watering facilities).

**Heritage Resources** – the objective is to protect heritage resources (archaeological sites) from direct or indirect impacts caused by ground disturbing activities associated with the construction of range facilities.

- If any unrecorded sites are discovered during the course of project implementation, all project activities in the vicinity of the site(s) would cease and the District or Forest Archaeologist would be notified. Project would be modified or relocated to avoid impacts to cultural resource sites.

### *Monitoring*

Implementation monitoring would include periodic inspections to ensure compliance with term grazing permit terms and conditions. For example, range readiness would be

monitored before the grazing season begins, stubble heights may be measured during the grazing season and utilization would be monitored at the end of the season. Effectiveness monitoring would determine if grazing standards and guidelines, grazing prescriptions, and Allotment Management Plan practices are effective in accomplishing the planned objectives. For example, vegetation condition and trend would be monitored at approximately ten-year intervals.

## Comparison of Alternatives

**Table 3 Comparison of Alternatives**

| Item                | Alternative A<br>No Action/No Grazing | Alternative B<br>Proposed Action   |
|---------------------|---------------------------------------|--|
| Permitted Livestock | None                                  | 115-192 cow/calf units and 7-11 bulls  |
| Season of Use       | None                                  | 6/1-9/30   |
| Grazing Management  | N/A                                   | 6 area rotational  |
| New Improvements    | None                                  | <ol style="list-style-type: none"> <li>1. Construct two new drift fences to separate Middle Fork from Upper Bottoms. Reconstruct one drift fence between West Fork and Upper Bottoms.</li> <li>2. Use herding and salting to achieve better distribution of livestock, proper timing and intensity of grazing, and compliance with grazing schedules.</li> <li>3. Implement prescribed burning within approximately 1,135 acres of the allotment in 36 acres in grassland, 80 acres in Gambel’s oak, 21 acres in aspen, 64 acres in Douglas-fir, 35 acres in Engelmann spruce, 670 acres in ponderosa pine, 54 acres in spruce fir, and 174 in white fir vegetation types.</li> <li>4. Construct a holding pen within the Santa Barbara campground so that if cattle do stray into the area, they can be held there for a short period of time until the permittees can move them to the correct pasture. This would be constructed under a cost share agreement with the permittees.</li> <li>5. Modify the “please close the gates” signs to identify when it needs to be closed and why.</li> <li>6. Construct hiking stiles near gates to reduce the problems of gates being left open. These would be constructed and maintained by the Forest Service.</li> <li>7. Consider posting the grazing schedule at the campground and at the trailhead, so users would know where cattle are supposed to be.</li> </ol> |

Figure 1. Santa Barbara Allotment and Pasture Location map

