

ALLOTMENT MANAGEMENT PLAN

FOR


**Bruno Allotment**

Douglas Ranger District

CORONADO NATIONAL FOREST

Prepared By:   
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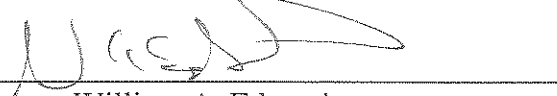
Date: 04/20/2011

Recommended By:   
Joseph E. Harris  
Range & Watershed Staff

Date: 04/21/11

Agreed To By:   
IV Bar, Inc  
Permittee

Date: 7-27-11

Approved By:   
William A. Edwards  
District Ranger

Date: 5/4/2011

## **Introduction**

The Bruno allotment is located in the southern portion of the Chiricahua Mountain Ecological Management Area (EMA) of the Coronado National Forest. It lies along the western foothills of the Pedregosa Mountains south of the Lower Rucker allotment in lower Bruno Canyon. The allotment is comprised of four large pastures and a small holding pasture. The allotment is approximately 7,526 acres of which approximately 5,440 are considered capable for livestock grazing or 72%. Approximately 28% of the allotment has slopes over 40% and is considered non-capable for livestock grazing.

Rangeland vegetation was assessed in 2004 using the Parker 3-step methodology and determined to be fair at two monitoring locations and poor at one site. Riparian vigor is fair and tree recruitment is low in Bruno Canyon.

Soil stability at all sites is improving as evidenced by increases in litter and decreases in bare soil. Soil condition is 93% satisfactory. Areas with compacted soils and poor vegetation condition are related to livestock concentration in areas where supplements are placed.

Under the Coronado Forest Plan most of the allotment lies within Forest Management Area (MA) 4, which allows for livestock grazing, wildlife habitat, and fuelwood harvest. North Fork Canyon of Bruno, Lower Bruno, and other drainages to the north and south are classified as MA7, and are designated as riparian areas.

## **Recent Management**

A new term grazing permit was issued to IV Bar Inc. in January of 2010. This permit is for 240 cow/calf pairs for 6 ½ months between 10/16 and 04/30 not to exceed 2,052 AUM's.

The permittee currently runs predominantly Braford cattle. However, due to market conditions, the permittee is planning to transition to a black Angus based herd which may have implications in terms of livestock use on rougher portions of the allotment. The allotment is permitted for 240 cow/calf pairs from October 16 to April 30. Cattle are rotated between three primary pastures over the course of the grazing season. The North Lower Bruno pasture is seldom used because it does not have reliable water. Cattle are removed from the Forest during the summer growing season. Allotment management consists of placing 200 cattle in the upper North Fork Pasture in October. In early January, gates to the Middle Holding pasture are opened and cattle are held there for a couple of weeks, at which time the herd is divided between the Meadow and Lower Bruno pastures for the rest of season. In February, bulls join the herd, and possibly additional cows depending on range conditions. The main management issue with this allotment is the need to improve distribution in order to take pressure off of ridges and canyon bottoms where cattle tend to concentrate.

## **Issues, Concerns, & Conflicts**

The following issues were identified during the Environmental Assessment (EA) through field visits to the allotment, discussions with the permittee, consultation with Forest resource specialists, and by soliciting comments from interested publics:

The North Bruno Pasture is frequently unusable due to the lack of reliable water. The only stock water available is off of the forest. The pasture is also very brushy and rocky which greatly limits the use of the pasture. The allotment is watered by 7 earthen and concrete dams, of which only half provide stock water throughout the season. The Bruno Well, storage, and pipeline provide water to the Meadow, Lower Bruno, and Middle Holding pastures. The pipeline extends 1.0 mile below the well and into the Meadow pasture. Most fences, interior as well as boundary fences, are in satisfactory condition.

### **Goals and Objectives**

The Coronado National Forest Plan has identified goals for the range, wildlife, soil, water and lands, wilderness and recreation programs on the Forest (Forest Plan pp. 9-11). These goals can be found on page 5 of the Environmental Assessment for the Bruno allotment published in March 2008.

Based on Forest Plan goals and site-specific knowledge of the allotment, the following objectives constitute the desired condition for the analysis area:

- Stocking rate is consistent with annual forage production and use is monitored annually. Management controls livestock use and distribution so that sufficient herbaceous vegetation is retained to protect soils and provide herbaceous wildlife cover; zones of heavy use are minimized.
- Ecological sites within the allotment have stable soils, functional hydrology and support functional biotic communities. All areas are at or moving toward their ecological potential.
- Native vegetation in riparian bottoms is a diverse mix of perennial grasses, forbs, shrubs and trees. Recruitment of young trees is occurring. Riparian bottoms throughout the allotment provide suitable year-round habitat for species dependent on herbaceous cover.
- Mesquite encroachment is reversed in western portions of the allotment at lower elevations.
- Areas of historic heavy livestock use have increasing ground cover and litter and stable soils.
- Occupied habitats for threatened, endangered, sensitive and management indicator species are maintained or improved, and recovery objectives are being met.
- All grazing improvements necessary for management on the allotment are in proper working order and are contributing toward improved livestock distribution and pasture reliability.

### **Grazing Strategy**

Initially, stocking will be maintained at 200-220 cow/calf pairs until the permittee can achieve better distribution in North Bruno, Meadow, and Lower Bruno pastures. Once improved distribution and utilization are demonstrated, stocking will be allowed to increase.

Grazing will be authorized on the allotment using rotational grazing in order to incorporate growing season rest or deferment to allow for grazed plant recovery. The

sequence and timing of pasture moves and entry and exit from the allotment would be based on monitoring of range readiness, ecological condition, water availability and utilization.

Forage utilization will be managed at a level corresponding to light to moderate intensity in order to provide for grazed plant recovery, increased plant vigor, and retention of herbaceous litter to protect soils and provide forage and herbaceous cover for wildlife. Consistent patterns of utilization in excess of 45 percent of key species in key areas would be used as a basis to modify management practices or take administrative actions necessary to reduce utilization in subsequent grazing seasons.

The number and class of livestock will be allowed to vary depending on resource conditions and management objectives, provided that annual use does not exceed the AUMs authorized or the season of use identified for the allotment. Annual adjustments would be documented and authorized in annual operating instructions. Depending on prevailing climate, resource conditions, management needs and permittee preference, actual use may be less than authorized in some years.

### **Mitigation**

To mitigate resource impacts, the following measures will be implemented. These practices have been demonstrated to be successful when used on similar projects and are considered effective at reducing environmental impacts. They are consistent with applicable Forest Plan standards and guidelines, Best Management Practices and the terms and conditions and conservation measures of applicable U.S. Fish and Wildlife Service Biological Opinions. Implementation of the mitigation measures and design criteria is intended to prevent the occurrence of potentially significant environmental impacts.

*Soil, Water and Vegetation:* The objective is to mitigate effects of livestock grazing and facility construction through the use of Best Management Practices and adaptive management. Practices include, but are not limited to, the following.

- Utilization of key upland herbaceous forage species in key areas will be managed to achieve the goal of light to moderate grazing as a pasture average. The objective is to protect plant vigor, increase herbaceous residue needed for soil protection and to increase herbage producing ability of forage plants. A utilization guideline of 45 percent use of key species in key areas will be used to achieve this objective.
- Management practices will be used to achieve proper distribution or lessen the impact on sensitive areas. Practices include herding, salting and controlling access to waters. Salt will be placed on good feed, one quarter to one half mile from waters and salting locations will be moved annually. Placement of liquid or bulk supplements will require prior approval of the District Ranger.
- No hay will be placed on Forest lands in order to minimize the introduction of weeds.

*Wildlife:* The objective is to mitigate impacts to wildlife from livestock grazing and from disturbance associated with maintenance and construction of range facilities.

- All water developments will include wildlife access and escape ramps. Waters will be kept available to wildlife year round.
- All new and reconstructed fencing will be built to Forest Plan standards (Forest Plan, p. 35) to provide for wildlife passage through the fence. At a minimum, this will be a 4-strand fence with smooth bottom wire 16 inches off of the ground and a total height of 42 inches or less.
- Range construction projects will be designed to avoid the destruction of agaves. If impacts to agaves are unavoidable, no more than 1 percent of agaves within 800 meters of a project are to be impacted. The objective is to avoid impacts to lesser long-nosed bat food resources.
- All proposed range improvements will be evaluated by a qualified wildlife biologist for effects to threatened, endangered or sensitive species prior to any ground-disturbing activities. Facilities will be designed and constructed to have no adverse effect on listed species.
- Within areas meeting the definition of high quality Mearns' quail habitat, herbaceous vegetation will be managed to maintain a minimum of 6 inches of herbaceous stubble height, which is generally interpreted as less than 45% utilization of key herbaceous species. The objective is to provide herbaceous vegetation as cover for quail and other wildlife.

*Heritage Resources:* The objective is to protect heritage resources (historic and prehistoric sites) from direct or indirect impacts caused by ground-disturbing activities associated with the construction of range facilities and to monitor the effects of cattle grazing on sites to ensure that adverse effects are not occurring. In general, these measures include the following:

- All structural range facilities will be surveyed by qualified personnel for heritage resources prior to any ground-disturbing activities. Facilities will be built or modified to avoid impacts to heritage sites. If unrecorded sites are discovered during the course of project implementation, activities will cease and the Forest or District Archeologist will be notified.
- Range facilities, if needed, will be located so as to avoid concentrations of livestock on identified heritage resource sites.
- No salting will occur within, or adjacent, to identified heritage sites.
- If impacts from grazing (e.g. excessive trampling, cattle rubbing against and knocking down standing features) are occurring to heritage sites, measures will be taken (e.g. fencing) to protect them.

#### **Livestock Distribution Aids**

- Use of salt, protein and other nutritional supplements are encouraged for livestock health and to improve livestock distribution. All supplements will be placed on forage, no less than ¼ mile from water, and away from natural concentration areas such as drainage bottoms, saddles, roads and trails. Supplement locations will be rotated periodically. No hay or bulk feed may be fed on Forest Lands.

- Water may be turned off to discourage livestock use in a portion of a pasture, but must be made available again once livestock leave the pasture.
- New water developments will be constructed in uplands to encourage livestock use out of the bottoms.
- Existing water lots around dirt tanks will be maintained in satisfactory condition to control livestock access to water.
- Regular herding of livestock will be used to improve livestock distribution.

### **Range Improvement Construction Priority**

The following structural improvements are proposed in order to improve livestock distribution and pasture reliability. These improvements have been identified as possible practices to assist in the achievement of desired conditions if management alone is not sufficient. Future monitoring may indicate that these projects are not necessary in which case they will not be constructed.

- Extend a pipeline 1/4 mile south from Bruno well to a 5,000 gallon storage and trough in the Meadow pasture.
- Extend the north Bruno pasture fence less than 1/2 mile north to a natural barrier. Forest Service will supply materials and permittee will construct.
- Install a 10,000 gallon storage and rainwater catchment in North Bruno pasture to provide reliable water.
- Construct a water lot around Meadow tank to control access by cattle and encourage use of the upper portion of Meadow pasture. Permittee will construct using Forest Service materials.
- Install a 5,000 gallon storage and drinker connected to the North Fork dam by a 1/4 mile pipeline to provide reliable water.

The following non-structural improvements have been proposed for this allotment in order to improve or maintain range condition:

- Treat 80 acres of mesquite invasion in the Lower Bruno pasture with either mechanical means or with herbicide. This was in the proposed action for this allotment dated 11/06/2007. However, it was not included in the final decision notice dated 12/19/2008. Additional NEPA documentation will be required before this project can be implemented. The treatment of native species with herbicide is contemplated in the Firescape Proposal currently under review.

If management actions indicate the need for additional physical improvements not listed above, further interdisciplinary (ID) review or NEPA analysis will occur. Based on the results of the ID review, the District Ranger will determine what NEPA analysis or documentation is required.

## **Range Improvement Maintenance**

Maintenance of all structural improvements listed in the term grazing permit is the responsibility of the permittee. Likewise, the maintenance of any new improvements as a result of this plan will be the responsibility of the permittee. All improvements must be kept in a serviceable condition. Given the increased probability of both prescribed fire and wildfire in this area for the foreseeable future, special attention should be given to protecting infrastructure from the affects of fire. In particular, fences should be kept clear of brush for 3 feet on either side of the fence and brush should be removed from the area around wooden brace and corner posts. The Forest Service will assist in supplying materials for maintenance needs if budgets allow. The Forest Service will also assist the permittee in planning for potential cost share and grant opportunities whenever possible.

FR717 is road is currently a single user access from the permittee's private land to a crucial water development on USFS property. This road is crucial to the maintenance of the Bruno well (120013) and associated water developments. Any improvements of or changes to the road, beyond routine maintenance, including any change to the basic design and structure of the road will be considered on a case by case basis.

## **Fires**

District wide, there is an effort to re-establish the role of fire on the landscape. Naturally ignited wildfires may be aggressively fought when they endanger life or property. However, when such fires do not threaten life or property they will most likely be fought with a containment strategy, being allowed to burn to the nearest roads or natural barriers. It is Forest Service policy to suppress all unplanned, human caused fires using the most appropriate tactics. Suppression may take the form of direct attack, indirect attack or containment.

Relatively large, prescribed fires will be an important tool in returning a more natural fire regime to the Forest. When planning prescribed fires, the permittee will be consulted, so that they will have time to make adequate preparations for their livestock operation, and so the rotation can be altered to allow fine fuels to accumulate. Burned areas will be allowed to rest for at least one growing season to ensure adequate recovery before livestock will be allowed access. In some cases, more than one season may be required for adequate recovery of forage resources depending on the available moisture. The Forest will coordinate rehabilitation efforts with the permittee in regards to both forage resources and infrastructure repairs whenever possible.

## **Monitoring**

The objective of monitoring is to determine whether management is being properly implemented and whether the actions are effective at achieving or moving toward desired conditions.

*Effectiveness monitoring* includes measurements to track condition and trend of upland and riparian vegetation, soil, and watersheds. Monitoring will be done following procedures described in the Interagency Technical Reference and the Region 3 Rangeland Analysis and Training Guide. These data will be interpreted to determine whether management is achieving desired resource conditions, whether changes in resource condition are related to management, and to determine whether modifications in management are necessary. Effectiveness monitoring will occur at a minimum of five-year intervals, or more frequently if considered necessary.

*Implementation monitoring* will occur yearly and will include such things as inspection reports, forage utilization measurements in key areas, livestock counts and facilities inspections. Utilization measurements are made following procedures found in the Interagency Technical Reference and with consideration of the Principles of Obtaining and Interpreting Utilization Data on Southwest Rangelands.

Utilization will be monitored on key forage species, which are native perennial grasses that are palatable to livestock. At a minimum, monitoring will include use in key areas, but may include monitoring outside of key areas. The Douglas District Range Staff Officer and the permittees will be responsible for monitoring livestock grazing utilization. Over time, changes in resource conditions or management may result in changes in livestock use patterns. As livestock use patterns change, new key areas may be established and existing key areas may be modified or abandoned in cooperation with the permittee(s).

Permittees are strongly encouraged to participate in monitoring activities. Records of livestock numbers, movement dates and shipping records will be kept by the permittee and will be provided to the District Range Staff annually.

Additionally, species-specific monitoring requirements are in place for Montezuma quail, Goshawk, Chiricahua leopard frog, and Mexican spotted owl, as described in the Grazing Strategy portion of the Environmental Assessment.

### **Travel Management**

The administration and operation of this allotment may involve the use of motorized access to some portions of the allotment and the associated infrastructure on either a one-time or a recurring basis. This need for access may be for maintenance of existing improvements or for the construction of new improvements, as well as other logistical needs. Access is usually provided on existing system roads. If access is required beyond that available on existing system roads, it may be authorized on a case by case basis by the District Ranger.