

ALLOTMENT MANAGEMENT PLAN


FOR

**Big Bend Allotment**

Douglas Ranger District

CORONADO NATIONAL FOREST

Prepared by:



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Rangeland Management Specialist

Date:

02/20/12

Recommended by:



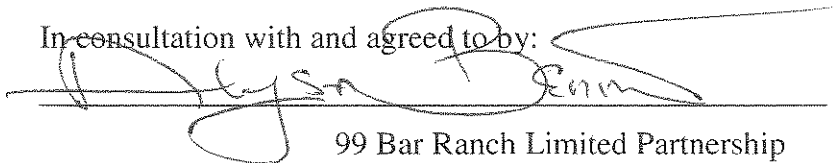
Joseph Harris

Range and Watershed Staff

Date:

02/20/12

In consultation with and agreed to by:

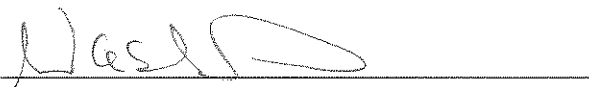


99 Bar Ranch Limited Partnership  
Permittees

Date:

02/29/12

Approved by:



William A. Edwards

District Ranger

Date:

03/19/2012

## **Purpose and Scope**

This Allotment Management Plan (AMP) will serve to provide the framework under which livestock grazing will be carried out on the Big Bend allotment. This AMP will implement the December 19, 2008 Decision Notice and Finding of No Significant Impact issued by William A. Edwards, District Ranger of the Douglas Ranger District - Coronado National Forest. This AMP will be incorporated into and be considered a part of the terms of the current Term Grazing Permit issued March 15, 2010 and any future Term Grazing Permits that are issued for livestock grazing on the Big Bend allotment. This AMP will remain in effect until it is either revised or replaced with a new AMP created for the allotment.

## **Allotment Description**

The Big Bend allotment is located in the southern portion of the Pedregosa Mountains. This area is well known for its high diversity of topography, wildlife and plants. Lower elevations support desert grasslands which transition into broadleaf evergreen woodlands and chaparral at middle elevations. The allotment is located in the southern section of the Chiricahua Mountain Ecological Management Area (EMA) of the Douglas Ranger District, in Cochise County. The allotment is bounded on the east by the Pedregosa allotment, on the north by the Barboot allotment and on the west by the Forest boundary. The allotment contains 8,254 acres, of which 6,130 are considered capable. Included within the Big Bend Allotment are 320 deeded acres.

The portions of this allotment identified as capable for livestock grazing are considered desert grassland with oak stringers along major drainages. Some of the lower portions of the major drainages have well developed Sacaton bottoms.

Big Bend Creek is the primary drainage associated with this allotment. The drainage immediately below this ranching operation flows into the Leslie Canyon National wildlife refuge.

The Coronado Forest Plan identifies the majority of the Big Bend allotment as Management Area (MA) 4, which emphasizes sustained harvest of livestock forage and fuel wood resources, while maintaining and improving wildlife habitat.

A trend study completed in September of 2005 using the dry-weight rank method found the allotment to be in fair range condition. Indications are that range trend has a static to upward trend because of conservative stocking in response to ongoing drought, along with management practices, pasture rotation, and additional range improvements. Soils in many sites show signs of impairment including compaction, erosion and lack of vegetative ground cover. Riparian vigor in Big Bend Canyon is rated as fair.

## **Recent Management**

The Big Bend allotment has been permitted to the 99 Bar Ranch Limited Partnership, LLLP for 400 cow/calf pairs or equivalent, November 1 to April 30 (up to 3,168 AUMs). This partnership has held the permit for this allotment since 1991. Recently the stocking rate has been as low as 50 head and as high as 250 for the season. The average stocking rate prior to 1953 was 351 AU's. During the early 1970's, range conditions deteriorated seriously on this allotment, with more than 5,150 acres in poor or very poor condition at that time. However by the 1980's the majority of the allotment was in fair to good

condition with only about 690 acres listed as poor or very poor condition. The current management is responsive to the need to match stocking rates with current conditions.

This allotment has five pastures that are used in a deferred rotation in order to provide spring rest in some pastures. The Big East pasture is used primarily during the dormant season. The Hunsaker, Packsaddle and Southwest pastures are rotated in a deferred rotation in order to achieve spring rest. The Beacon pasture has not been used in several years due to chronic lack of water. Between April and November, cattle are moved off of the Forest and placed on private land.

The Big Bend allotment is watered by 6 miles of pipeline from a private well located to the west. This water line provides water to most of the allotment except for the Beacon pasture. In addition there are 17 earthen and concrete dams of which 5 are considered unreliable. Both the interior and boundary fences are in satisfactory condition.

### **Issues and Concerns**

The primary management issue is the need to improve cattle distribution, away from bottoms and existing water developments.

### **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 Big Bend allotment published in August 2008.

Based on Forest Plan guidance and site-specific knowledge of the allotment, as well as permittee input, the following objectives constitute the desired condition for the allotment:

- Implement a framework for management that provides the flexibility to adapt to changing resource and administrative conditions.
- Ensure livestock grazing is continued on the Big Bend allotment and that it is in line with the capacity of the allotment.
- Ensure that livestock grazing on the Big Bend allotment is carried out in compliance with all applicable laws, regulations, Forest Service policies, the Coronado Forest Plan, and the June 27, 2008 NEPA Decision for this allotment.
- Implement livestock management practices which, under normal climatic conditions, will improve vegetative, soil, and watershed conditions across the allotment to achieve a fair, or better, range condition rating.
- Implement livestock management practices which, under normal climatic conditions, will sustain or improve riparian conditions in the lower end of the Big Bend Creek drainage.
- Implement livestock management practices which, under normal climatic conditions, will not have any adverse affects on any endangered, sensitive, and/or management indicator species.

- Livestock stocking 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 in fair range condition or better.
- Lower elevation sites are dominated by warm season native perennial grasses and are increasing in diversity of grasses, forbs and shrubs.
- Within dense chaparral stands, shrub density contributing to poor ecological condition and high fire hazards is reduced and herbaceous cover is increased.
- Native vegetation in evergreen riparian bottoms is a diverse mix of perennial grasses, forbs, shrubs and trees. Trees and shrubs show no evidence of high-lining or heavy browsing resulting in hedging and recruitment is occurring. Riparian bottoms throughout the allotments provide suitable year-round habitat for wildlife species dependant on herbaceous cover.
- 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 on the allotment are in proper working order and are contributing toward improved livestock distribution and pasture reliability.
- Management plans provide sufficient flexibility to allow management to adapt to changing resource conditions.

### **Management Strategy**

Use on the Big Bend allotment is authorized seasonally using rotational grazing. Grazing management will be designed to ensure that pastures are not grazed during the same season or plant growth stage in consecutive years in order to provide for plant recovery. The sequence and timing of pasture moves will be based on monitoring of range readiness, ecological condition, and utilization.

Permitted use will be 400 cow/calf pairs or equivalent, November 1 to April 30 (up to 3,168 AUMs). This continues current authorized use. The season of use will be extended by one month in the fall to provide some flexibility in entering and leaving the allotment. The number and class of livestock and season of use will be allowed to vary depending on resource conditions and management objectives, provided annual use does not exceed the total AUMs authorized. Such changes will be documented and authorized in the annual operating instructions (AOI) for the allotment.

In years of drought or excessive forage production, deviations from the normal deferred rotation system may occur to ensure that excessive grazing use will not occur or to take

advantage of above normal conditions. The annual grazing rotation schedule will be documented in the AOI.

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% 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 and season of use will be allowed to vary depending on resource conditions and management objectives, provided annual use does not exceed the total AUMs authorized or the season of use identified for the allotment. Annual adjustments will be documented and authorized in the AOI. 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 preclude 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 (FSH 2509.22) 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, provide herbaceous residue for soil protection and to increase herbage producing ability of forage plants. An annual utilization guideline of 30-45% 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 weed seeds.

*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 if possible.
- 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, the Forest will ensure that no more than 1% of agaves within 800 meters of a project are impacted. The objective is to avoid impacts to lesser long-nosed bat and Mexican long-nosed bat food resources.
- All proposed range facilities 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.
- The Forest will implement the Forest's Stockpond and Aquatic Habitat Management and Maintenance Guidelines for the Chiricahua leopard frog (*Rana chiricahuensis*). The objectives are 1) to minimize short-term impacts to frogs while allowing maintenance activities that maintain occupied habitats, and 2) to protect shoreline and emergent vegetation and to improve water quality.

*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 proposed 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 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 if possible.
- 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:

### *Structural*

- Develop a seep on the south slope of the Big East pasture by installing a spring box, ½ mile of pipe, 5,000 gallon storage and a trough. This development would be contingent on determination of water rights on the spring.
- Install a 12,000 gallon fiberglass umbrella rainwater catchment (trick tank) in the Beacon pasture. Installation will require the use of a dozer to repair washed out portions of FR 4862 to provide access to transport equipment and supplies.

### *Non-structural Improvements:*

- There are currently no non-structural improvements such as brush control or erosion control measures planned for this allotment.

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.

## **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. Two basic types of monitoring will be carried out on the Big Bend allotment in order to implement timely and effective adaptive management.

*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.

### **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.