ALLOTMENT MANAGEMENT PLAN

FOR

Barboot Allotment

Douglas Ranger District

CORONADO NATIONAL FOREST

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Permittee

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Introduction

The Barboot allotment is located in the southern portion of the Chiricahua Mountain Ecological Management Area (EMA) of the Coronado National Forest. The allotment lies entirely in Cochise County, Arizona. It is bounded on the east by the Hunt Canyon and Pedregosa allotments, on the north by the Bruno allotment and on the south by the Big Bend allotment. The allotment consists of approximately 11,002 National Forest acres, of which 6,328 acres are classified as capable for livestock grazing.

The allotment ranges in elevation from around 5,200 feet to 6,400 feet at the highest point. Most of the capable acreage falls within a desert grassland vegetation type, mostly on lower elevation uplands and south facing slopes. The north facing slopes are mostly a madrean encinal woodland vegetation type. The two riparian areas mapped out on the allotment are in fair to good condition. The riparian areas are in Hunt Canyon and Box Canyon.

The Barboot allotment is comprised of four large pastures. Three of these pastures, Chalkhill, Box and High Lonesome are used in a deferred rotation in most years. The Wildcat pasture is seldom used due to a chronic lack of water. The High Lonesome pasture is frequently inaccessible due to lack of water as well. The allotment is watered by a combination of 8 dirt tanks and two wells, the Riggs well (#122018) in the Box pasture and a private well in the Chalkhill pasture. The private land well in the Chalkhill pasture is connected via a pipeline across USFS land to another piece of private property in the Box pasture.

Rangeland vegetation was assessed in 2005 and determined to be in fair to excellent condition. Mesquite is encroaching in many portions of the allotment and this may eventually have an effect on range condition. Soil stability at all sites is improving as evidenced by increases in litter and decreasing bare soil. Soil condition is 100% satisfactory. Under the Coronado Forest Plan most of the allotment lies within Forest Management Area (MA) 4, which allows livestock grazing, wildlife habitat, and fuel wood harvest. The High Lonesome Draw, Hunt Canyon and Box Canyon riparian areas are in the MA7 or riparian classification.

Recent Management

The previous permit was for 450 Cow/calf pairs from 11/01 – 04/30 with no specification as to the number of AUMs. The permittee has had this allotment since 2000. During the tenure of the current permittee the average stocking rate has been 674 AUM's. The full permitted numbers were only run during two years and then only for a shortened season. This average is based on a review of actual use figures. The average stocking rate was 112 cow/calf pairs for 6 months during the last 9 years. This does not include the three years of personal convenience non-use the permittee took in the 2000 -2002 grazing seasons.

The grazing plan for the Barboot allotment has been to use it as a winter seasonal allotment depending on the availability of water for livestock. This allotment has not been capable of running the permitted numbers of livestock for the entire permitted season for the last ten years due to lack of dependable water throughout the allotment.

The environmental analysis was completed for the Bar Boot Allotment in August of 2008. A new term grazing permit was recently issued to the Bar Boot Ranch, LLC on January 1, 2010. The permit is not to exceed 3,168 AUM's which is equivalent to 400 cow/calf pairs from 10/01 – 04/30. Proper distribution of grazing pressure and lack of reliable water had been a recurring problem which resulted in a reduction of 396 AUMs over a slightly longer season.

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:

- Vegetative cover and recruitment of obligate riparian species in riparian zones
- Poor grazing distribution related to a lack of reliable water

The following actions will allow the riparian areas within this allotment to develop more stable banks with better vegetative cover and will allow for riparian obligate tree reproduction and establishment:

- A reduction of 396 AUMs.
- A limitation of 3,168 AUMs total during a grazing season window that is one month longer to allow the flexibility of stocking in October if needed
- Several proposed water developments

The development of the water infrastructure on this allotment is critical to any further increases in the grazing numbers. The current limitation is 275 cow/calf pairs for six months until the proposed water developments have been constructed.

Water developments are needed in the High Lonesome and Wildcat pastures in order to allow these pastures to be included in the normal rotation on a regular basis. This will enhance the reliability of the allotment for the permittee as well as the stewardship of the allotment in general. Without the use of these pastures on a regular basis, it will not be possible to stock this allotment with the full permitted numbers of livestock.

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 Hunt Canyon 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 and trees and shrubs show no evidence of high-lining or hedging. Riparian bottoms throughout the allotment provide suitable year-round habitat for species dependent 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 necessary for management on the allotment are in proper working order and are contributing toward improved livestock distribution and pasture reliability.

Grazing Strategy

A new 10-year term grazing permit has been issued to Barboot Ranch LLC on January 1, 2010 for 3,168 AUM's for the period of 6 months between 10/01 and 04/30. This is equivalent to 400 cow/calf pairs. However, the Decision Notice dated 12/19/2008 states that livestock numbers will initially not exceed 275 cow/calf pairs (2,178 AUM's). Once additional water is developed, additional AUM's will be added due to the increased livestock distribution and reliability of access to water.

Grazing will be authorized on the allotment using a deferred rest rotation strategy which will hopefully allow one pasture out of the four to be rested each grazing season. 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 significantly 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 (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, increase herbaceous residue needed for soil protection and to increase herbage producing ability of forage plants. A utilization guideline of 30-45 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.

The Decision Notice from 2008 approved three improvements:

- Pipeline from Hunt Canyon Well through Chalkhill to just below Boot Dam.
- Spring Development in High Lonesome
- Water Storage in the Wildcat pasture.

This list no longer reflects the current situation. The pipeline from the Hunt Canyon Well to the Boot Dam has been completed. The spring development in the High Lonesome pasture has been determined to not be feasible. The pipeline from the well in Hunt Canyon now ends on the private land in the south end of the Box pasture. The existing water source and pipeline on the permittee's deeded parcel are the only feasible source and delivery system for this improvement at this time.

As has been discussed with the permittee, a new pipeline could be extended to a new storage located in a saddle along the fence line between the Box pasture and the High Lonesome pasture with a ¼ mile pipeline to a new drinker in the north end of the High Lonesome pasture. In addition, another pipeline from this storage can be installed down the High Lonesome drainage to supply water to a drinker on the west side of the High Lonesome pasture. This will address the lack of permanent water in the High Lonesome pasture. This project is subject to a NEPA analysis by an interdisciplinary team.

The water storage and drinker in the Wildcat pasture is still a priority. This consists of a 12,000 gallon storage and associated rainwater catchment. This water development would provide dependable water to this pasture for the first time.

There are currently no non-structural improvements such as brush control or erosion control measures proposed 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. The necessity and feasibility of the improvement will be analyzed, and the ID review will consider the proposed improvement or improvements and site-specific environmental effects in the context of the overall project. Based on the results of the ID review, the District Ranger will determine whether supplementation or revision of the environmental analysis is necessary or whether further NEPA analysis 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.

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.