ALLOTMENT MANAGEMENT PLAN

FOR

Jackwood Allotment

Douglas Ranger District

CORONADO NATIONAL FOREST

Prepared By: _____ Date: 12/20/2017
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Agreed To By: _____ Date: 12-21-17
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Permittee

Approved By: _____ Date: 12/22/17
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INTRODUCTION

The Jackwood Allotment lies in the southeastern corner of the Chiricahua Mountain Ecological Management Area (EMA) of the Douglas Ranger District, in Cochise County. The allotment is bounded on the south and east by the Forest boundary. The Price Canyon Allotment is to the west and the Horseshoe Allotment is to the north. It is currently permitted to CTI, Inc., an Arizona corporation, for a total of 812 head of yearlings under an On/Off permit (406 On the Forest & 406 Off the Forest) from 11/01 – 04/30; a total of 3410 AUMs, to be grazed in lands 50% controlled by the permittee. The allotment consists of 10,832 acres, of which 10,301 acres are considered capable for livestock grazing. The current permittee acquired the Jackwood Allotment in November of 2003 for the present permitted number, although the name of the company has changed slightly from CTI, a corporation, and Arizona corporation to CTI, Inc., an Arizona corporation.

The allotment is composed of four pastures divided by steep topography and some drift fences. Two of the four pastures (Klaus & Old Farm) are composed of National Forest and deeded lands. The allotment is located on the east side of the Chiricahua Mountains on the west side of the San Simon Valley. Elevations range from approximately 4,400 feet on the eastern edge of the area to over 6,000 feet on May Day Peak. Most capable rangelands are found below 6,000 feet.

Rangeland vegetation condition has been evaluated several times in recent years, including 2004 – 2006 and most recently in 2013. In the first installment of monitoring, eighty-one percent (81%) of the allotment, primarily the higher elevation pastures, was found to be in fair or better condition and met Forest Plan standards for ecological condition. Lower elevations on the allotment appeared to be trending toward a drier plant community dominated by mesquite, snakeweed, annuals, and Lehman lovegrass (*Eragrostis lehmanniana*) at the time. As a result, vegetation condition on some lower elevation sites were considered poor. Soils were assessed in 2006 and were found to be 92% satisfactory and 8% impaired. The impaired soils typically occured on the same low, flat sites dominated by woody plants and with little vegetative ground cover. Plant composition, frequency and vigor were below what would be expected for the climax community. Production and utilization studies conducted during the same timeframe indicate that permitted use is within existing capacity.

In the fall of 2013, Rangeland Management Specialists from the Douglas Ranger District read the five long term vegetation trend clusters on the Jackwood Allotment. The purpose of this long term vegetation monitoring was to assess vegetation condition and trend as well as soil condition and trend. The first three clusters were initially established in 1953. Clusters four and five were established in 1971. All five long term vegetation trend clusters were established according to the Parker 3-step method. The measurement parameters collected in 2013 were plant frequency, dry weight rank, ground cover, fetch distance, and soil condition indicators. The condition of the sites were determined by the NRCS similarity index, which relates species composition to a presumed climax community.

Range condition based on the NRCS similarity index for the Jackwood Allotment was found to range from low to moderate similarity. The basis for the low and moderate condition scores are established around the lack of Lehmann lovegrass within the NRCS

site guide. Lehmann lovegrass is the most abundant species within each of the five long term vegetation trend clusters ranging from 32-62% of the species composition. Although the similarity index illustrated a decreasing trend for species composition due to Lehmann lovegrass, the ground cover data remained stable with very little to no change.

An allotment trend study was also conducted in 1953 and indicated that approximately 100% of the allotment was in fair range condition. In 1972, 5,078 of the 10,289 acres were considered capable range within the allotment. Of these 5,078 acres, 2,701 acres were determined to be in poor range condition and the balance in fair range condition. The trend study conducted in 2004 indicated a downward trend in vegetation due to encroachment of Lehman lovegrass, mesquite, annuals and an increase of bare ground. The soil conditions have a stable to upward trend; possibly due to increased biomass associated with Lehman lovegrass. The most highly impacted areas are the bottoms of canyons, with side slopes showing little use and stable soils. The 1993 production/utilization study recommended a stocking level of 695 yearlings for the same grazing season (2,918 AUMs). The production/utilization study conducted in the spring of 2005 estimated stocking level at 954 yearlings or 3,972 AUMs. The following year P/U study recommended an estimated stocking of 686 yearlings or 2,857 AUMs.

A soils assessment in 2006 found 94% of the soils in the Jackwood Allotment in satisfactory condition, but indicated that vegetation composition has shifted towards a drier, less productive plant community.

Soil condition was assessed in 2013 using NRCS soil health indicators. Satisfactory is the highest rating and indicates that the site is fully functioning with respect to hydrology, soil stability, and biotic integrity. Soil condition on the allotment is 100% satisfactory.

One riparian transect is located in the Jackwood Allotment. This transect has not been evaluated by a Riparian Area Survey and Evaluation System since 2001 when it was found to be in poor to fair condition. Rangeland condition in the evergreen riparian vegetation is moderately high with a static trend.

Fire suppression has changed the vegetation composition by allowing a build up of brush and ladder fuels in the higher elevations, and the encroachment of woody species into the grasslands at lower elevations. There have been several wildfires in recent years (2008, 2011) that have helped to reduce the woody species encroachment, however.

Recent Management

The Jackwood Allotment has been permitted for a total of 812 yearlings, November 1 to April 30. Two of the pastures (Klaus and Old Farm) have been part of a larger ranch operation consisting of 50% Forest Service administered lands and 50% state and private holdings controlled by the permittee. Taken together, these intermingled lands form a natural grazing unit, so their use has been authorized using on/off provisions in the permit. These pastures have been used season-long by individual herds. A third herd has been rotated through the two remaining pastures (Upper Jackwood and Lower

Jackwood), which, except for 180 acres in Lower Jackwood, are entirely on the Forest. Use on the Forest has been limited to 406 head through special terms and conditions in the grazing permit, with the remaining use on non-federal lands. The timing of pasture changes has been determined by forage use monitoring and water availability. The entire allotment has been rested during each summer growing season (May-October). The allotment has been dependent on earthen stock tanks and in dry years, water availability has limited the ability of cattle to use the entire allotment.

Prior to the late 1970's, the Jackwood Allotment was grazed year-round and lower range conditions occur in flatter areas where livestock historically (pre-1976) concentrated under year-round use. Although this type of use no longer occurs, in some of these areas soils may have lost their inherent productivity and may not recover for many years.

The actual use on the Jackwood Allotment has been representative of the permitted and authorized numbers. The majority of the time since 2008, however, the actual class of livestock placed on the allotment has been cow/calf pairs instead of yearlings, but still within the allowed AUM range. Only a twice did partial non-use occur due to range improvement damage since the Decision Notice was signed in 2008. The Jackwood Allotment grazing is winter seasonal to allow for summer growing season rest for the 4 pastures that make up the allotment. The actual rotation dates are based on ecological conditions, water availability and the Forest Service/Permittee goals.

Issues, Concerns, & Conflicts

The following issues were identified during the Environmental Assessment (EA), completed in 2008, through field visits to the allotment, discussions with the permittee, consultation with Forest resource specialists, and by soliciting comments from interested publics:

Wildlife, soil and watershed condition, upland vegetation and heritage resources: Continued grazing in the project area could result in effects, either positive or negative, to these items, depending on the timing, intensity, frequency and duration of grazing and other management activities.

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 Jackwood Allotment published in April 2008. Furthermore, based on these goals and site-specific knowledge of the allotment, a list of objectives that constitute the desired condition of the allotment can be found on page 6 of the Environmental Assessment.

In keeping with the Coronado National Forest Plan goals and guidelines for the management areas within the allotment, more specific conditions for the Jackwood Allotment are addressed:

- Improve range trend by increasing perennial native plant cover, in particular canyon bottoms and areas designated as impaired soils.

- Control or mitigate the encroachment of Lehman lovegrass and other undesirable plants as well as noxious weeds onto Forest land through grazing and pasture rotation.
- Stock the allotment annually according to estimated production capability and based on water developments providing stock water, fences and gates being in satisfactory condition, and climate conditions.
- Allotment is self-monitored by permittee and only needs to be spot checked.
- Communication between the permittee and the Forest Service concerning management and conditions within allotment will be timely and ongoing.
- Keep all range improvements needed for grazing management in functional working order.
- Manage grazing and construction activity with full consideration for wildlife and cultural resources.
- Other impacts (UDAs, dispersed campsites, & RVs) to the range and watershed resource are monitored by respective Forest function and/or agency.

Review of Recent NEPA Decisions

The Jackwood Allotment Environmental Analysis (EA) Decision Notice (DN) and Finding of No Significant Impact (FONSI) were signed on June 2nd, 2008. That decision underwent interdisciplinary review on July 18, 2017 as per Forest Service Handbook direction [FSH 1909.15(18) and 2209.13 (96)]. The findings of the review team were that management since the initial NEPA 2008 decision is meeting standards and achieving or moving towards desired conditions, and that there is no new information to demonstrate significant effects not previously considered. This supplement to the existing Allotment Management Plan (AMP) implements the continuation of the 2008 NEPA decision, and is part of the terms and conditions of the Jackwood Allotment term grazing permit.

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Grazing Strategy

Permitted use will be 406 yearlings or equivalent for six months between October 15 and May 15 [Up to 1705 animal unit months (AUMs)]. The herds will most likely be comprised of cows and cow/calf pairs, but the stocking rate won't exceed the AUM limit. The permit will also include special terms and conditions providing for the grazing of an additional 1705 AUMs on non-forest lands controlled by the permittee (on-off permit). Rotation will be similar to current management, with three herds grazing on the allotment (one in each of the on/off pastures, and the third rotated between the Upper and Lower Jackwood pasture).

Use on the Jackwood Allotment will be winter seasonal to allow for annual summer growing season rest. On the allotment, the sequence and timing of pasture moves will be based on monitoring of range readiness, ecological condition, 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 annual utilization in excess of 45% of key species in key areas will be used as a basis to modify management practices or take administrative actions necessary to reduce utilization in subsequent grazing seasons.

Mitigation

To mitigate resource impacts, the following measures will be implemented. These practices have been demonstrated to be successful when used on similar allotments 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, 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 noxious weeds.

Wildlife: The objective is to mitigate impacts to wildlife from livestock grazing and from disturbance associated with maintenance and construction of range facilities. These measures include features developed through the interdisciplinary NEPA process to mitigate effects to wildlife in general, and species specific conservation measures (shown in bold) for listed species.

- 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.
- Within areas meeting the definition of high quality Montezuma (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 percent utilization of key perennial grass species. The objective is to provide herbaceous vegetation as cover for quail and other wildlife.

Conservation Measures:

- Range construction projects will be designed to avoid the destruction of agaves. If impacts to agaves are unavoidable, the Forest will insure that no more than 1 percent of agaves within 800 meters of a project are impacted. The objective is to avoid impacts to lesser long-nosed bat food resources.
- All proposed waters and fences 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.
- Range improvement projects within Mexican Spotted Owl protected activity centers (PACs) or Goshawk post-fledging family areas (PFAs) will be constructed outside of the breeding season for these species (March 1-September 30), or after a Forest wildlife biologist has determined that nest sites or territories are not occupied.
- 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.
- Supplements will be packed into remote country, and not simply dumped out of a truck where it is convenient, as this does not promote improved livestock distribution.
- 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 improved livestock distribution.

Range Improvement Construction Priority

1. It was planned to extend a pipeline from the Forest boundary to a private parcel in the middle of Lower Forest pasture in order to improve reliability of the pasture and improve distribution. Though the project only crossed Forest land, its purpose would have been influential to the pasture as a whole. The pipeline and labor were to be supplied by the permittee. This project was not completed, but the purpose was accomplished by a different pipeline running east to the forest boundary and was accomplished in 2009.

Range Improvement Maintenance

Maintenance of all structural improvements listed on 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. The forest service will assist in supplying materials if budgets allow.

Fires

District wide, there is an effort to re-establish the role of fire on the landscape. Naturally ignited wildfires will only be aggressively fought when they endanger life or property. Fires on other portions of the allotment will be fought with a containment strategy, being

allowed to burn to the nearest roads or natural barriers. When planning prescribed fires, the permittee will be consulted, so that he will have time to make adequate preparations for his livestock operation, and so the rotation can be altered to allow fine fuels to accumulate. Burned areas will be allowed to rest for 1-2 growing seasons to ensure adequate recovery before livestock will be allowed access.

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 us 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 Mearns' quail, Goshawk, Chiricahua leopard frog, and Mexican spotted owl, as described tin the Grazing Strategy portion of the Environmental Assessment.