

**ALLOTMENT MANAGEMENT PLAN**

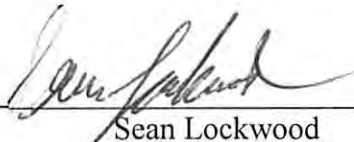
FOR THE

**Agua Caliente ALLOTMENT**

NOGALES RANGER DISTRICT

CORONADO NATIONAL FOREST

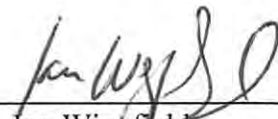
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Date: 4-12-10

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## **INTRODUCTION**

A National Environmental Policy Act (NEPA) analysis of ongoing livestock grazing on the Agua Caliente Allotment was completed in 1995. That decision underwent interdisciplinary review in 2009 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 1995 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.

The Agua Caliente Allotment is permitted to Ian Wingfield for 110 cattle from 11/01-04/30. This allotment management plan (AMP) implements the continuation of the 1995 NEPA decision and will be made a part of the terms and conditions of the Agua Caliente Allotment term grazing permit.

The Agua Caliente Allotment is located at the southwest corner of the Santa Rita Mountains. It is bordered on the north, east and south by the Coronado National Forest boundary and on the south by state and private lands. The Santa Rita Mountains run north-south through the eastern portion of the allotment. Elevations range from approximately 3,000 feet to nearly 8,500 feet. Topography is moderately rough and broken. Agua Caliente and Montosa Canyons run northwest to southeast through the central and southern portions, respectively, of the allotment.

The Agua Caliente Allotment consists of approximately 9,234 Forest acres, of which 3,627 acres are considered capable for grazing. Under current management there is one main pasture, Agua Caliente. Most of the capable portion of the allotment is classified as Natural Resources Conservation Service (NRCS) granitic or loamy hills ecological sites in the 12-16 inch precipitation zone.

## **GOALS & OBJECTIVES**

The Coronado National Forest Land and Resource Management Plan (LRMP, page 10) contains the following goals for the range program on the Forest:

- Restore rangeland to at least moderately high ecological condition (70% to 75% of potential production, fair range condition) with stable soil and a static-to-upward trend.
- Produce livestock products consistent with other resources and uses.
- Eliminate grazing from areas not capable of supporting livestock without significant detriment to range or other resources.
- Balance permitted grazing use with grazing capacity.
- Provide habitat for wildlife populations consistent with the goals outlined in the Arizona Department of Game and Fish Comprehensive Plans and consistent with other resource values.

- Provide for ecosystem diversity by at least maintaining viable populations of all native and desirable nonnative wildlife, fish and plant species through improved habitat management.
- Improve the habitat of and the protection for local populations of Threatened and Endangered species to meet the goals of the Endangered Species Act of 1973.
- Provide a favorable flow of water in quantity and quality for off-forest users by improving or maintaining all watersheds to a satisfactory or higher level.
- Allow the use of available National Forest lands for appropriate public or private interests consistent with National Forest Policies.

The grazing permit and AMP for the Agua Caliente Allotment support these goals by providing for the following specific objectives, which constitute the desired condition on the allotment:

- Grazing activities contributing to impaired soil quality are corrected through improved distribution.
- Ecological condition as expressed by the number of acres in fair or better condition is maintained or improved.
- Range production and movement toward site potential for each soil/vegetation site is increased.
- All grazing improvements on the allotment are in proper working order.
- Adequate rest periods are provided in all pastures.
- Livestock use is balance with existing capacity.

The purpose of this AMP is to describe on-the-ground management practices that will achieve the above goals and objectives.

### **MANAGEMENT STRATEGY**

Adaptive management will be the guiding strategy on the Agua Caliente Allotment. This approach is intended to provide flexibility to adapt management to changing circumstances and resource conditions. If monitoring indicates that desired conditions are not being achieved, the Forest Service and permittee will cooperatively modify management practices. Modifications may include the number of livestock authorized in annual operating instructions (AOI), dates for grazing, class of animal, pasture rotations, and grazing systems. Any changes will not exceed the limits for timing, intensity, duration and frequency analyzed in the 1995 Environmental Assessment (EA).

Grazing will be authorized on the allotment under the following terms and conditions.

**Timing:** Although the allotment is permitted for seasonal use, individual pastures will be grazed at varying times during the year. Most use for a given pasture will occur during the dormant season and care will be taken to limit repeated growing season use.

**Intensity:** Forage utilization will be managed at a level corresponding to light to moderate intensity (maximum of 45% annual utilization in key areas) in order to provide for grazed plant recovery, increased herbage production and retention of herbaceous litter

to protect soils and provide forage and cover for wildlife. Consistent patterns of utilization in excess of 45% of key species in key areas may be used as a basis to modify management practices or take administrative actions necessary to reduce utilization in subsequent grazing seasons. Areas that are dominated by exotic grass species such as Lehman's lovegrass will be allowed a maximum utilization of 55% to take advantage of the high production and regrowth capacity of these grasses.

**Duration:** The allotment is one pasture. Typically the pasture will be used for a few months when livestock is allowed in the allotment.

**Frequency:** Livestock grazing will be managed under a deferred use/rest rotation system to insure adequate rest following use. After a pasture has received adequate rest it will be available to be grazed again.

Use on the Agua Caliente Allotment will be authorized seasonal using a deferred rest rotation grazing system to insure rest following use. Actual rotation dates are based on ecological conditions, water availability and utilization within each pasture and Forest Service/permittee goals. Rotation dates are developed by the permittee and Forest Service Range Staff and authorized in the AOI.

Numbers authorized in the AOI may fluctuate from year to year based on such variables as precipitation patterns and resulting forage production, changes in the grazing system or class of animal, potential impacts of wildfire, and the permittee's performance in implementing proper grazing practices as indicated in the AMP. Records of livestock numbers, movement dates, shipping records, and rainfall dates and amounts will be kept by the permittee and provided to the USFS annually.

## **MITIGATION**

To mitigate resource impacts, the following measures will be implemented. They are consistent with applicable Forest Plan standards and guidelines, Best Management Practices and the terms and conditions and conservation measures of existing biological opinions. Implementation of the mitigation measures, in combination with project design criteria, should preclude the occurrence of potentially significant environmental impacts.

**Soil, Water and Vegetation.** The objective is to mitigate effects of livestock grazing management and to assure that management is responsive to changing resource conditions. The objective will be accomplished 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, provide herbaceous residue for soil protection and to increase herbage producing ability of forage plants. A utilization guideline of 45% use of key species in key areas will be used to achieve this objective.
- The Forest Service and permittees will jointly prepare annual operating plans that consider current conditions and management goals. Periodic field checks including stock counts, range readiness and utilization monitoring will be used to

identify needed management adjustments. The objective is to assure achievement of resource and management objectives.

- Necessary techniques 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, at least one quarter mile from water, and salting locations will be moved annually. No hay or bulk feed will be placed on Forest lands. Any hay used on Forest system lands, such as to feed livestock in holding corrals, will be certified weed free.

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

- All new or reconstructed water developments will include wildlife access and escape ramps that make contact with the side of the trough or open storage tank from the water to the top of the trough or tank. A pole or board sticking out into the water does not constitute an escape ramp.
- All new 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.
- All proposed range facilities will be surveyed for 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 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% of agaves within 800 meters of a project are impacted.
- 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.
- Stock pond maintenance activities will be conducted in compliance with the Forest's stock pond management and maintenance guidelines for the Sonoran Tiger Salamander and the Chiricahua leopard frog in order to reduce effects to these species as a result of stock pond maintenance activities. The objective is to maintain occupied habitats for the species. The permittee is required to notify the district at least 30 days prior to cleaning a stock tank to allow time for a pre-work inspection.

**Heritage Resources.** The objective is to protect heritage resources (historic and prehistoric sites) from impacts caused by range construction projects or livestock concentration.

- All proposed range facilities will be surveyed 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 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.

**Livestock Distribution.** The objective is to make appropriate use of available forage.

- Use of salt, protein, and other nutritional supplements is encouraged for livestock health and to improve livestock distribution. All supplements will be placed on forage, at least ¼ mile from water, and away from natural concentration areas such as drainage bottoms, saddles, roads and trails, unless exception is granted by the Forest Service. Supplement locations will be rotated periodically. Supplements will be packed into remote country when necessary.
- No hay or bulk feed may be fed on Forest lands (see Soil and Water Mitigation section above).
- 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. 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 IMPROVEMENTS**

No new range improvements are planned for the Agua Caliente Allotment as part of the Section 18 NEPA Review. If new improvements are proposed in the future, they will be analyzed in an appropriate NEPA document and made a part of the Term Grazing Permit through an approved Permit Modification. Construction would comply with the management practices identified in this AMP and would meet Forest Service standards. Any required biological or archaeological clearances would be obtained prior to the authorization of new improvements.

Maintenance of all structural improvements listed in the term grazing permit is the responsibility of the permittee. All improvements must be kept in a serviceable condition.

### **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.** The Forest Service will take the lead on collecting long-term condition and trend data in cooperation with and assistance from the permittee. 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<sup>1</sup> and the Region 3

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<sup>1</sup> Sampling Vegetation Attributes, Interagency Technical Reference. 1996. Cooperative Extension Service, USDA Forest Service and Natural Resources Conservation Service,

Rangeland Analysis and Training Guide.<sup>2</sup> 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 least once over the ten-year term of the grazing authorization, or more frequently if considered necessary.

Long term trend monitoring will include, but is not limited to measurements to track upland range condition and watershed condition (hydrologic function). Techniques may include, but are not limited to dry weight rank, comparative yield, pace transects, Parker 3-step, repeat photography, and clipping and weighing.

**Implementation Monitoring.** The Forest Service in collaboration with the permittee will collect implementation monitoring on an annual basis. Data may include precipitation, forage production, condition of improvements, actual use, and utilization. Utilization measurements are made following procedures found in the Interagency Technical Reference<sup>3</sup> 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. Utilization will be measured after the growing season. However, grazing intensity will be monitored throughout the grazing period in order to practice adaptive management and make necessary management changes needed for plant development and recovery.

At a minimum, monitoring will include use in key areas, but may include monitoring outside of key areas. 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. The Forest Service in cooperation with the permittee will reassess existing key areas and/or monitoring locations and agree upon where monitoring should occur.

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and USDI Bureau of Land Management.

<sup>2</sup> Rangeland Analysis and Management Training Guide. 1995. USDA Forest Service, Southwestern Region.

<sup>3</sup> Utilization Studies and Residual Measurements. Interagency Technical Reference. 1996. Cooperative Extension Service, USDA Forest Service and Natural Resources Conservation Service, and USDI Bureau of Land Management. Revised 1999.