

Allotment Management Plan

Walnut Creek

Chino Valley Ranger District,

Prescott National Forest

USDA Forest Service

Yavapai County, Arizona

Introduction

The allotment supports a mixture of pinyon-juniper and ponderosa pine vegetative communities differentiated by soil parent material and/or slope. The pinyon-juniper vegetative communities cover approximately 57% of the allotment. Dominant perennial grass species include blue grama, side-oats grama, and long-tongue muhly while the dominant tree species are pinyon pine and Utah juniper. Herbaceous conditions are fair to excellent within this community type.

While perennial grass cover is generally below terrestrial ecosystem survey (TES) potential, species diversity and woody species canopy cover is near potential creating good vegetation ground cover (VGC) levels. Soils are variable depending on slope, aspect, and parent material. Soil conditions are generally satisfactory throughout as indicated by good VGC levels that are providing for functional hydrologic capability, soil stability, and functional nutrient cycling.

The ponderosa pine vegetative community covers roughly 42% of the allotment. The dominant tree species is ponderosa pine and gambel oak or ponderosa pine and Utah juniper with dominant perennial grass species of side oats and blue grama. Herbaceous conditions are poor to excellent in this community type; this is attributed to inherent variability resulting from differences in aspect and soil parent material. Much of this community is on topography that limits livestock accessibility and this is not significantly disturbed by livestock grazing. Soils are in generally satisfactory condition.

Perennial intermittent riparian ecosystems are found throughout the allotment along Apache and Turkey Creek. The allotment also contains ephemeral drainages that contain some perennial pools along Hyde and Pine Creek. The perennial intermittent drainages and perennial pools support riparian vegetation such as willows, cottonwood, ash, sedges and rushes as well as a variety of grasses and forbs. The ephemeral channels do not support riparian plant species.

Objectives

Desired conditions for this project are derived from the general Prescott Forest Plan goals of “managing forest lands with a primary emphasis on healthy, robust environments with productive soils, clean air and water, and diverse populations of flora and fauna.

Resource goals and objectives on the Walnut Creek Allotment are:

- Continue to improve/maintain soil conditions by striving to attain/maintain effective litter and vegetative basal area (vegetation ground cover).
- Continue to manage for a diverse population of flora that provides for watershed health, wildlife habitat, and forage for herbivores.
- Continue to allow riparian vegetation to reach or move towards potential.
- Continue to maintain the hydrologic system necessary to maintain state water quality standards.

Grazing Management

A. Permitted Numbers, Season of Use, and Head Months

| Allotment | Grazing System | Grazing Season | Head Months | Equivalent Cattle | Horses |
|--------------|---|------------------------|-------------|-------------------|--------|
| Walnut Creek | 4 pasture deferred /rest rotation | Yearlong 3/1 – 2/28 | 1560-3000 | 126-246 | 4 |

- **Permitted Use:** This plan incorporates management flexibility by providing a range of allowable numbers (126 – 246 cattle) that reflects variations in resource conditions and management objectives over time. It also allows for adjusting duration, timing and frequency of allotment/pasture use based on monitoring of forage availability, utilization, and resource conditions. Generally stocking would be adjusted within the range of numbers, although stocking could be less than the range in any given year to allow for extreme fluctuations of weather and available forage. Specific numbers of livestock (not exceeding equivalent permitted use) would be authorized in the yearly Bill for Collection.
- **Duration:** Grazing will be permitted on a yearlong basis (3/1 – 2/28) on the allotment, but may be less in some years.
- **Intensity:** Forage utilization on upland forage will be 40% in pastures used during the growing season (sufficient re-growth and plant recovery of grazed herbaceous forage plants is expected prior to the end of the growing season). Use in pastures during slow growth and the dormant season will be 50% (little to no re-growth of grazed herbaceous forage plants is expected prior to the end of the grazing season). Utilization on upland shrubs will be 50% of available leaders and utilization on riparian forage species will be 20% of current year's growth.

- **Frequency and Timing:** Management systems will continue to follow a 4 pasture deferred rotation system with complete livestock removal during different periods of the spring, summer, and fall when livestock are taken to irrigated pasture on private land thus providing for grazed plant recovery and maintenance/improvement of species diversity through growing season deferment and rest. Timing of livestock movements will be based on utilization monitoring and management objectives identified above. Annual Operating Instructions (AOI) will be prepared each year in cooperation with the permittee to allow for consideration of current allotment conditions and management objectives. The AOI will detail the season's grazing schedule, the stocking level, maintenance needs, needed improvements, and allowable use levels of key forage and browse species.

B. Improvement Construction Specifications & Maintenance Responsibility

Existing improvements are shown on the allotment map and range improvement inventory sheets of the Walnut Creek Allotment Term Grazing Permit.

All maintenance must be done annually whether the allotment is actually grazed or not.

Maintenance must occur throughout the season and cannot be a one-time action.

Damage resulting from big game, wind, other acts of nature, or human caused actions, must be repaired in a timely manner so as to ensure the integrity of the structures.

All maintenance of exterior fences must be completed prior to "turn on" (allotment entry) each year. *(It is the responsibility of the permittee to ensure that the necessary coordination occurs between adjacent allotments to ensure maintenance is completed in a timely manner).*

All new or reconstructed fencing will be built to accommodate wildlife passage using a 4-strand fence with a smooth bottom wire 18 inches off the ground and a total fence height of 42 inches or less.

All water troughs will include wildlife access and escape ramps.

C. Livestock Distribution Aids

Application of standard management practices such as salting, herding, and controlling access to water to achieve proper distribution or lessen the impact on areas which are sensitive or are natural concentration areas will be applied by the permittee.

Protein, salt, and other supplements will not be placed within ¼ mile of water or any identified sensitive plant population.

D. Drought Management

During extended or severe periods of drought, perennial grasses and major browse species may need rest in order to provide time to recover from drought induced stress. Move cattle when utilization in pastures is met. If complete removal is necessary, livestock may be authorized to return to the allotment once conditions improve; meaning

sufficient recovery from the effects of drought stress has occurred and there has been enough herbaceous production to support livestock numbers.

E. Adaptive Management

If monitoring indicates that resource objectives are not being achieved, management will be modified in cooperation with the permittee. Adaptive management allows the Forest Service to adjust: the timing, intensity, frequency and duration of grazing; the grazing management system, and livestock numbers. If adjustments are needed, they are implemented through the Annual Operating Instructions. Adaptive management will also allow for the optional construction of rangeland improvements if they have been identified and are determined, through monitoring, to be necessary for achieving resource objectives. Construction of new improvements will require additional site-specific clearances and must be coordinated with District range staff.

Mitigation Measures and Best Management Practices

The following mitigation measures and best management practices are included in this AMP to avoid or minimize effects to soil, water, and wildlife. Practices include but are not limited to:

- Preparation of annual operating instructions with the permittee to allow for consideration of current allotment conditions and management objectives.
- Periodic field checks to assess vegetation health and trend as well as soil function.
- Cooperation with permittee to provide stock water for wildlife needs during critical periods, if water is available at the sources (e.g. storage tank) and livestock rotations would not be disrupted.

Monitoring and Evaluation

Two types of monitoring will be used, implementation and effectiveness monitoring. Both qualitative and quantitative monitoring methods will be used in accordance with the Interagency Technical References, Region 3 Rangeland Analysis and Management Training Guide, and the Region 3 Allotment Analysis Handbook.

1. **Implementation monitoring** will be conducted periodically by the Forest Service and/or permittee and may include but is not limited to: livestock actual use data, grazing intensity evaluations during the grazing season, utilization at the end of the growing season (within key areas), and visual observation of vegetation and ground cover. Key areas are a relatively small portion of a range selected because of its location, use or grazing value as a monitoring point for grazing use. It is assumed that key areas, if properly selected, will reflect the overall acceptability of current grazing management over the range.* (*Monitoring of allowable use on key forage species is the joint responsibility of the Forest Service and the permittee. Although the Forest Service will make every*

effort to assist the permittee in ensuring compliance with standards, the permittee has the ultimate responsibility for ensuring that the allowable use standards are met).


2. **Effectiveness monitoring** will be conducted to evaluate the success of management in achieving the desired objectives and will occur within key areas on permanent transects at an interval of ten (10) years or less. Effectiveness monitoring may also be conducted if data and observations from implementation monitoring (annual monitoring) indicate a need. Key areas will need to be identified by the Forest Service in cooperation with the permittee.

* Definition from "A Glossary of Terms Used in Range Management." Forth Edition, edited by the Glossary Update Task Group, Society for Range Management, Thomas E. Bedell, Chairman. 1998. Second Printing 2003.

Permittee Review / Agreement

Reviewed by/Agreed to  Date 1/7/14
John Hunt, Walnut Creek Permittee

Forest Officer Approval

Approved By  Date 12-8-2011
Linda Jackson, Acting Chino Valley District Ranger