

Allotment Management Plan

Sycamore

USDA Forest Service

Verde Ranger District, Prescott National Forest

Yavapai County, Arizona

Introduction

The Sycamore allotment is located on the Verde Ranger District, on the Prescott National Forest. The Sycamore Allotment consists of approximately 28,118 National Forest Service (NFS) acres. The project area is situated along the southeast boundary of the forest around the small unincorporated community of Dugas, Arizona in T.10, 11N., R.2, 3, 4E., Gila and Salt River Meridian. Elevation ranges from 4,197 feet in the northwest corner of the allotment to 6,814 feet at the top of Pine Mountain. Topography is mainly rolling hills and flats with a few steep sided drainages. Four major vegetation types occur on the allotment: semi-desert grasslands, chaparral, juniper woodland, and ponderosa pine forest.

This Allotment Management Plan implements the decision (supported by the Sycamore Livestock Grazing Project Environmental Assessment) made by the Verde District Ranger on September 24, 2010.

Objectives

Vegetation Resource

- Maintain areas with satisfactory soil, watershed and riparian conditions.
- Manage for diverse populations of vegetation.
- Manage resources to create or maintain at least 3 age-classes of woody riparian species with at least 10 percent of the woody plant cover in sprouts, seedlings and saplings where site potential exists.
- Maintain riparian communities by providing water for wildlife and livestock away from sensitive areas.
- Projects impacting riparian areas will be designed to protect the productivity and diversity of riparian-dependent resources. Emphasize protection of soil, water, vegetation, wildlife and fish resources.
- Provide forage to grazing and browsing animals to the extent benefits are relatively commensurate with costs without impairing land productivity, in accordance with management area objectives.

Soils and Watershed Resource

- Protect and improve the soil resource.
- Cross-country travel by any vehicle is prohibited, with the following exception(s): Approved resource management activities (employees/permittees).
- Provide for long-term quality waterflow needs through improved management technology.
- Manage livestock grazing to achieve soil and water protection objectives. Make use of cost effective range improvements and management techniques.
- Give preference to riparian-dependent resources over other resources.
- Improve all riparian areas and maintain in satisfactory condition.

Wildlife and Fisheries Resource

- Manage for a diverse, well distributed pattern of habitats for wildlife populations and fish species in cooperation with states and other agencies.
- Maintain and/or improve habitat for threatened or endangered species and work toward the eventual recovery and delisting of species through recovery plan implementation.
- Integrate wildlife habitat management activities into all resource practices through intensive coordination.
- Support the goals and objectives of the Arizona Wildlife and Fisheries Comprehensive Plan, as approved by the Southwestern Regional Forester and Director of the Arizona Game and Fish Department
- Gila chub and Sensitive species within Sycamore Creek are self sustaining and contribute to the overall recovery or conservation of the species within their ranges.
- Aquatic habitat, including Gila chub critical habitat, along Sycamore Creek provides diverse aquatic habitat structure, stable banks, and good riparian conditions, meets water quality standards, provides a natural flow pattern, and has low levels of non-native aquatic species.

Grazing Management

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

Permittee	Permit Type	# of Livestock	Season of Use	Animal Months
Bar- K – Ranch LLC	Term (10 years)	450 (cow/calf) 7 (horses)	Year-long	5,484

The period of grazing and the stocking numbers on NFS lands will be determined by monitoring, designated in the Annual Operating Instructions and authorized in the Bill for Collection.

B. Grazing Management and Allowable Use

Apply deferred rotation in the four main pastures in conjunction with two small intermittently used holding pastures. The Sycamore Allotment's grazing rotation system would continue to emphasize a 4-pasture 1 herd system which would realize one pasture rested fully, 1 year out of 4, and would realize summer growing season deferment or partial deferment in each pasture, 3

years out of 4. This grazing rotation would allow a staggered entry into pastures at different seasons each year.

Allowable Use

Site	Utilization levels
Upland sites	Upland forage (growing season) – 31-40% Upland forage (non-growing season) – 41-50% Upland Browse – 50%
Riparian	Riparian Woody – 20% Riparian Herbaceous – 50%

Livestock grazing during the summer (warm-season, typically July -September), would be managed at Conservative (31-40%) use intensity on key herbaceous species identified within key areas on the allotment.

Livestock grazing prescribed use levels outside of the summer forage growing seasons would be managed at a Moderate (41-50%) use intensity on selected key herbaceous species within key areas on the allotment.

Livestock grazing prescribed use levels would be managed at Moderate (41-50%) use intensity on selected upland key browse species current leader growth at any given time during the year. 20% allowable use of current year's production on selected key riparian woody species (willow, cottonwood, ash and alder). These use prescriptions would apply at any time of the year that livestock are in the riparian area.

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. New improvements (e.g. pipelines, troughs, tanks, or fences) will be designed to avoid adverse impacts to any such populations.

C. Rangeland Improvement Program

Adaptive management would allow for the construction of rangeland improvements if they have been identified and are determined, through monitoring, to be necessary for achieving resource objectives. However, if some or all improvements are not implemented, the upper limits of permitted livestock numbers are likely not achievable. By identifying these structural range improvements, the Forest Service is not implying a commitment of funding for implementation.

- The Tule corral would be expanded by constructing approximately 1/3 mile of fence.
- The Double T holding pasture would be expanded by constructing approximately 3/4 mile of fence.
- One cattleguard would be relocated, and one new cattleguard installed with above-mentioned changes to corral/holding pasture.
- A water development would be installed in Loball pasture to provide additional water for livestock in the uplands and reduce their reliance on Sycamore Creek. The source for this water would be a new well drilled on private property. Specifics of the water development:
 1. Water would be piped above ground from the source well to two water trough areas in LoBall Pasture, and would also be piped from near the private parcel above ground to the T-anchor corrals located in the Loball Pasture and to Hiball Pasture. At full implementation, three segments of pipeline would originate from the well. Solar-powered water pumps would be used to supply the upland stock tanks.
 2. In order to drill the well, the permittee would access the private property via a temporary road, using an old existing travel way¹ for alignment. This existing travel way served as the access to this private property, but is no longer used. It may be necessary to remove juniper trees in, or adjacent to the travel way prior to use.
 3. Use of this temporary road is only authorized as needed for construction of the well. Any other use is not authorized. The temporary road would be closed after well installation. Any future maintenance would need to be reauthorized.
- If monitoring shows that livestock reliance on Sycamore Creek still needs to be reduced beyond the well development, a trick tank (i.e., guzzler) could be installed along with storage tank and water trough. If the trick tank is installed, it would provide an opportunity for additional water in the Hiball Pasture.
- All new or reconstructed fencing will be built to accommodate wildlife passage using a 4-strand fence with a smooth bottom wire 20 inches off the ground and a total fence height of 42 inches or less.
- All new or reconstructed water developments will include wildlife access and escape ramps.
- Cooperation of the permittee will be sought to make stock water supplies available for wildlife needs during critical periods, if water is available at the sources (e.g. storage tank).
- The permittee will ensure that structural range improvement maintenance is completed to standard; that livestock do not enter the allotment or a pasture prior to the approved entry date; that livestock are removed from pastures and the allotment as specified in the AOI; and that livestock do not enter or re-enter pastures that either have already been grazed, or that are planned for rest.

¹ Travel Way – Any transportation facility that allows vehicle passage of any sort, that came into existence without plans, design or standard construction methods, that is not maintained or signed and has a very low traffic volume.

D. Maintenance Responsibility

Existing improvements are shown on the allotment map and range improvement inventory sheets of the 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 onetime 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 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).*

E. Drought Management

Perennial grasses and major browse species need deferment/rest in order to provide time to recover from drought induced stress.

Move cattle when utilization in pastures is met. If removal of livestock is necessary, they 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. Potential return of livestock will be evaluated no earlier than the summer growing season.

Monitoring and Evaluation

A. Implementation (Compliance) Monitoring

In order to evaluate continued progress toward meeting range management objectives, grazing monitoring would be conducted as described in the EA. Additionally, in order to ensure that Alternative 2 would not exceed agreed to parameters for the Gila chub, populations and critical habitat would be monitored and a yearly report outlining monitoring results would be provided to the USFWS and the permittee.

--- Periodic field checks will be conducted by the Forest Officer and/or the grazing permittee to measure forage use to determine if allowable use levels are being reached and determine any needed pasture movements.

(Monitoring of allowable use on key forage species in key areas 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).

--- Periodic field checks will be conducted by the Forest Officer to assess vegetation health and trends as well as soil function to identify needed adjustments in season of use and/or livestock numbers.

Field Checks will include informal inspections, formal inspections, and permittee compliance monitoring.

Informal Inspections

Informal inspections conducted by the Forest Officer will be made as the opportunity arises, such as when the Forest Officer is working in the area or is passing through the allotment.

The permittee will be notified by telephone of any significant observations needing immediate attention. Significant observations will be documented in writing by the Forest Officer and a copy of the inspection notes will be sent to the permittee in a timely manner.

Formal Inspections

Formal inspections conducted by the Forest Officer will be made as time and competing duties allow with an attempt to inspect each of the pastures.

The permittee will be requested to accompany the Forest Officer during the inspections. Significant findings from these inspections will be documented in a letter or inspection report sent to the permittee in a timely manner.

Permittee Compliance Monitoring

The permittee will:

- Monitor the allotment continuously throughout the grazing season to determine current resource conditions and to ensure the terms of the permit are being met.
- Document all findings through notes, photographs, or other means decipherable by the Forest Officer
- Share monitoring information with the Forest Officer, and
- Coordinate with the Forest Officer to resolve any problems that arise.

B. Effectiveness Monitoring

The permittee is encouraged to participate in any effectiveness (e.g. long term condition and trend) monitoring and evaluation conducted on the allotment.

Adaptive Management

The following adaptive management strategies may be implemented:

- Timing of livestock movements on the Sycamore Allotment would be determined by utilization levels, forage conditions, water availability, and would be specified in the AOI.
- The timing, intensity, and/or duration of grazing in any pasture of the Sycamore Allotment would be adjusted to lower levels as needed to achieve resource objectives. Additional vegetation growth would be allowed before any re-entry into a pasture.

- Gila chub monitoring measures employed for Sycamore Creek would be managed to the described grazing use and streambank thresholds. Upon meeting these thresholds the permittee would immediately manage livestock away from Sycamore Creek into another portion of the pasture and if that is not possible, into the next available pasture.
- Gila chub monitoring measures: Gila chub population, pool habitat, and proper functioning condition (PFC) would need to show stable or upward trends or consultation with the U.S. Fish and Wildlife Service would be re-initiated.

Mitigation Measures

1. A physical retention structure designed to retain sediment will be placed in the erosive gully in the Holding Pasture. This designed feature will include placement in the gully itself and additional structures adjacent to the gully including mechanical contouring.
2. Monitoring will be conducted specific to conditions in the holding pasture for grazing and soil. A key area will be established in the holding pasture. Specific soils effectiveness monitoring will be conducted on the gully's physical control structure. In addition, through monitoring of the key herbaceous vegetation, soil conditions will be interpolated as needed to determine trend. In the event that soil trend is downward, additional grazing management changes would be implemented including modifications to timing, intensity, or duration in the holding pasture.
3. Fences that are constructed or reconstructed will be designed to meet Forest Service specifications for safe wildlife passage. Fence design will be approved by the Forest Service prior to implementation
4. Place approved wildlife escape ramps on all water developments (both new construction and retrofit for existing), as appropriate.
5. Provide pronghorn fawning cover in the small mesa area in the southern part of the Holding pasture during the pronghorn fawning period of March-May each year (approximately 160 acres), by grazing at conservative use levels.
6. Well Monitoring – A piezometer with a pressure transducer to measure stream level would be installed in reach 1 of Sycamore Creek before the well is drilled to identify baseline groundwater conditions. Following installation of the well, a pump test should be conducted. The Forest hydrologist will work with the permittee to establish a maximum drawdown rate to ensure adequate ground water is moving through the system in order to mitigate impacts on downstream Gila chub critical habitat. ~~A data logger may be installed in the well to record water levels over time.~~

well is on private land.

Permitee Review / Agreement

Reviewed by/ agreed to


Permittee

Date

10-04-11

Forest Officer Approval

Approved By


Celeste Gordon, Verde District Ranger

Date

10/6/2011