



ALLOTMENT MANAGEMENT PLAN

SITGREAVES ALLOTMENT

WILLIAMS RANGER DISTRICT

KAIBAB NATIONAL FOREST

08/23/2011

1. INTRODUCTION

This Allotment Management Plan was developed following a Decision Notice on the Environmental Assessment for Spitz Hill and Sitgreaves Grazing Project, signed by M. Stephen Best, Williams District Ranger, on September 15, 2005. It was amended in April of 2012 to include the Travel Management Rule and a modification in the allotment boundary following the 2011 reconstruction of the Duck Lake Fence.

The Sitgreaves Allotment is located four miles northeast of Williams and contains approximately 20,410 acres. The allotment is bordered on the west by State Highway 64 and lies one to two miles north of Interstate 40. Adjacent grazing allotments include the Homestead and Twin Tanks allotments to the north, the Spitz Hill allotment to the east, and the Davenport allotment to the south. The dominant topographic features are Poquette Hill, Radio Hill, Fues Hill, Bald Mountain and the western slopes of Sitgreaves Mountain.

Permitted livestock numbers will be 340 adult cattle (cow/calf), which equates to 1,531 Animal Unit Months (AUMs). The permitted season of use will be from June 1 to October 15. The permitted numbers may be converted to yearlings using a conversion rate of 0.7 yearlings/adult cow (340 adult cows = 486 yearlings).

The Sitgreaves allotment is dominated by a ponderosa pine forest community (64%). Other vegetative communities present on the Sitgreaves allotment include: prairie grassland (29%), mixed conifer forest (4%), mountain grassland (2%), and pinyon-juniper woodland (1%). Dominant grass species on the allotment include: blue grama, Arizona fescue, mountain muhly, pine dropseed, and bottlebrush squirreltail. Common shrub and herbaceous species include rabbitbrush, broom snakeweed, ceanothus, pussy toes, sandwort, globemallow, and buckwheat.

Duck Lake is an 80 acre ephemeral wetland located in the Buggy Wheel Pasture. Approximately 62 acres of the ephemeral wetland was fenced to exclude livestock in 1989; the earthen tank which was built there in 1938 remained accessible to livestock. The enclosure fence was reconstructed in 2011 and designed to provide livestock access to the tank. Approximately 10 acres of ephemeral wetland are open to livestock grazing; however, they are prohibited from grazing when standing water is present or when the soils are saturated.

Approximately $\frac{1}{2}$ to $\frac{3}{4}$ mile of the Sitgreaves/Spitz Hill allotment boundary/exclosure fence on the southeast corner of Duck Lake will be removed so that the “new” allotment boundary lines up with the newly reconstructed enclosure fence (range improvement number 2071B).

2. GOALS AND OBJECTIVES

The desired condition is to have a healthy range condition with a diversity of cool and warm season native plants that allows for livestock use on a sustained-yield basis without impairment to wildlife, soils, watershed, recreation values, or heritage resources.

The four goals and objectives of grazing management on the Sitgreaves allotment are as follows:

- 1) To provide forage for domestic livestock as directed by the Forest Plan.
- 2) To maintain or improve range and soil conditions on the allotment.
- 3) To improve the cool season grass component on the allotment.
- 4) To improve cattle distribution on the allotment to prevent re-grazing of plants.

3. MANAGEMENT STRATEGY

Permitted Livestock

The permitted livestock will be 340 adult cattle (cow/calf) and the permitted season of use will be from June 1 to October 15. This permitted use equates to 1,531 Animal Unit Months (AUMs). The permitted numbers of 340 adults may be converted to adult cows using a conversion rate of 0.7 yearlings/adult cow (340 adults = 486 yearlings). A combination of adult cattle and yearlings may be authorized provided the use does not exceed 1,531 AUMs.

The typical season of use will be from June 1 to October 15 (137 days). However, if appropriate conditions exist on the allotment (ex. range readiness, abundant forage, etc.) the season of use may be extended to include an early on date and/or a later exit date. The earliest on date authorized will be no sooner than May 15 and the latest exit date will be no later than October 31. If the season of use is extended, the authorized livestock numbers will be adjusted so as not to exceed 1,531 AUM's.

Grazing System

The Sitgreaves Allotment is divided into three main grazing pastures (Fues, El Paso, and Wade) and two smaller holding pastures (Buggy Wheel and Headquarters). The allotment will be managed utilizing a deferred rotation system with a grazing period of approximately 35 to 40 days in each main grazing pasture and a grazing period of approximately 10 days in each of the smaller pastures. Refer to the Pasture Use Plan on page 9.

The grazing period within the El Paso and Fues pastures will be distributed between early, mid, and late season grazing with the use period deferred annually. Due to its higher elevation, range readiness is usually not achieved in the Wade pasture until the middle of the permitted season of use. As a result, Wade pasture will be used during the mid and late season grazing periods and the use within this pasture will also be deferred annually.

The two smaller pastures are used at the beginning and at the end of the grazing period to work cattle. As with the main grazing pastures, use within these smaller pastures will be deferred annually.

Seasonal deferment will provide spring growing season rest to each pasture and the shorter grazing periods will decrease the potential for grazing the regrowth of important cool season grasses and provide additional recovery time. This management strategy is expected to improve the vigor and density of the cool season grasses and the overall condition and trend of the allotment.

Allowable Utilization

The average allowable utilization in key areas on the allotment will be 35%. The average allowable utilization in upland areas and within Mexican spotted owl (MSO) habitat will be 20%.

Specific Management Measures

Regardless of the normal scheduled use within the Buggy Wheel pasture, the livestock accessible portions of the Duck Lake ephemeral wetland will not be stocked when standing water is present or when the soils are saturated. Soils will be assessed ten days after the disappearance of standing water for saturation and range readiness.

No human activities or construction actions associated with livestock grazing will occur in Mexican spotted owl Protected Activity Centers during the breeding season (March 1 to August 31).

4. RESOURCE PROTECTION AND MITIGATION MEASURES

The Annual Operating Instructions will incorporate specific and/or additional measures as needed per the adaptive management strategy.

Grazing Practices

- a) The maximum allowable use will be 35% utilization in Key Areas. These grazing utilization limits can be exceeded in the limited areas where livestock concentrate (e.g., areas within 1/4 mile of water developments and temporary water hauls, salt and supplement stations, areas within 1/10 mile of pasture gates, etc.).
- b) Consider a variety of factors related to drought when making decisions on annual authorization of livestock numbers and grazing period, including:

The amount and timing of precipitation received at weather stations nearest to the Allotment, current and past forage production as they both contribute to available forage, and current and projected amount and distribution of water available to livestock (Howery 1999, Forest Service 2006).

- c) Permittees must distribute livestock throughout the suitable grazing areas of each pasture using appropriate methods. These methods include, but are not limited to, the placement of salt and supplements, water hauling, and/or herding. Salt, protein block and supplement locations will be changed annually and they will not be placed within ¼ mile of water, or within areas of depleted rangeland, erosive soils, or sensitive plant species. Additionally, mineral and protein supplements will not be placed in or adjacent to Mexican spotted owl protected or restricted habitat.

Soil and Watershed

- d) Follow applicable Best Management Practices for range management from the *Soil and Water Conservation Practices Handbook* (Forest Service Handbook 2509.22) to minimize soil and watershed impacts caused by livestock grazing and grazing management activities. The following are the primary practices for this Allotment:
- Monitor ground conditions before and during any future construction activities to avoid wet ground conditions that can negatively affect soil condition and water quality. Work on all projects (stock tanks, pipelines, trick tanks, fences, power line, roads, etc.) may only be conducted when soils are dry enough to support heavy equipment without creating compaction, ruts, or erosion.
 - Graze at a level that maintains adequate cover to protect soils and maintain or improve the quantity and quality of desirable vegetation. This practice will be applied through the utilization guidelines described above.

Noxious Weeds Management

- e) Follow applicable direction in the *Final Environmental Impact Statement for Integrated Treatment of Noxious or Invasive Weeds* to minimize the risk of new weed infestations caused by livestock grazing and grazing management activities. Examples include:
- Implement weed prevention and control practices in the management of grazing Allotments.
 - Utilize weed-free hay to the extent possible.
 - Maintain healthy, desirable vegetative communities to promote resistance to weed invasions.
 - Remove mud, dirt, and plant parts from equipment before moving it into the area. This practice does not apply to vehicles traveling frequently in and out of the project area that will remain on a clean roadway.
 - Prohibit work in areas that have large infestations of weeds until the weeds are controlled. Minimize soil disturbance to the extent practical.

Wildlife

- f) Remove existing fence on the Allotment that is considered unnecessary by the grazing permittee and the Forest Service.
- g) Where necessary, install “goat bars” on fencing to facilitate pronghorn antelope passage at specific locations identified by Forest Service Biologists. Bottom wires (i.e., strands) that are currently barbed will be replaced with smooth wire 18 inches above the ground on all rebuilt fences within the Allotment. Top strands are to be no higher than 42 inches above the ground. Completion of such fence improvements will be dependent on funding.

Heritage Resources

- h) Before initiating any construction and/or ground disturbing activities, the South Zone Archaeologist must be notified at least 2 weeks in advance to ensure the proposed activities have heritage resource clearance prior to implementation.
- i) Livestock management practices that concentrate cattle, such as placement of salt and construction of water developments, will be located so that there are no effects to heritage resources.
- j) Should any unrecorded prehistoric or historic archaeological sites be encountered within these Allotments, they should be reported to the South Zone Archaeologist.
- k) Archeological sites within these Allotments will be monitored. If cattle are using these sites for shelter and impacting the site, the shelter should be excluded from future livestock grazing.

Should any tribes identify any plants within the Allotments having traditional importance, rangeland specialists and South Kaibab heritage staff would work together to ensure that grazing management is allowing for natural regeneration of such plants.

5. MONITORING

Collection and interpretation of utilization information is based on two documents; *Principles of Interpreting Utilization Data* (University of Arizona, 2005) and the *Kaibab National Forest Guidelines for Obtaining and Analyzing Use Information* (2005).

Monitoring of utilization in key areas, uplands, and MSO habitat will be conducted in each pasture at the end of the growing season to ensure compliance with the established utilization standards. Grazing intensity will be assessed in key areas and upland areas at least once during livestock use in each pasture. This is to assure that grazing intensity is not exceeded and to aid in identifying timing of cattle rotation through pastures. Within Mexican spotted owl habitat, grazing intensity monitoring will occur prior to livestock entering the pasture, during livestock use, and when livestock leave the pasture to assure that grazing intensity is limited to light use.

Range condition and trend monitoring will be conducted on the allotment using Parker Three-Step clusters, Pace Frequency transects, and Paced transects. Parker Three-Step clusters and Pace Frequency transects will be read approximately every 10 years. Paced transects will be read at approximately 5 year intervals.

Noxious weeds will be identified during field inspections and follow-up action will be implemented according to the *Coconino, Kaibab, & Prescott National Forests Noxious and Invasive Weed Strategic Plan 1998, Amended 2002*.

6. RANGE IMPROVEMENTS

A) Existing Structures

Range improvements (fencing, waters, handling facilities, etc.) are critical components of any grazing management plan. All range improvements assigned to the permittee (Inventory and Maintenance Responsibility, page 8) need to be maintained in order to facilitate proper management of the allotment.

Permittees are required to follow the District's Heavy Equipment Policy prior to beginning any ground disturbing activities which may require an archaeological survey and/or wildlife clearances.

No heavy equipment use will be authorized until:

- a) We receive your request for heavy equipment use in writing;
- b) Your request includes the name of the improvement to be worked on, their range improvement number, and/or a legal description, and/or include a map of the improvement;
- c) It includes a detailed description of the work to be done;
- d) Your request includes a timeframe for completion, an original signature and date;
- e) No work will begin until we get necessary clearances (archaeology, wildlife, NEPA, etc), and provide you with a written authorization for the work, including an agreement to the extent of work.
- f) The Forest Service will provide you with a list of certified Archaeologists and NEPA consultants that you may wish to use to expedite the process.

B) Structural/Non-Structural Improvements

There are no new structural or non-structural improvements scheduled for construction or implementation. Two sections of existing fence have been identified for removal if they no longer serve management purposes:

- Kaufman Tank fence – this section is approximately 1.0 miles in length and is located near Kaufman Tank in the southeastern portion of the Wade pasture. This fence is identified as FR 76 Holding Trap (Improvement #2303) on the Inventory and Maintenance Responsibility list. This improvement will need heavy maintenance if it is still needed for management purposes.
- Buggy Wheel Tank fence – this section is approximately 0.6 miles in length and is located west and north of Buggy Wheel Tank in the southwestern portion of the Wade pasture. This section of fencing is mostly down and is not identified on the Inventory and Maintenance Responsibility list.

7. TRAVEL MANAGEMENT

The Travel Management Rule (TMR) has been implemented on the Williams Ranger District of the Kaibab National Forest. Implementation of the TMR will require active management of all motorized use, including that related to permitted grazing activities. Motorized travel off the designated road system by grazing permit holders should be based on need related to carrying out required management practices. Legitimate motorized use, including cross-country access, needed for conducting activities required under Term Grazing Permits will be authorized unless compelling natural and/or heritage resource issues are evident.

Any unplanned or emergency type travel not previously contemplated in the Term Grazing Permit will be discussed with appropriate authorization and guidance established in the AOI. If access is required in a motor vehicle restricted area or on a closed road, you must have special authorization in the form of an Off-Road Vehicle Permit or specific authorization through your AOI.

8. FLEXIBILITY

It is imperative that flexibility be considered when following this allotment management plan. Adjustments to the grazing sequence may be necessary due to weather and/or forage constraints, or management activities in an allotment or pasture (prescribed burning, etc.).

There may also be a need to vary livestock numbers to meet objectives. Drought may force the reduction of livestock numbers while on the other hand additional numbers above term permit may be appropriate in certain situations.

SITGREAVES ALLOTMENT PASTURE PLAN

| YEARS | PASTURE | JUNE | JULY | AUG | SEPT. | OCT. |
|-------------------|--------------|------|------|-----|-------|------|
| 1, 3, 5, 7, 9 | El Paso | | | | | |
| | Fues | | | | | |
| | Wade | | | | | |
| | Buggy Wheel | | | | | |
| | Headquarters | | | | | |
| 2, 4, 6, 8, 10 | El Paso | | | | | |
| | Fues | | | | | |
| | Wade | | | | | |
| | Buggy Wheel | | | | | |
| | Headquarters | | | | | |

9. IMPROVEMENT INVENTORY and MAINTENANCE RESPONSIBILITY

| Improvement Name | Improvement Number | Units in Place | Year Constructed |
|------------------------------------|--------------------|----------------|------------------|
| HOMESTEAD/SITGREAVES FENCE | 2063 | 3.1 | 1930 |
| SITGREAVES/SPITZ HILL FENCE | 2071B | 3.6 | 1970 |
| SITGREAVES/DAVENPORT FENCE | 2072 | 2.8 | 1930 |
| SITGREAVES/FOREST FENCE | 2073 | 2.0 | 1930 |
| POUQUETTE TANK | 2075 | 1 | 1930 |
| POUQUETTE-CORRAL | 2076 | 1 | 1930 |
| TANQUE PIEDRA TANK | 2077 | 1 | 1950 |
| PIPELINE TANK EAST | 2078 | 1 | 1960 |
| MOSS TANK | 2079 | 1 | 1930 |
| CROWE TANK | 2080 | 1 | 1950 |
| BUGGYWHEEL TANK | 2081 | 1 | 1930 |
| DUCK LAKE TANK | 2082 | 1 | 1930 |
| WADE TANK | 2083 | 1 | 1980 |
| FREDS TANK | 2084 | 1 | 1930 |
| BUGGYWHEEL PASTURE FENCE | 2090 | 1.4 | 1982 |
| PIPELINE TANK WEST | 2188 | 1 | 1967 |
| KAUFMAN TANK | 2189 | 1 | 1967 |
| RADIO HILL DIVISION FENCE | 2257 | 0.8 | 1973 |
| SITGREAVES/TWIN TANKS FENCE | 2258 | 1.0 | 1973 |
| EL PASO/FUES FENCE | 2275 | 5.0 | 1960 |
| RAYMOND TANK WATERLOT | 2301 | 0.3 | 1990 |
| FR 76 HOLDING TRAP (to be removed) | 2303 | 1.0 | 1982 |
| FUES TANK | 2304 | 1 | 1995 |
| ROCK TANK | 2305 | 1 | 1980 |
| FRENCHY SPRINGS TANK | 2308 | 1 | 1950 |
| PIT TANK | 2309 | 1 | 1950 |
| EL PASO HOLDING TRAP | 2362 | 0.25 | 1985 |