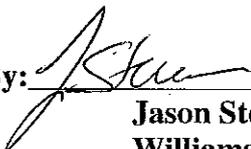


**ALLOTMENT MANAGEMENT PLAN**  
**GOVERNMENT MOUNTAIN ALLOTMENT**  
**WILLIAMS RANGER DISTRICT - KAIBAB NATIONAL FOREST**

Prepared By:  Date 12/15/09  
**Jason Stevens, Rangeland Management Specialist**  
**Williams and Tusayan Ranger Districts**

Approved By:  Date 12/17/09  
**Martie Schramm**  
**District Ranger, Williams Ranger District**

## 1. BACKGROUND

This Allotment Management Plan was developed following a decision on the Environmental Assessment for the Authorization of Grazing on the Government Mountain Allotments, signed by Susan Skalski, Williams District Ranger, on August 24, 2001.

The Government Mountain Allotment is located approximately 6 miles north of the community of Parks, Arizona on the Williams Ranger District of the Kaibab National Forest. The allotment is approximately 20,739\*\* acres of Forest Service lands. Prominent features within the allotment include Government Mountain, Government Prairie, Beale Mountain, and the southwest portion of Kendrick Mountain Wilderness. Adjacent allotments include Moritz Lake to the north, Elk Springs to the west, Spitz Hill to the southwest and Government Prairie to the south. Ponderosa pine forest interspersed with openings is the dominant vegetation type in the northern part of the allotment, while the southern portion is more typified by grasslands. Some alligator juniper is occurs on the allotment.

Permitted livestock numbers on the Government Mountain Allotment were reduced following the 2001 Decision from 686 yearlings (2,225 AUM's) to 600 yearlings (1,932 AUM's), a 13 percent reduction. The permitted grazing period is from May 15 to September 30 (139 days). The allotment is divided into 9 grazing pastures, and utilizes a 9-pasture rest-rotation grazing system. The use period within any given pasture would be an average of 17 days, with one of the nine pastures being rested on an annual basis.

Table 1. Government Mountain Allotment; Pastures, Acres, Approximate Grazing Period

Pasture	USFS Acres**	Approximate Grazing Period – Days
Spring Valley	2,790	20
Northwest	2,205	20
Southwest	2,328	14
Newman North	2,164	14
Newman South	1,678	14
Red Tank North	979	10
Red Tank South	2,706	16
Antelope North	1,588	15
Antelope South	1,917	16
Kendrick Wilderness*	2,384	0
<b>Allotment Total</b>	<b>20,739</b>	<b>139 Days Permitted</b>

\*88% of the Kendrick Mountain Wilderness that occurs within the allotment is considered to have no grazing capacity do to topography.

\*\*Pasture area estimates reflect current (2009) GIS data

## **2. DESIRED CONDITIONS**

The overall desired condition is maintenance of sustainable ecosystems within and surrounding the Government Mountain Allotment in which livestock grazing does not impair important ecosystem functions, such as providing habitat to support abundant wildlife populations and maintain biodiversity, providing high-quality water resources, maintaining soil stability and productivity, and maintaining vegetation diversity and productivity.

Specific desired conditions that apply to the Government Mountain Allotment include the following:

### ***Vegetation***

- Maintain a stable to upward trend in total plant cover and range condition.
- Provide for a diversity of cool and warm season plants and maintain a stable to upward trend in cool season grasses.
- Protect Threatened, Endangered, and Sensitive plant species from adverse effects caused by livestock grazing and grazing management activities.
- Eradicate or control as many existing populations of noxious weeds as possible and prevent new introductions of noxious weeds caused by livestock management activities.

### ***Soils and Watershed***

- Minimize erosion caused by livestock grazing and grazing management activities by maintaining a stable to upward trend in soil condition and maintaining or increasing vegetative cover across the allotment.
- Protect watershed resources such as ephemeral lakes and ephemeral stream channels and downstream water bodies from adverse effects caused by livestock grazing and grazing management activities.

### ***Wildlife***

- Maintain sufficient levels of cover and forage throughout the grazing period to support wildlife populations utilizing the allotment.
- Protect Threatened, Endangered, and Sensitive wildlife species from adverse effects caused by livestock grazing and grazing management activities.

### ***Recreation and Heritage***

- Manage livestock grazing to minimize adverse effects on recreation activities and developments.
- Protect heritage resources from adverse effects caused by livestock grazing and grazing management activities.

### 3. MANAGEMENT STRATEGY

Livestock grazing is authorized on the Government Mountain Allotment under the terms and management prescriptions described below:

1. The number of permitted livestock is 600 yearlings (or 420 adult cattle) with a grazing period from May 15 through September 30 (139 days); a maximum of 1,932 AUM's.
2. The grazing strategy must allow adequate deferment or rest, therefore the grazing strategy will be an 9-pasture rest-rotation system. However, flexibility in this grazing strategy will be provided through an adaptive management approach that provides opportunities for resource benefit when resource issues are identified.
3. Four new water sources (earthen tanks) were approved in the 2001 Decision to improve livestock distribution, and include Whitney Tank, Quarterhorse Tanks, Omaha Tank, and McIntyre Tank. Shell Tank was also approved for reconstruction. The grazing permittee will be required to work directly with Forest Service personnel prior to implementing the water projects listed above, as well as any other ground disturbing projects.

### 4. RESOURCE PROTECTION MEASURES –The Annual Operating Instructions will incorporate specific and/or additional measures as needed per the adaptive management strategy.

1. The maximum allowable use will be 35% in Key Areas (i.e., all areas other than northern goshawk and Mexican spotted owl habitats). An average utilization limit of 20% has been established in northern goshawk and Mexican spotted owl habitats. A map showing northern goshawk and Mexican spotted owl habitats is included in this document (Page 11).

These grazing utilization limits can be exceeded in the limited areas where livestock concentrate, which include: a) areas within 1/4 mile of water developments (including temporary water hauls) and salt and supplement stations; and b) areas within 1/10 mile of pasture gates.

2. 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 current-year and previous-year precipitation received at weather stations nearest to each allotment,
  - current-year and previous-year forage production as they contribute to current standing forage, c) estimates of current-year and previous-year grazing intensity,
  - current and projected amount and distribution of water available to livestock (Howery 1999, Forest Service 2006).

3. Permittees must distribute livestock throughout the suitable grazing areas of each pasture using appropriate methods, including placement of salt and supplements, water hauling, or herding.
4. Livestock will not be allowed to graze at ephemeral wetland sites when soils are wet. Soils will be considered wet for 10 days following disappearance of standing water. At that time, soils will be assessed for saturation and range readiness.
5. 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:
  - Monitoring ground conditions before and during any future construction activities to avoid wet ground conditions that can negatively affect soil condition and water quality.
  - Grazing pastures will be alternatively rested and grazed in a planned sequence.
  - Grazing 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.
  - Fencing to improve livestock management and control access and distribution.
6. 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. Relevant direction includes:
  - Consider weed prevention and control practices in the management of grazing allotments.
  - Minimize transport of weed seed into and within allotments (e.g., use of weed-free hay).
  - Maintain healthy, desirable vegetative communities to promote resistance to weed invasions.
  - Minimize ground disturbances that promote invasions.
  - Promote weed awareness and prevention efforts among community members and grazing permittees.

## 5. MONITORING

The Forest Service will monitor grazing intensity in each grazed pasture at least twice each year. Multiple key areas have been designated on maps and in GIS within the allotment, and additional key areas may be designated. In addition to key areas, grazing intensity will be monitored in forested areas, including Mexican spotted owl Critical Habitat.

Various methods will be used to evaluate grazing intensity, including one or more of the following (and/or new methods as they become available): determination of forage utilization,

amount of forage standing crop remaining at the end of the grazing cycle, percentages of grazed and ungrazed plants, plant stubble heights, litter or carryover vegetation from previous years, and visual appearance (Holechek and Galt 2000, Holechek and Galt 2004, Holechek et al. 2004: pages 195-196 and 248-251).

In addition to monitoring conducted by Forest Service personnel, permittees are also encouraged to participate in monitoring grazing intensity in each pasture to avoid exceeding grazing intensity levels specified above in Resource Protection Measures #1. Coordination between the permittees and the Forest Service is encouraged to assist the permittee with accurately determining grazing intensity using adequate monitoring methods. Permittees are also encouraged to provide the Forest Service with actual use records for each pasture at the end of each grazing season, including: 1) number, class, and type of animal; 2) grazing period; and 3) estimate of average grazing intensity at key areas on departure from pasture. Monitoring forms can be provided upon request.

Effectiveness monitoring is designed to evaluate rangeland trend, and allows a determination of whether desired conditions for vegetation resources, soil and watershed resources, and wildlife resources are being achieved. Range condition and trend monitoring will be conducted on the allotment using Pace Frequency transects and/or Paced transects. Pace Frequency transects will be read approximately every 5-10 years. Paced transects will be read at approximately 5 year intervals.

## **6. RANGE IMPROVEMENTS**

### **1) Existing Structures**

Range improvements (fencing, waters, handling facilities, etc.) are critical components of any grazing management plan. All range improvements assigned to the permittee (Improvement Maintenance Responsibilities, page 9-10) need to be maintained in order to facilitate proper management of the allotment. Shell Tank was approved in the 2001 Decision for reconstruction.

**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.

## 2) New Construction

Four new water sources (earthen tanks) were approved in the 2001 Decision to improve livestock distribution, and include Whitney Tank, Quarterhorse Tank, Omaha Tank, and McIntyre Tank.

## 7. MITIGATION MEASURES

The following mitigation measures apply to the Government Mountain Allotment.

### **Mexican Spotted Owl and Northern Goshawk**

- Use of heavy equipment for the construction of earthen tanks in the Government Mountain Allotment, as with any ground disturbing activity, would occur only after authorization is obtained from Forest Service personnel to avoid adverse effects on wildlife.
- Allowable use will not exceed 20% utilization in Mexican spotted owl and northern goshawk habitats.

### **Rare Plant and Noxious Weeds**

- Surveys for rare plants (plant species listed under the Endangered Species Act and Forest Service Sensitive plant i.e., species) and noxious weeds will be completed before the construction of earthen tanks. If rare plant species are located, appropriate action would be taken to avoid or mitigate negative effects (e.g., moving the location of the pit tank). If noxious weed populations are located, appropriate action would be taken to eradicate or control them and avoid their potential spread.

### **Heritage Resources**

- Activities associated with allotment improvements would be managed to ensure no adverse effects to heritage resources. Before initiating construction activities for earthen tanks, the South Zone Archaeologist will be notified to ensure the proposed activities have heritage resource clearance prior to implementation.
- 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.
- Should any unrecorded prehistoric or historic archaeological sites be encountered within these allotments, they should be reported to the South Zone Archaeologist.

- 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.

## **8. FLEXIBILITY/ADAPTIVE MANAGEMENT**

It is imperative that flexibility and adaptive management be considered when following this allotment management plan. Adjustments to the grazing sequence may be necessary due to weather constraints (i.e. precipitation patterns favor or do not favor certain portions of the allotment), or management activities in an allotment or pasture (P/J treatment or prescribed burning).

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.

## 9. Range Improvements

Improvement Maintenance Responsibilities for Government Mountain Allotment		
Improvement Name	Improvement Number	Units in Place
MORITZ-GOVT MTN BOUNDARY FENCE	R01979	2
COMMUNITY TANK PASTURE FENCE	R02021	4
SOUTH WEST/HOLDING FENCE	002021	2
GOVERNMENT MTN-SPITZ HILL FENCE	002022	2
GOVT MTN-GARLAND PRAIRE FENCE	002023	2
ANTELOPE DIVISION FENCE	002025	1
GOVT-BEALE-DIVISION FENCE	002026	3
LITTLE TANK	002028	1
NEWMAN TANK	002029	1
NEWMAN SPRINGS	002030	1
BALD HILL TANK	002031	1
ELK TANK	002032	1
PUMPKIN CENTER TANK	002033	1
PUMPKIN CENTER TANK WATERLOT	002034	1
SERAPPI TANK	002035	1
SERAPPI WATERLOT	002036	1
RED TANK	002037	1
RED WATERLOT	002038	1
DENT TANK	002039	1
DENT WATERLOT	002040	1
RAIN TANK-1	002041	1
RAIN TANK-2	002042	1
HORSESHOE TANK	002044	1
GOVERNMENT HOLE TANK	002046	1
GOVT HOLE WATERLOT	002047	1
OBSIDIAN TANK	002048	1
BR TANK	002049	1
SOREYE TANK	002050	1
COMMUNITY TANK	002053	1
SECTION 10 TANK	002054	1
NEWMAN DIVISION FENCE	002186	2

ANTELOPE DIVISION FENCE	002187	2
GOVT MTN-COUNTY RD FENCE	002267	1
RED NEWMAN FENCE	002286	1
AUTRY TANK	002312	1
DIVIDE TANK	002313	1
RED TANK DIVISION FENCE	002356	1
NEWMAN DIVISION FENCE	002357	1
QUAKIE TANK	002374	1
QUAKIE TANK WATERLOT	002375	1
W. PASTURE DIVISION FENCE	002399	2
DIVIDE TANK WATERLOT	002402	1
GOVT MTN BOUNDARY FENCE	002413	1
SERAPPI TANK	002035A	1
HORSESHOE TANK WATERLOT	002044A	1

Government Mountain Grazing Allotment

0 0.5 1 Miles 1:55,820

