

CROOKS/MAVERICK ALLOTMENT

MANAGEMENT PLAN

BRADSHAW RANGER DISTRICT
PRESCOTT NATIONAL FOREST

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Range Conservationist Date

Agreed to by: [Signature] 2/26/01
Permittee Date

Approved by: [Signature] 2/26/01
District Ranger Date

CROOKS CANYON/MAVERICK ALLOTMENT MANAGEMENT PLAN

I. PURPOSE AND NEED

This Allotment Management Plan implements a decision made on the Crooks Canyon and Maverick Allotments on September 30, 1998.

II. OBJECTIVES, related to LIVESTOCK GRAZING MANGEMENT

- A. Make effective use of full capacity rangeland.
- B. Improve vegetative structure, composition and vigor in uplands where there is potential for improvement by 12/31/06.
- C. Regenerate woody riparian species, increase vegetative ground cover, and improve bank stability in all riparian areas by 12/31/06.
- D. Provide for the maintenance and/or recovery of threatened, endangered, and sensitive species and their habitats.

These objectives will be monitored and evaluated as outlined in Section VII of this plan. If monitoring indicates that due to livestock management, no progress towards objectives or a downward trend, other actions may be taken which could include a further reduction in livestock numbers, change in grazing period (season or length) change in class of use etc. Such changes would be identified in an amendment to this plan or in changes to other terms of the grazing permit, as provided for in the standard clauses of the current grazing permit.

III. MANAGEMENT ACTIONS to ACHIEVE OBJECTIVES

- A. Permit use of 131 – 185 head of cattle from November 1 – May 10 annually. The annual permitted use will depend on the results of the two previous grazing seasons in regards to following allowable use, and rangeland health indicators as outlined in the Rangeland Health Checklist (Appendix).
- B. Grazing management will consist of a rest rotation system as identified on the attached R3-2200-19.
- C. Increase water storage at Bodie Spring to improve stock water for the range capacity in this area.
- D. Follow management practices identified by the Forest Officer in this Allotment Management Plan and the Annual Operating Instructions.

IV. KEY AREAS

The key areas and/or critical or sensitive areas are identified on the attached allotment map. Other key areas will be identified as deemed appropriate. The permittee will be involved in identifying key areas.

V. ALLOWABLE USE

These criteria may be adjusted based on the period of use or range conditions. One such adjustment would be to allow higher levels of utilization on dormant grasses. For example, a 25 – 40% growing season allowable use level would be 50% outside the growing season. However, the maximum allowable use on dormant grasses is 50%.

Key species are defined as the 2-3 perennial herbaceous forage species that provide the bulk of forage or browse during the period of grazing use. Utilization will be averaged between key species on each key area, but not averaged between key areas to determine livestock management and moves.

KEY SPECIES/ALLOWABLE USE

UPLANDS: Common key species and allowable utilization (percent of growth at the time of leaving the pasture; relative utilization) may include, but are not limited to: *

Species	time of growth	dormant season
Side Oats Grama (<u>Bouteloua curtipendula</u>)	25%	50%
Blue Grama (<u>Bouteloua gracilis</u>)	25%	50%
Three Awn (<u>Aristida</u> species)	25%	50%
Squirrel Tail (<u>Elymus elymoides</u>)	25%	50%

Additional key species and allowable utilization (of leaders within livestock reach, *percent of tips browsed*) may include, but are not limited to:

Species	time of growth	dormant season
Mountain mahogany (<u>Cercocarpus</u> species)		
Ceanothus (<u>Ceanothus</u> species)		
Cliffrose (<u>Purshia stansburiana</u>)	50%	50%
Ratany (<u>Krameria</u> species)		
Silktassel (<u>Garrya wrightii</u>)		

* The allowable utilization on grass species are copied from the Best Management Practices in the July 1998 Crooks Canyon/Maverick Environmental Assessment. If other key species are identified, allowable use during periods of active growth will follow FSH 2209.21, section 53.2.

V. ALLOWABLE USE, cont.

RIPARIAN AREAS: Key species and allowable utilization may include, but are not limited to:

Bluegrass (Poa pratensis) 3" stubble height

Sedges (Carex species all) 4" stubble height

Wire grass (Juncus species all) 4" stubble height

Woody Species - Proper allowable use within riparian areas will not exceed 20% of the shoots that can be reached by livestock.

VI. DISTRIBUTION AIDS

A. Salt, Mineral, Supplements: No salt, mineral or supplements will be allowed along or adjacent to any riparian zone at anytime. All salt, mineral, or supplements will be at least ¼ mile from water. Some supplements may be expressly allowed (in the Annual Operating Instructions) closer to water because of label requirements, still, never permitted in or adjacent to riparian zones.

B. Herding: All livestock will be herded away from riparian zones. Livestock will be evenly distributed throughout the allotment during the grazing season. A rider shall scatter livestock on a near daily basis to maintain good distribution. If concentrations of livestock occur in riparian areas then action will be taken to alleviate this problem. This plan may also be amended to address the problem.

VII. RANGE IMPROVEMENT MAINTENANCE

The range improvements listed in Part 3 of the Term Grazing Permit will be maintained by the permittee as needed to retain function.

VIII. RANGE IMPROVEMENT CONSTRUCTION

Only one new structural range improvement is currently planned. This is to increase water storage at Bodie spring (T12N, R1W, Section 31).

Limited improvement of existing waters may become necessary, such as storage, pipelines, or troughs. These improvements would be covered under a separate Decision Memo signed by the District Ranger if deemed necessary.

IX. MONITORING AND FOLLOW-UP ACTION

IMPLEMENTATION MONITORING and FOLLOWUP ACTION: Each year for the first two grazing cycles, implementation monitoring will ensure this plan and other terms of the permit are being implemented. Implementation monitoring would include in key areas, as a minimum:

- a field review of rangeland health indicators after livestock leave each pasture;
- forage utilization monitoring. Adjustments will be made through annual operating instructions to follow forage utilization standards.
- photo points will also be established in conjunction with implementation monitoring.

The allowable use criteria of the key perennial grasses will be applied. Once the use is reached within a key area of a pasture, livestock will be moved to another part of the pasture or the next scheduled unit, whichever is practical. When all pastures have met the allowable use criteria then livestock will be removed from the allotment without regard to calendar date.

If allowable use criteria are still not met after the stocking at 131 – 185 head, the process of a 15% reduction will be repeated the following grazing season, and so on until stocking is commensurate with allowable use criteria.

Should increased livestock numbers be warranted, the increase will be in temporary numbers commensurate with the allowable use criteria.

EFFECTIVENESS MONITORING and FOLLOWUP ACTION: This plan will be evaluated to determine if management objectives are being met. At the end of approximately three grazing cycles monitoring would indicate:

- the change in frequency of forage plants (on three Parker 3 Step transect locations as a minimum),
- the vigor of key forage species in key areas, and
- the change in canopy cover and/or density, and form of key browse species in key areas (such as described in FSH 2209.21 Range Analysis and Management Handbook).

Monitoring methods would follow the method in "Plant Frequency Sampling for Monitoring Rangelands", University of Arizona Extension Report #9043, or methods in the current Region 3 Range Analysis handbook (FSH 2209.21), the Rangeland Analysis and Training Guide (USDA 1997), or the Interagency Technical Reference for Sampling Vegetation Attributes (USDI 1996).

Results from this monitoring will be used to update this Allotment Management Plan.

X. ANNUAL OPERATING INSTRUCTIONS

Annual operating instructions will be prepared by Bradshaw District personnel and the permittee each year prior to grazing. The purpose of these instructions is to provide implementation of this Allotment Management Plan including adjustments found necessary. Any deviation will be reviewed and approved by the Range Staff or District Ranger.

NEXT PAGE: APPENDIX to CROOKS/MAVERICK ALLOTMENT MANAGEMENT PLAN

RANGELAND HEALTH CHECKLIST

Allotment _____

Date _____

Pasture _____

Recorder _____

Location _____

Actual Use _____

1. SEEDLINGS - perennial seedlings present

_____ grass _____ forb _____ shrub _____ tree _____ unknown

2. GROUND COVER - estimate Daubenmire category code (see table, right)

_____ % effective litter - sufficient organic matter to protect surface during rain

_____ % rock or gravel

_____ % bare soil

_____ % canopy cover _____ % grass _____ % woodys

Daubenmire Cover Codes

T = 0 - 1% cover

1 = 1 - 5% cover

2 = 5 - 25% cover

3 = 25 - 50% cover

4 = 50 - 75% cover

5 = 75 - 95% cover

6 = 95 - 100% cover

3. EROSION - erosion from the site in excess of natural conditions

_____ none

_____ inactive erosion. Describe: _____

_____ active erosion - evidence of the following:

_____ pedestalled plants

_____ sheet erosion

_____ rill erosion

_____ gully erosion

Describe the cause of erosion (e.g. roads, trails, livestock concentration, inherent instability, loss of vegetative ground cover) and if slight, moderate or severe:

4. SOIL SURFACE

_____ soil surface generally broken and crumbly with good water infiltration

_____ soil compaction is present and impaires water infiltration

_____ soil surface is subangular and blocky

_____ soil surface crusted

5. PLANT VIGOR - perennial grasses; compare grazed to ungrazed. Consider crown diameter, seed stalks, evidence of root health (eg pulled up easily?)**6. UTILIZATION - on key forage species**

_____ 0-5% _____ 6-20% _____ 21-40% _____ 41-60% _____ 61-80% _____ 81+%

7. BROWSE CONDITION - hedging of woody species

_____ none _____ light _____ moderate _____ severe _____ dying

8. NOXIOUS WEEDS

List any noxious weed species present:

9. DOMINANT PLANT COMMUNITY

_____ desert grassland

_____ desert shrub

_____ chaparral

_____ riparian

_____ juniper

_____ pinyon/juniper

_____ pine

9. DOMINANT PLANT COMMUNITY, continued

Describe general trend of the plant community if possible. Consider: - shading of understory? - limitations to herbaceous seedling establishment? - any species apparently increasing? Explain why, if possible.

10. VEGETATIVE COMPOSITION - *do not cross range sites*

- for diversity estimate codes, see chart on right)
- estimate Dabuenmire category code (see table, front page)

A. Grasses: _____ estimate diversity of perennial grass species present
 _____% estimate grass canopy cover on the key area

List dominant forage species: _____ List other common species: _____

B. Forb species: _____ estimate diversity of forb species present
 _____% estimate total forb canopy cover

List primary forb species: _____

C. Shrub Species: _____ estimate diversity of shrub species present
 _____% estimate shrub species canopy cover

List dominant shrub species: _____

D. Tree Species: _____ total number of tree species present
 _____% estimate total tree canopy cover

List tree species: _____ If riparian list age classes for each species: _____

Diversity Estimate Codes

H = High – common species present, & at least two uncommon species also present.

M = moderate – common species generally present.

L = low – only a few species present.

11. COMMENTS - Describe: - livestock distribution patterns
 - management recommendations
 - other (explain)

- watershed opportunities
 - structural improvement condition