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MANAGEMENT ACTION SELECTION REPORT

SAMPSON CREEK ALLOTMENT

SCHELL RESOURCE AREA

Warren Robison, Permittee

A. INTRODUCTION

The Sampson Creek Allotment evaluation was conducted in accordance with the direction set forth in Washington Office Instruction Memorandum No. 86-706, and is based on monitoring data collected between 1981 and 1988.

A considerable amount of public comment was received pertaining to the allotment evaluations conducted in the Schell Resource Area. Copies of the comment letters pertaining specifically to this allotment can be found in Section VII of the allotment evaluation summary, located in the Ely District files. All allotment-specific comments were carefully considered for incorporation into the final evaluation. Errors and inconsistencies between text and tables were corrected. Several concerns were common to more than one allotment and often more than one individual. Some of the primary concerns are addressed as follows:

Numerous comments were received concerning the use of the Sneva and Hyder Crop Yield Index. The yield index is not used to "correct" utilization levels as suggested. The determination of whether or not allowable use levels were exceeded is based on actual utilization measured. The index is used to account for the affect of yearly climate variations on the calculation of appropriate stocking levels for all users. Since it is not feasible to adjust numbers of all grazing animals (livestock, wildlife, and wild horses) on a yearly basis to respond to annual fluctuations in precipitation, an average carrying capacity is determined based on a "normal" year. The affects of precipitation on carrying capacity must be considered. After review of existing research on this subject, the Schell Resource Area chose the Sneva and Hyder model as the most appropriate for this region. Authority to use the yield index is provided in BLM Technical Reference #4400-7 and Instruction Memorandum No. NV-89-468 and has been supported by a recent court ruling by an Administrative Law Judge in Oregon.

Some concern was expressed over short term allowable use level objectives. The allowable use levels recommended in the Nevada Rangeland Monitoring Handbook were used in conjunction with existing research as guidelines to establish acceptable use levels. The use levels from the handbook were considered appropriate on most native ranges to maintain the present plant community under yearlong or fall/winter use. However, the

literature suggests that more conservative utilization levels are necessary during critical spring growth, on sensitive areas, or to improve condition within acceptable timeframes on certain plant communities. The information also suggests that higher utilization levels are appropriate for seeded ranges and for native ranges under an intensive management system. Allowable use levels were developed for key species within individual use areas in each allotment taking into consideration these guidelines, monitoring observations, and site-specific factors.

Several comments suggested that the Draft Nevada Wild Horse and Burro Habitat Evaluation Procedures be used in the allotment evaluations to establish objectives. These are draft procedures which have not yet been approved and are still being tested to determine if the procedures should be established in a final form and used statewide. Until such time as it is appropriate to incorporate these procedures, wild horse forage objectives are being based on ecological status (seral stages). Specific herd objectives for wild horses will be developed during preparation of Wild Horse Herd Management Area Plans.

There were several comments pertaining to the continued use of Appropriate Management Levels (AMLs) for wild horses. All evaluations have been revised to clearly state that the goal for each herd area is to maintain a thriving natural ecological balance between the public land resources and the animals using these resources. Recommended adjustments in the level of wild horse use will be based on analysis of monitoring data.

A few individuals questioned why suitability criteria were not included in the monitoring evaluations. Suitability criteria were developed to be used with "one-point-in-time" vegetative inventories which are not presently being used as the sole data source upon which adjustments are made. However, most of the suitability criteria are inherently applied during the implementation of certain portions of the monitoring program such as use pattern mapping and allotment stratification for key area selection. Areas of no use on a use pattern map usually indicate areas that are unsuitable for use due to steepness of slope, distance from water, or insufficient forage production. Appropriate stocking levels are calculated based on those portions of the allotment which can be effectively utilized by grazing animals.

Conclusions of the evaluation were based upon data collected from the following sources:

Range, wildlife, and wild horse monitoring files compiled by the Schell Resource Area staff.

Input from Reed B. Robison, Chin Creek permittee, at a meeting at the Ely District Office on August 29, 1989 and letters dated August 25, 1989 and September 25, 1989.

Input from Warren Robison, Sampson Creek permittee, from meetings at the Ely District Office on September 1, 1989 and September 7, 1989, and through telephone conversations dated July 28, 1989, August 25, 1989, August 30, 1989, September 15, 1989, November 3, 1989, and November 6, 1989 and a letter dated August 16, 1989.

Input from the Nevada Department of Wildlife through consultation meetings conducted in 1984, the Antelope Range field tour on August 31, 1988 and letters dated May 26, 1989 and August 14, 1989.

Input from Resource Concepts, Inc., range consultants, through a telephone conversation dated September 7, 1989 and letters dated August 18, 1989, and September 22, 1989.

Input from the Commission for the Preservation of Wild Horses through a letter dated August 14, 1989.

Input from the Sierra Club through a letter dated July 30, 1989.

Input from the U. S. Fish and Wildlife Service through a letter dated August 29, 1989.

Input from the Natural Resources Defense Council through a letter dated July 30, 1989.

B. ANALYSIS OF MONITORING DATA

Based on the identified issues in the evaluation, seven of the eight land use plan objectives for the allotment are not being met with the existing management practices. Therefore, changes in management actions and/or adjustments to livestock and wild horses are necessary to meet these objectives. Overutilization of the key species selected for specific use areas on the allotment, poor distribution of livestock and wild horses, downward trend of range sites, and trampling of riparian areas are the primary problems that need to be corrected. In addition, there are conflicts between users on the allotment for food, shelter, and space. This occurs between livestock, wild horses, antelope, deer, raptors, game birds.

The allotment has traditionally been grazed by sheep. There are few range improvement projects other than a few spring developments. The upper part of the allotment is very steep and physical access is quite limited.

Census and observations show a significant increase in the number of wild horses on the allotment. Livestock and wild horses contribute to the high use levels recorded on the benchland and on the upper part of the mountain where both livestock and wild horses graze. Wild horses are the major user on the winterfat bottomland where no sheep graze due to the late spring diet preference for other forage.

Use pattern mapping shows overutilization of the key species on the valley bottomland and centered around the water sources of the upper mountain area. The heavy concentration of users around the water sources caused severe trampling and degradation of three identified springs. The winterfat bottomland has been severely overutilized. Ecological status was determined to be in a late seral stage at the three key management areas on the allotment. Trend was determined for the key plant species at the key areas using frequency studies from 1981 and 1986. There was a significant downward change in the percent composition in the key species at two of the three key areas.

C. SUMMARY OF MANAGEMENT OPTIONS

Option 1 - Reduce wild horse use to the initial stocking rate shown in the land use plan. Active livestock preference would be reduced 17 percent from 1,592 AUMS to 1,327 AUMS. Wild horse use would be reduced 87 percent from the existing 92 head utilizing 1,104 AUMS to 12 head utilizing 149 AUMS.

Option 2 - Reduce wild horse and livestock use. Active livestock preference would be reduced 25 percent from 1,592 AUMS to 1,195 AUMS. Wild horse use would be reduced 58 percent from the existing 92 head utilizing 1,104 AUMS to 39 head utilizing 465 AUMS.

Option 3 - Haul water for better livestock distribution. Additional AUMS would not be made available under this option, but the AUMS that are available would be better utilized through improved distribution of livestock.

D. SELECTED MANAGEMENT ACTION

The selected management action is as follows:

Reduce active livestock preference 265 AUMS, or 17 percent, from 1,592 AUMS to 1,327 AUMS phased in over a 5 year period as follows:

Reduction in Year 1 = 89 AUMS
Reduction in Year 3 = 88 AUMS
Reduction in Year 5 = 88 AUMS

Implement a deferred rotation grazing system for livestock.

Spread out the locations of water hauling and salt and/or mineral placements for sheep on the benchland at the following locations:

T. 24 N., R. 66 E.
Section 8, NWNW
Section 16, SENW
Section 30, NWNW

Salt and/or minerals will be placed a minimum of one-quarter mile from water.

Develop two of four identified springs as follows:

T. 24 N., R. 65 E.

Gravel Spring Section 14, NWNW

or

Horse Spring Section 14, NWNE

and

Grouse Spring Section 23, NWNW

or

Skull Spring Section 23, SENW

Improve road access to the upper mountain area by maintaining the following roads:

Horse Canyon Road

Box Canyon Road

Becky Peak Rim Road

Manage the wild horses on the Sampson Creek Allotment at 25 head which has been determined to be the optimum level to maintain the thriving natural ecological balance in this portion of the Antelope Horse Management Area (HMA).

Based on the 1988 census remove 67 head from the allotment. This equates to a 73 percent reduction from the 1988 level of 92 head of horses. This equates to an increase of 201 percent over the initial stocking rate identified in the land use plan for wild horses.

Based on a future census those wild horses above the 25 head will be considered excess animals, and will be removed in subsequent gathers.

Revise the Antelope Wild Horse Herd Management Area Plan (HMAP) to reflect current site-specific objectives and numbers of wild horses identified through the allotment evaluation process.

Rationale

The desired stocking level for livestock for the Sampson Creek Allotment is 1,327 AUMS, and was calculated from actual use data and use pattern mapping completed throughout the evaluation period.

The livestock and wild horse reductions are being made to meet the allowable use level objectives based on the desired stocking rate formula. The proportional reduction for wild horses and livestock is to reduce the level of use in areas where both wild horses and livestock graze. The proportional reduction for wild horses is to eliminate the overutilization of the winterfat bottomland where only the wild horses graze. This was based on the monitoring data and the 1987 actual use records. That is the most current census for the wild horse population.

The allotment has three natural use areas. Past livestock licensing was for the allotment as a whole and not by use area, which has caused areas to be overstocked and overutilized. Future livestock licensing will be based on the desired stocking level for the use areas.

Implementing a deferred-rotation grazing system will provide needed plant rest from livestock grazing during the spring growing period. This will maintain or allow for an increase in the percent composition of native forbs and perennial grasses on sites throughout the allotment. It should eliminate the severe use occurring on the riparian areas and trampling of the three identified springs that are in less than good condition. Also, the grazing system is for the protection and improvement of habitat for sage grouse strutting/nesting/brooding grounds, deer and antelope fawning/kidding/wintering grounds, hawk prey species, as well as, for numerous other animals that inhabit the area.

Hauling water and placement of salt and/or minerals at several locations will improve distribution of the sheep and lower overall recorded levels of use.

Due to the steepness of the upper mountain area, instead of hauling water it would be more practical to develop the existing water sources. Development should be done on two of four springs. The springs presently provide a small water supply, but if developed would service that area of the allotment for all users.

Improved access is necessary to achieve the above identified needed management practices. Limited physical access has prohibited grazing use over a large portion of the allotment and concentrated use on the remaining portion. Access would allow for better distribution of sheep use, development of the water supply for all users and monitoring studies to be completed.

E. GRAZING ADJUSTMENTS

Authorized use effective in Year 1 will be as follows:

Use Area	No. Kind	Period of Use	%Federal	AUMs	
				Active	Susp
Benchland Area	2,522 Sheep	05/01 to 07/15	100	1,277	76
Upper Mtn Area	563 Sheep	08/01 to 09/30	100	226	13
			Total	1,503	89

Authorized use effective in Year 3 will be as follows:

Use Area	No. Kind	Period of Use	%Federal	AUMs	
				Active	Susp
Benchland Area	2,372 Sheep	05/01 to 07/15	100	1,201	151
Upper Mtn Area	533 Sheep	08/01 to 09/30	100	214	26
			Total	1,415	177

Authorized use effective in Year 5 will be as follows:

Use Area	No. Kind	Period of Use	%Federal	AUMs	
				Active	Susp
Benchland Area	2,223 Sheep	05/01 to 07/15	100	1,126	226
Upper Mtn Area	501 Sheep	08/01 to 09/30	100	201	39
			Total	1,327	265

From 07/16 to 07/31 the sheep will be on private land for docking, separating, etc.

The following terms and conditions will be a part of the grazing permit:

1. No livestock grazing will be allowed on the bottomland area unless the season of use is changed to provide for winter grazing.
2. A deferred-rotation grazing system will be implemented for the benchland area. Sheep use will be rotated starting from the north end of the area and ending at the south end in even calendar years. And in odd years the order will be reversed.
3. Water will be hauled to, and salt/mineral blocks will be placed at the following sites as sheep are rotated through the benchland area:

T. 24 N., R. 66 E., Sec. 8, NWNW
T. 24 N., R. 66 E., Sec. 16, SENW
T. 24 N., R. 66 E., Sec. 30, NWNW

4. A deferred-rotation grazing system will be implemented for the upper mountain area. Sheep use will be rotated starting from the north end of the area and ending at the south end in even calendar years. And in odd years the order would be reversed.

F. FUTURE MONITORING AND GRAZING ADJUSTMENTS

The Schell Resource Area will continue to monitor all existing studies and establish additional studies as identified in Section VI of the Allotment Evaluation. This monitoring data will continue to be collected in the future to provide the necessary information for subsequent evaluations in the third and fifth years following the decision. These re-evaluations are necessary to determine if the allotment specific objectives are being met under the new grazing management strategies. In addition, these subsequent evaluations will determine if the phased in adjustments are still necessary or additional adjustments are required to meet the established allotment specific objectives.