



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

ELY DISTRICT OFFICE

Star Route 5, Box 1
Ely, Nevada, 89301



IN REPLY REFER TO:

1784.3
(NV-047)

JUL 21 1989

Dear Participant:

We appreciate your interest in being involved in the consultation process and enclosed for your information and review is the Dry Mountain Allotment Monitoring Evaluation. This is your opportunity again to provide allotment specific information and also to provide comments to the evaluation which will be incorporated into Section VII. We would appreciate receiving your information and/or comments by August 15, 1989, to allow adequate time to review all input and to adhere to our deadlines. All of the information received will be evaluated and considered in the final portion of the evaluation which is the selection of a management action.

We appreciate your participation and solicit your continued involvement in the consultation process.

Sincerely,

Gene L. Draais, Manager
Egan Resource Area

1 Enclosure

1. Dry Mountain Evaluation (8 pp)

DRY MOUNTAIN ALLOTMENT EVALUATION SUMMARY

I. INTRODUCTION

The allotment now known as the Dry Mountain Allotment (00609) was originally divided into two allotments, Dry Mountain and Sabala Springs. The allotments had been run as one management unit by the same operator for years so they were combined into one allotment consisting of 27,552 acres of public native rangeland. This allotment is in the "M" category and does not have an approved activity plan. The preference was originally for sheep use, but in 1982 the existing operator, Dan Russell, applied for a conversion from sheep to cattle. A temporary authorization to run cattle was granted to monitor the effects of such a conversion. The information obtained as a result was used to formulate the stipulations for conversion in the proposed decision issued on June 1, 1984. The proposed decision was subsequently protested, specifically as to the conversion rate and allocation of AUMs to wild horses on this allotment. Since then, the permittee has been authorized to run cattle on this allotment in accordance with provisions of the proposed decision except for the deduction of AUMs for wild horses. This evaluation covers the period of time since the operator was authorized to run cattle instead of sheep.

II. INITIAL STOCKING LEVEL

A. Livestock Use

The original preference was for 3,432 AUMs of sheep use with the season of use being 11/1 through 4/15. The three year average listed in the RPS (1,626 AUMs) reflected sheep use. The proposed conversion decision allows for 2,827 AUMs of cattle use during the same season (11/1-4/15). The remaining 605 AUMs would be suspended. Cattle use authorized since the proposed decision was issued has averaged 2,650 AUMs, with 177 AUMs of non-use.

B. Wild Horse Use

The Dry Mountain Allotment is within the Buck and Bald Herd Management Area (HMA). The RPS objective for this allotment is to provide habitat and forage for 28 wild horses, or 335 AUMs. Existing wild horse use is estimated at 517 AUMs.

C. Wildlife Use

The RPS objective for this allotment is to provide forage and habitat for reasonable numbers of wildlife, or 275 AUMs for mule deer and 23 AUMs for pronghorn antelope. Existing wildlife use listed in the RPS is 190 AUMs for mule deer and 2 AUMs for antelope.

There are approximately 50-75 resident mule deer which winter at higher elevations on Dry Mountain. However, Dry

Mountain is primarily used by mule deer as a migration corridor to and from winter range to the south. The total number of AUMs used by mule deer fluctuate according to winter conditions, primarily snow depth, on the mountains to the north. During an average winter, 200-400 mule deer could be expected to move through the allotment. In severe winters, herds of up to 2000 deer can be expected to move through the allotment.

Key or critical management areas are as follows:

- 8 ferruginous hawk nest sites
- 1 sage grouse strutting ground
- important mule deer migration route
- possible antelope augmentation area

III. ALLOTMENT PROFILE

A. Description

The allotment is situated in the southwest portion of Long Valley. The crest of Dry Mountain forms the west boundary of the allotment. Water is available at four wells and one fenced spring which are distributed so that no area is further than four miles from water.

B. Allotment Specific Objectives

1. Land Use Plan Objectives

- (a) Rangeland Management-All vegetation will be managed for those successional stages which would best meet the objective of this proposed plan.(Egan Resource Area Record of Decision, p.3)
- (b) Wild Horses-Wild horses will be managed at a total of 700 animals within the Buck and Bald herd use area.(Egan ROD, p.6)
 - Future adjustments in wild horse numbers will be based on data provided through the rangeland monitoring program.(Egan ROD, p. 6)
- (c) Wildlife-Habitat will be managed for "reasonable numbers" of wildlife species as determined by the Nevada Department of Wildlife.(Egan ROD, p.6)
 - Forage will be provided for "reasonable numbers" of big game as determined by the Nevada Department of Wildlife. (Egan ROD, p.8)
- (d) Watershed-Establish utilization limits to maintain watershed cover, plant vigor and soil fertility in consideration of plant phenology, physiology, terrain, water availability, wildlife needs, grazing system and aesthetic values.(Egan ROD, p.44)

2. Rangeland Program Summary Objectives

- (a) Maintain or improve ecological condition of native range with utilization levels not to exceed 50 percent on winterfat.
- (b) Maintain or improve mule deer winter habitat to good or better condition by not exceeding utilization levels on native species as recommended in the Nevada Rangeland Monitoring Handbook(NRMH). Manage rangeland habitat and forage condition to support 275 AUMs for mule deer.
- (c) Manage rangeland habitat and forage condition to support 23 AUMs for pronghorn antelope.
- (d) Protect sage grouse breeding complexes by maintaining the big sagebrush sites within 2 miles of active strutting grounds for mid to late seral stage with a minimum of 30 percent shrub composition by weight.
- (e) Protect ferruginous hawk nest sites by limiting utilization to 55 percent on winterfat flats within 2 miles of the nest sites.
- (f) Manage rangeland habitat to support wild horses as part of the Buck and Bald HMA by not exceeding allowable use levels on native species as recommended in the NRMH.

3. Key Species Identification

There are no riparian areas or key/crucial habitats in the allotment. There is no riparian vegetation associated with the fenced spring, which is simply a large deep hole with a collection box. The riparian inventory erroneously identified a 400 acre meadow in the valley and a 1/4 acre meadow at Maple Syrup Well. Neither of these exist. The predominant wildlife use occurring in the allotment is by mule deer migrating across Dry Mountain. The primary key species for both cattle and wild horses is winterfat (Eurotia lanata). In addition to large winterfat flats, winterfat occurs as a major component in three other vegetation types, black sagebrush, big sagebrush, and shadscale. Utilization observed on any species is recorded during the process of use pattern mapping, even though these other species are not considered as key species.

IV. MANAGEMENT EVALUATION

A. Purpose

The purpose of this evaluation is to assess whether or not current livestock management practices are meeting the multiple use objectives for the allotment and to determine the appropriate

stocking level for cattle on the Dry Mountain Allotment in order to issue the final decision on the proposed sheep to cattle conversion.

B. Summary of Studies Data

Utilization patterns have been mapped in 1983, 1987, and 1988. Data collected from these years reflect the grazing use made by all users during the previous year. For instance, the 1987 map shows use made in 1986 and early 1987 (before new growth). Due to inconsistencies in actual use data for 1982-83, only the data from 1987 and 1988 use pattern maps will be evaluated. (Refer to Tables 1 and 2 below.)

Total annual precipitation in eastern Nevada (measured at the Ely monitoring station) was slightly below normal in 1986 and above normal again in 1987. The crop year precipitation (measured from September of the previous year through June of the growth year) was above normal for all years of data, but only slightly so for 1987. (It is the crop year precipitation that is used to compute yield indices.) The Ely weather station information is being used for this evaluation because a 30 year average has not been computed for the Eureka station. Although total precipitation was higher at the Eureka station, monthly precipitation correlates quite closely between the two stations.

Table 1: Use Pattern Mapping Summary - acres and percent of the allotment by use category

YEAR	SLIGHT (1-20%)	LIGHT (21-40%)	MODERATE (41-60%)	HEAVY (61-80%)	SEVERE (81-100%)
1987	4,011 (14.6%)	6,470 (23.5%)	7,448 (27%)	9,112 (33%)	511 (1.9%)
1988	3,239 (11.8%)	3,110 (11.3%)	10,428 (37.8%)	10,775 (39.1%)	0

Table 2: Estimated Actual Use Summary (AUMs) by Stratum*

YEAR	STRATUM	LIVESTOCK	WILDLIFE	WILD HORSES
1986-87	1	2,678	--	214
	2	--	192	142
1987-88	1	2,826	--	310
	2	--	222	207

*Stratum 1 consists of the winterfat areas used primarily by cattle and wild horses. Stratum 2 consists of the upper benches and Dry Mountain itself, which are areas used primarily by mule deer, antelope and wild horses.

Also, in the summer of 1983, a weight estimate forage production survey was conducted on the allotment. The data obtained from the survey is summarized on the following table:

DRY MOUNTAIN ALLOTMENT WEIGHT ESTIMATE SURVEY RESULTS SUMMARY

<u>VEGETATION TYPE</u>	<u>ACRES BY TYPE</u>	<u>CATTLE AUMS BY TYPE</u>
Black sagebrush/winterfat (ARNO/EULA)	5,390.1	744.6
Big sagebrush/grass (ARTR/SIHY/ORHY)	905.8	56.1
Black sagebrush/grass (ARNO/POSE)	11,248.0	313.2
Winterfat/grass (EULA/SIHY)	1,506.6	334.9
Big sagebrush/winterfat (ARTR/EULA)	5,539.6	385.3
Shadscale/winterfat (ATCO/EULA)	1,995.0	218.2
Big sagebrush/grass (ARTR/POSE)	1,860.4	27.2
Big sagebrush/shadscale (ARTR/ATCO)	278.1	11.8
TOTAL	<u>28,732.6</u>	<u>2,091.3</u>

V. CONCLUSIONS

A. Land Use Plan Objectives

III.,B.,1.,(a)- Not Met

Rationale: Although existing vegetation is currently in appropriate successional stages, long term condition objectives would not be met if short term use continues to exceed allowable use levels.

III.,B.,1.,(b)-Not Met

Rationale: Allowable use levels have been exceeded on portions of the allotment grazed by wild horses.

III.,B.,1.,(c) -Met

Rationale: Areas used by mule deer and antelope are in appropriate seral stages and allowable use levels are not being exceeded.

III.,B.,1.,(d) - Not met

Rationale: Allowable use levels have been exceeded on portions of the allotment.

B. Rangeland Program Summary Objectives

III.,B.,2.,(a) - Not met

Rationale: Utilization levels have exceeded 50% on winterfat.

III.,B.,2.,(b) - Met

Rationale: Allowable utilization levels in mule deer habitat have not been exceeded.

III.,B.,3.,(c) - Met

Rationale: Allowable use levels in antelope habitat have not been exceeded.

III.,B.,2.,(d) - Met

Rationale: Big sagebrush sites within 2 miles of strutting grounds are being maintained in mid to late seral stages with a minimum of 30% shrub composition. Allowable use levels in big sagebrush habitat types are not being exceeded.

III.,B.,2.,(e) - Not met

Rationale: Allowable use levels on winterfat have been exceeded.

III.,B.,2.,(e) - Not met

Rationale: Allowable use levels have been exceeded on portions of the allotment.

VI. TECHNICAL RECOMMENDATIONS

A. Problems

-overutilization of the winterfat areas (Stratum 1)

B. Solutions

1. Short Term Solutions/Options

(a) Issue the final decision on the sheep to cattle conversion recalculating the appropriate stocking level based on monitoring information using the following formula:

$$\frac{\text{Actual Use (AUM's)}}{\text{Measured Utilization*}} = \frac{\text{Desired Use (AUM's)}}{\text{Desired Utilization**}}$$

*From utilization pattern mapping, adjusted as per yield index.

**50% on winterfat

Use pattern maps from 1987 and 1988 indicate that utilization levels are acceptable in all areas other than Stratum 1 (the winterfat areas). Since adjustments in use are necessary only in Stratum 1, estimated carrying capacity is calculated only for this stratum. The following is a summary of the estimated carrying capacity for Stratum 1 based on use pattern maps from 1987 and 1988.

ESTIMATED CARRYING CAPACITY SUMMARY FOR STRATUM 1

<u>Year</u>	<u>Total Actual Use (AUMs)</u>	<u>Measured Util.(%)</u>	<u>Yield Index</u>	<u>Adjusted Util.(%)</u>	<u>Desired Use (%)</u>	<u>Desired Use</u>
1986	2,892	70%	1.26	88%	50%	2,066
1987	3,136	70%	1.04	73%	50%	2,240

The average carrying capacity, adjusted using the yield index, for Stratum 1 in the Dry Mountain Allotment is 2,153 AUMs. If wild horses are managed at 1987 levels, 310 AUMs would be utilized by wild horses in Stratum 1. Since none of the wildlife use and all of the livestock use occurs in Stratum 1, the remaining 1,843 AUMs would be available for cattle preference with 1,589 AUMs being put into suspended nonuse.

(b) Issue a final decision denying the sheep to cattle conversion. A large portion of the allotment is covered with black sagebrush which is more suitable forage for sheep than cattle. Overutilization of the winterfat in the valley bottoms is less likely to occur with sheep use, but competition with mule deer may increase. Utilization of the winterfat bottom by wild horses would continue. In this option the grazing preference would remain at 3,432 sheep AUMs in the short term. Additional monitoring would be necessary to determine whether or not the combination of sheep and wild horses would result in AULs being exceeded in some areas.

(c) In addition to implementing either of the above options, wild horses should be gathered back to AML to achieve the proper total stocking rate and meet resource objectives. Existing wild horse use in the allotment is almost twice the level identified in the RPS as the objective for wild horses. It has been identified through use pattern mapping that wild horses contribute significantly to the problem of over utilization of the winterfat bottom (Stratum 1), particularly since the wild horses are in the allotment yearlong and grazing impacts continue after the livestock are removed. If wild horses are managed at the AML of 335 AUMs, about 60% of the use (or 201 AUMs) would occur in Stratum 1. This would result in 1,952 AUMs for cattle with 1,480 AUMs in suspended nonuse as discussed in Option (a) or 3,432 AUMs for sheep use as discussed in Option (b).

(d) The option of shortening the season of use by livestock to strictly winter use would somewhat lessen the impacts to winterfat, but the effectiveness of such an option is hindered by the fact that wild horses are in the allotment yearlong. No change in AUMs from levels proposed in other options would result from a change in season of use.

2. Long Term Solutions

The stocking levels calculated in the short term option are based on the assumption that the patterns of use observed, particularly the amount of livestock use made in each stratum, will not change without a significant change in management such as fencing or water development on the bench. If more intensive management could be implemented in the long term, more AUMs could be available to livestock in Stratum 2.

Regardless of which short term option is selected, the following long term solutions should be continued:

(a) Continue to monitor to determine whether or not further adjustments in livestock use are necessary.

(b) Maintain wild horse numbers at AML unless monitoring indicates otherwise.

3. Additional Monitoring Data Required

Continue to conduct use pattern mapping.

VII. CONSULTATIONS

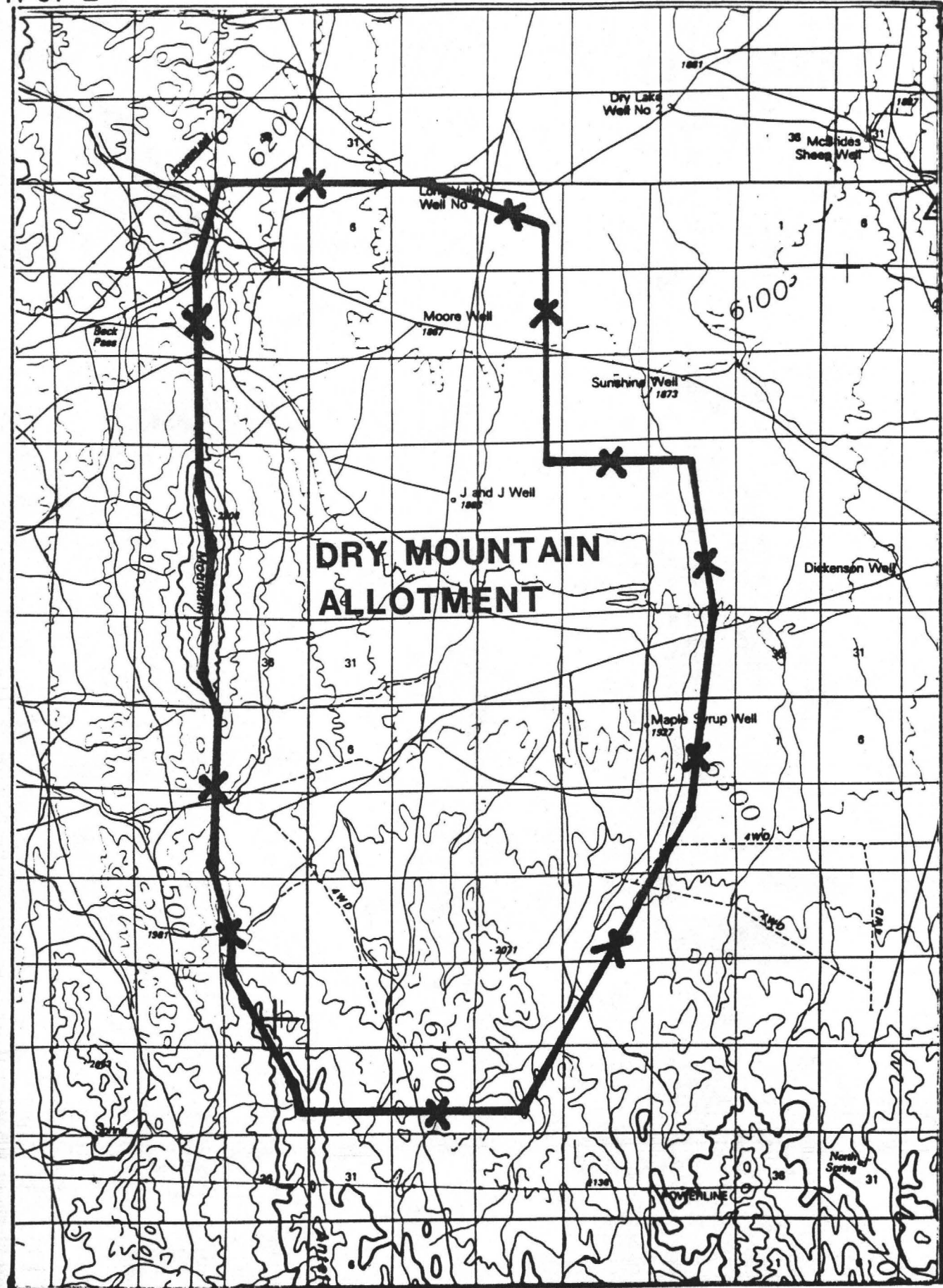
VIII. MANAGEMENT DECISION AND RATIONALE (separate document)

IX. Appendices

A. Letter from Nevada Department of Wildlife discussing wildlife actual use in the Dry Mountain Allotment.

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Map 2

8/7/89

August 7, 1989

Gene L. Drais, Area Manager
Egan Resource Area
Ely District Office
Star Route 5, Box 1
Ely, Nevada 89301

Dear Mr. Drais,

Thank you for the opportunity to comment on the Dry Mountain Allotment Monitoring Evaluation.

My comments are as follows:

II. Initial Stocking Level

B. Wild Horse Use - Since this allotment contains wild horses, I feel that it is important to integrate the Draft Wild Horse and Burro Habitat Evaluation Procedures Users Guide at this time.

Since you deliniate key or critical management areas for wildlife, the same should be done for the wild horses. I'm sure you are aware that the Carson City district is already using the Habitat Evaluation Procedures Users Guide, even though it is in draft form.

III. Allotment Profile

A. Description - You mention that there are four wells and one spring. Since the present season of use is only 11/1 - 4/15, are the wells left on the rest of the year? If not, is the spring source sufficient to provide for the needs of the other users?

Would turning on the wells year-round help to better distribute the other grazing/browsing animals?

B. Allotment Specific Objectives

1. Land Use Plan Objectives

(b) Wild Horses - In light of the recent IBLA decision, please provide the data which shows how you determined that any horses over 700 would be determined as "excess."

Gene L. Drais, Area Manager
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August 8, 1989

3. Key Species Identification

You state that the riparian inventory erroneously identified two riparian areas that don't exist. Please clarify. Who did the riparian inventory? Were the areas considered riparian at one time?

Also, you state that there are no key/crucial habitats. How can you make this determination when you have not identified whether or not there is key/crucial habitat for wild horses?

B. Summary of Studies Data

Please provide me with the instruction memorandum that authorizes you to use the yield indexes to derive "Adjusted Utilization."

V. Conclusions

A. Land Use Plan Objectives

III., B., 1., You state that this objective has not been met on portions of the allotment grazed by wild horses. Please provide the data that shows that only horses grazed in the portions of the allotment that were overutilized.

In the paragraph following Estimated Carrying Capacity Summary for Stratum 1, you state that "If wild horses are managed at 1987 levels..." Please provide the justification for managing the horses at 1987 levels.

Option (c) In light of the recent IBLA decision, the AML no longer exists. Please provide the specific data that shows wild horses and only wild horses are impacting the thriving ecological balance. This data will be necessary to determine if there is an "excess" of wild horses and then to determine how many are "excess."

2. Long Term Solutions

(b) See above paragraph

In conclusion, I appreciate the opportunity to comment on the Dry Mountain Allotment Evaluation and look forward to working with you further.

Sincerely,

TERRI JAY
Executive Director

TJ/cb