

7-13-99



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Ely District Office
HC 33 Box 33500
Ely, Nevada 89301-9408



IN REPLY REFER TO:

4400 (NV-046)

IN REPLY REFER TO:

JUL 13 1999

Wild Horse Organized Assistance
P.O. Box 555
Reno, NV 89504

Dear Sirs:

Enclosed for your information is the Draft Management Action Selection Report (MASR) for the Cottonwood Allotment. The draft Allotment Evaluation was sent out to the affected public's on October 12, 1993.

The Management Action Selection Report is the final section of the allotment evaluation, and completes the monitoring evaluation process. It addresses the primary concerns received from involved interests, lists the options considered during the evaluation, and describes the rationale as to why those actions were selected or not selected. The MASR identifies selected changes in management by use area or pasture required to meet or make progress towards allotment specific objectives. In addition, the MASR includes specific terms and conditions for the grazing permit held by the permittee for the Cottonwood Allotment. Finally, the MASR addresses wildlife and wild horse management to be included in the Proposed Multiple Use Decision for the Allotment.

The Draft Management Action Selection Report is provided for your comment only. Please provide written comments by August 15, 1995. The comments will be considered prior to the issuance of the Final Management Action Selection Report and Proposed Multiple Use Decision.

If you have any questions, please feel free to contact Bryan Fuell or Bill Coulloudon of my range staff at the above address, or phone (702) 289-4865.

Sincerely,

Gerald M. Smith, Manager
Schell Resource Area

MANAGEMENT ACTION SELECTION REPORT

COTTONWOOD ALLOTMENT

SCHELL RESOURCE AREA

A. INTRODUCTION

The Cottonwood Allotment Evaluation was conducted in accordance with the direction set forth in the Washington Office Instruction Memorandum No. 86-706, and based on monitoring data collected between 1982 and 1992. The draft allotment evaluation was sent out October 12, 1993.

A moderate amount of public comment was received pertaining to the Cottonwood Allotment Evaluation 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. Some of the primary concerns are addressed as follows:

A comment was received from the permittee on the change of season of use for the crested wheatgrass seedings and the problems with grass tetany and spring use. The seedings current season of use was adjusted to 3/01 through 6/30 to better conform to Mr. Kirkeby's current livestock operation. This change will be more in line with how the allotment has been grazed during the evaluation period, and conforms with the proposed grazing system. The grazing system will increase available forage on the allotment over the long term. In practice, supplemental magnesium from a variety of inorganic sources is effective in preventing grass tetany.

A comment was received from the permittee on why Basin Spring, Cow Haven Spring, and Deer Flat Spring were not included in the evaluation. Basin Spring, Cow Haven Spring, and Deer Flat Spring were examined in the fall of 1993. Basin Spring and Cow Haven Spring were dry, and have been dry for several years. Deer Flat Spring had been developed; however, the old concrete spring box and trough have deteriorated and are no longer functional. Flow at Deer Flat Spring appears to be very low. In addition, there are no riparian areas associated with these springs.

The permittee restated his long standing complaint about the boundary fences needing re-alignment. As explained to the permittee during various meetings in the past, the BLM will not reconstruct the boundary fences. All maintenance on fences will be in accordance with cooperative agreements and the District Managers Decision dated 8/4/86.

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A comment was 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 concerns were 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 time-frames on certain plant communities. The information also supports 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.

Conclusions of the evaluation were based upon monitoring data collected and consultation, cooperation, and coordination from the following sources:

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

Input from Permittee: Gordon A. Kirkeby through letters dated November 8, November 17, December 4, and December 7, 1993.

Input from the N-4 Grazing Board/Resource Concepts Inc. through a letter dated October 20, 1993.

B. ANALYSIS OF MONITORING DATA

Based on the identified issues of the evaluation, three of the five land use plan objectives for the allotment are not being met under the existing management practices; therefore, implementation of management actions and/or adjustments to livestock and wild horse numbers are necessary to meet these objectives. Allowable use levels for the key species selected for specific use areas on the allotment have been exceeded; use pattern data indicates poor distribution of livestock. Livestock actual use records show a significant amount of voluntary nonuse applied for by the permittee over the past years. Livestock contributed to the high use levels recorded on the allotment.

A portion of the allotment is within the Wilson Creek Wild Horse Herd Management Area (HMA) (see map 1). Based on census data, wild horses are using the allotment approximately 4 months of the year during the growing season, from March to June. Wild horses mostly use the portion of the allotment west of the seedings which is the east side of the Fortification Range. It appears that the horses move from the west side of the Fortifications onto the allotment for a short period of time in the spring, and then move back to the west.

C. SELECTED MANAGEMENT ACTION

LIVESTOCK

The selected management actions are a combination of the options listed under Section VI of the Cottonwood Allotment Evaluation and input from the permittee and affected interests. Short term management actions for livestock and wild horses will be implemented the first year. The long term management actions are necessary to make progress towards attainment of multiple use management objectives (refer to Appendix II, III, and IV). Implementation of long-term management actions such as range improvement projects are dependent on staff and funding availability.

The selected management actions for the Cottonwood Allotment are as follows:

1. Short Term

- a. Reduce active preference a total of 1,858 AUMs from 4,106 AUMs to 2,248 AUMs phased in over a 5-year period as follows:

Reduction in Year 1 - 620 AUMs
Reduction in Year 3 - 619 AUMs
Reduction in Year 5 - 619 AUMs

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This preference adjustment is based on evaluation of monitoring data towards the accomplishment of multiple use objectives.

In addition to the adjustment to active preference, 312 AUMs will be placed in mandatory nonuse for conservation and protection purposes for the Native Pasture, which is the difference between the 1979 Range Survey and the Desired Stocking Rate Analysis. The required nonuse is necessary to establish an initial stocking rate due to the lack of actual use information for the Native Pasture during the evaluation period. Since actual use for the Native Pasture was not submitted by the permittee the initial stocking rate for the pasture will be as identified in the 1979 Range Survey. The 1979 range survey was used as the best available data for determining a stocking level for the Native Pasture. The range survey indicated 778 AUMs available for livestock in the pasture. This will establish a stocking rate that is consistent with the Bureau's best available data and shall not exceed the livestock carrying capacity (refer to Appendix I). Mandatory nonuse will continue until the desired stocking levels are determined through actual use during the 5 year phase in period. Future monitoring data will be evaluated to determine if livestock management practices are meeting the allotment specific objectives. An evaluation by the Bureau will be made to either increase, maintain, or reduce the active use identified for the Native Pasture and/or modify the terms and conditions of the grazing permit.

- b. Implement a three pasture rest rotation grazing system for the crested wheatgrass seedings. Upper and Middle Pastures would be combined to form one pasture having 386 AUMs. Lower and Deer Flat Pastures would make up the other two pastures of the grazing system. Lower Pasture has 320 AUMs and Deer Flat Pasture has 452 AUMs. This totals 1,158 AUMS in the crested wheatgrass seedings. The implementation of a grazing system will provide year-long rest for one of the three pastures each year. The Native Pasture will be grazed each winter; this will improve forage condition by avoiding grazing during the critical spring grazing period.

In year 5, the grazing system will accommodate 194 cows from 11/01 to 06/30. Periods of use and treatment level will be adjusted by pasture to

account for the disproportionate carrying capacities between pastures (Table 1 and Map 1).

Table 1: Grazing Schedule for the Cottonwood Allotment.

YEARLY GRAZING SCHEDULE	
PASTURE	PERIOD OF USE
YEAR 1	
NATIVE	11/01 to 03/01
Upper and Middle	03/02 to 05/07
Lower	05/08 to 06/30
Deer Flat	REST
YEAR 2	
NATIVE	11/01 to 03/01
Deer Flat	03/02 to 05/05
Upper and Middle	05/06 to 06/30
Lower	REST
YEAR 3	
NATIVE	11/01 to 03/01
Lower	03/02 to 04/20
Deer Flat	04/21 to 06/30
Upper and Middle	REST
YEAR 4	
REPEAT CYCLE STARTING WITH YEAR 1	

- c. Improve livestock distribution with herding, salting, and water hauling. Heavy use could be alleviated with increased herding, salting no closer than 1/2 mile from water, and water hauling. Water haul sites will be located in consultation with permittee during annual use authorizations.

2. Long Term

- a. Improve deteriorated and/or unproductive rangeland to secondary successional stages through

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vegetative manipulations to enhance livestock and wildlife habitat. This will be accomplished by performing seeding maintenance on the Middle and Lower seedings. This would provide additional forage for livestock while meeting the long-term objective established for the seedings.

- b. Construct a water pipeline from the Lime Range Well located in T. 8 N., R. 68 E., sec 23 to a water trough in T. 8 N., R. 68 E., sec 15 (see map 2).

WILD HORSES

Manage the wild horses on the Cottonwood Allotment at 11 horses for four months (44 AUMs) \pm 15% which has been determined to be the optimum level to maintain the thriving natural ecological balance in this portion of the Wilson Creek Herd Management Area (HMA).

RATIONALE

Monitoring data indicates that the present livestock situation has resulted in unacceptable use patterns (heavy to severe use). The short term and long term objectives would be met with the recommended adjustments in grazing use as discussed in Appendix I to establish proper carrying capacities based on sustained yield, to improve the vigor and production of key forage plants, and to prevent the invasion of undesirable annual plants, such as halogeton. The establishment of a rest rotation grazing system for the seeded pastures and primarily winter use treatment for the native range should increase forage production, grass and forb composition and plant vigor throughout the allotment. Improved management practices to improve distribution, increased herding, water hauling, and water developments would also aid in meeting resource objectives throughout the allotment.

Wildlife use on the allotment have not contributed to the non attainment of multiple use objectives. Limiting livestock use in the Native Pasture from 11/1 to 3/1 would improve habitat condition of antelope kidding grounds.

Based on 1990 utilization data and census data, wild horses were the primary contributors to heavy utilization levels on a portion of the allotment west of the Upper Pasture. There were 14 horses counted in March 1990. To reduce utilization levels from 70% to 55% on grasses, a reduction to 11 horses (44 AUMs) is necessary in order to meet the short-term objectives. Appropriate Management Level (AML) for the allotment is 11 horses (44 AUMs) for four months, March to June. This has been determined to be the optimum level in order to achieve a thriving natural

ecological balance in this portion of the Wilson Creek HMA.

D. OBJECTIVES

The allotment objectives under which grazing use, as stated above will be monitored and evaluated are as follows (see appendix II for site specific objectives):

1. Allotment Specific Objectives

Livestock

- (1) The short term objective will be accomplished through managing the allowable use level (AUL) by season of use to improve or maintain the desired vegetative community throughout the allotment.
- (2) The long term objective is to improve those acres in poor or fair livestock forage condition and maintain all acres presently in good livestock forage condition by managing for those seral stages which optimize livestock forage production.
- (3) The long term objective is to improve those acres in poor or fair livestock forage condition on seeded rangeland.

Wild Horses

- (1) The short term objective will be accomplished through managing the allowable use level (AUL) by season to improve or maintain the desired vegetative community.
- (2) The long term objective is to manage for the most appropriate seral stage to provide the desired quantity, quality, variety, and density of forage in order to meet the requirements of the wild horses.

Mule Deer

- (1) The short term objective is to limit yearlong use on key species to 40 percent for perennial grasses, grass-like plants, and forbs and to 35 percent for shrubs if the mule deer range is in poor habitat condition. If the range is in fair condition or better, the objective is to limit yearlong use on key species to 55 percent for perennial grasses, grass-like plants, and forbs and to 45 percent for shrubs.
- (2) The long term objective is to maintain mule deer range in at least fair habitat condition by providing diversity of forage species.

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Pronghorn Antelope

- (1) The short-term objective is to limit use on key perennial grasses and forbs listed for antelope kidding ground to 30 percent until June 30, and to 40 percent yearlong; also limit yearlong use on key shrubs to 45 percent.
- (2) The long-term objective is to improve antelope kidding ground from fair to good habitat condition.

Riparian Areas

- (1) The short term objective is to limit use on wet meadows and stream riparian areas to 50 percent for key species by all animals yearlong.
- (2) The long term objectives are to manage all wet meadows for late seral stage (80-85 percent grass and grass-like plants, 10-15 percent forbs, and 5 percent shrubs).

E. GRAZING ADJUSTMENTS

(See Appendix I for Stocking Rate Calculations)
Active preference will be adjusted as follows:

From:	<u>Total</u> 4,106	<u>Suspended</u> 0	<u>Active Preference</u> 4,106		
To:	<u>Total</u> 4,106	<u>Suspended</u> 1,858	<u>Active Preference</u> 2,248	<u>Nonuse*</u> 698	<u>Active Use</u> 1,550
Year One	<u>Total</u> 4,106	<u>Suspended</u> 620	<u>Active Preference</u> 3,486	<u>Nonuse*</u> 946	<u>Active use</u> 2,540
Year Three	<u>Total</u> 4,106	<u>Suspended</u> 1,239	<u>Active Preference</u> 2,867	<u>Nonuse*</u> 823	<u>Active Use</u> 2,044
Year Five	<u>Total</u> 4,106	<u>Suspended</u> 1,858	<u>Active Preference</u> 2,248	<u>Nonuse*</u> 698	<u>Active Use</u> 1,550

* Mandatory non-use required for conservation and protection purposes includes 312 AUMs for the Native Pasture and the average number of AUMs of the three seeded pastures to cover one pasture being rested each year.

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Authorized livestock use effective in year 1 (11/1/95) will be as follows:

<u>Livestock No.</u>	<u>Kind</u>	<u>Period of Use</u>	<u>% PL</u>	<u>Active Use</u>
318	Cattle	11/1-6/30	100	2,540

Authorized livestock use effective in year 3 (11/1/97) will be as follows:

<u>Livestock No.</u>	<u>Kind</u>	<u>Period of Use</u>	<u>% PL</u>	<u>Active Use</u>
256	Cattle	11/1-6/30	100	2,044

Authorized livestock use effective in year 5 (11/1/99) will be as follows:

<u>Livestock No.</u>	<u>Kind</u>	<u>Period of Use</u>	<u>% PL</u>	<u>Active Use</u>
194	Cattle	11/1-6/30	100	1,550

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

1. Implement a three pasture-rest rotation grazing system for the crested wheatgrass seedings from 3/2 to 6/30 as outlined in Table 1.
2. To improve livestock distribution; mineral block and/or salt block will be placed a minimum distance of 1/2 mile from water, increased livestock movement by herding and water hauling. One water haul site will be in T.8 N., R.68 E., Sec.4 SW1/4 others will be approved by the authorized officer.
3. When livestock are moved out of a seeded pasture, gates will be closed.
4. Certified actual use report by use area and pasture is due 15 days after the end of the authorized grazing period.

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

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subsequent evaluations will determine if the phased in adjustments are still necessary, or if additional adjustments are required to meet the established allotment specific objectives.

Data on seasonal distribution of wild horses will be collected as will annual census data. If funding is available, two flights per year may be conducted in this portion of the Wilson Creek HMA.

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APPENDIX I

STOCKING LEVEL CALCULATION PROCEDURES
COTTONWOOD ALLOTMENT

Historically no grazing system was implemented on the Cottonwood Allotment following the development of seeding projects. The Deer Flat, Lower, Upper and Middle Seedings were established by the BLM in cooperation with the permittee between 1957 and 1965. Portions of the Lower Pasture were reseeded or extended in other areas in the summer of 1981. A stocking rate analysis following the vegetation treatment projects was never performed by the BLM.

The permittee did not submit actual use reports indicating livestock use by pasture as required during the evaluation period. Utilization data was collected by pasture and use pattern mapping data was collected for the whole allotment.

A stocking rate analysis was performed using licensed use each year for the whole allotment. Six years of data indicated an average desired stocking level of 2,248 AUMs. This stocking rate analysis assumes the permittee left all the pasture gates open each year during the period of use on the allotment.

The desired stocking level for the Cottonwood Allotment was determined using the following formula (BLM Technical Reference 4400-7):

$$\frac{\text{Actual Use (AUMs)}}{\text{Actual \% Utilization}} = \frac{\text{Desired Use (AUMs)}}{\text{Desired \% Utilization}}$$

TABLE I

CALCULATED LIVESTOCK STOCKING RATES

Year	Estimated Livestock AUMs	Livestock Actual Utilization	Yield Index	Adjusted Utiliz	Desired Utiliz	Desired Use AUMs
1984	1,840	74%	.89	65.9%	60%	1,675
1985	2,440	72%	1.37	98.6%	60%	1,485
1986	3,535	*	1.07	0.0%	60%	**
1987	2,188	*	0.96	0.0%	60%	**
1988	2,800	*	0.60	0.0%	60%	**
1989	2,127	70%	0.60	42.0%	60%	3,039
1990	1,237	70%	0.48	33.6%	60%	2,209
1991	1,922	67%	0.53	35.5%	60%	3,248
1992	1,925	76%	0.83	63.1%	60%	1,830
AVE/2,224					AVE/2,248	

* Livestock Actual Utilization data was not collected.
** Desired Use AUMs were not calculated.

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APPENDIX I CONT.

In order to determine a stocking rate to manage each pasture on a sustained yield basis it was decided to collect production data in each seeded pasture. The data was analyzed and used to determine a stocking level for each seeded pasture.

Forage production calculations indicated that 1158 AUMS were available in the four seeded pastures ie. Upper Seeding (188 AUMs), Middle Seeding (198 AUMs), Lower Seeding (320 AUMs), and Deer Flat Seeding (452 AUMs).

Subtracting the stocking rate for the seeded pastures based on production data from the Desired Stocking Rate for the whole allotment (2248 AUMs) there is a difference of 1090 AUMs ie. 2248 minus 1158 = 1090. This leaves 1090 AUMs for the Native Range as shown in the draft evaluation.

Upon a review of the data it was decided to compare the results for the native pasture to the 1979 Range Survey. The 1979 Range Survey indicated approximately 778 AUMs were available in the Native Range. This results in a difference of 312 AUMs (1090 AUMs minus 778 AUMs).

The differences shown in the above stocking rate analysis is because the first analysis extrapolates a stocking level for the whole allotment without regard to pasture. The second stocking rate analysis determines a stocking rate by pasture.

The stocking rate analysis by pasture was applied to the recommended three-pasture spring/fall rest rotation grazing system for the seeded pastures. The native pasture will receive primarily winter use each year. Implementation of a three-pasture rest-rotation grazing system will require one pasture to be rested each year. Nonuse will be required each year for the rested pasture. The recommended grazing practices will improve the current management practices and should provide more forage on a sustained yield basis and allow for progress to be made towards attainment of multiple use objectives for the allotment.

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APPENDIX I CONT.

FORAGE PRODUCTION CALCULATIONS
CRESTED WHEATGRASS PASTURES

Upper Seeding

$$\frac{* 1,235 \text{ Ac.} \times 203 \text{ lbs/Ac.} \times 60\% \text{ (proper use)}}{800 \text{ lbs forage/AUMs}} = 188 \text{ AUMs}$$

$$\frac{1,235 \text{ Ac}}{188 \text{ AUMs}} = 6.6 \text{ Ac./AUMs}$$

Middle Seeding

$$\frac{*1,510 \text{ Ac.} \times 175 \text{ lbs/Ac.} \times 60\% \text{ (proper use)}}{800 \text{ lbs forage/AUMs}} = 198 \text{ AUMs}$$

$$\frac{1,510 \text{ Ac}}{198 \text{ AUMs}} = 7.6 \text{ Ac./AUMs}$$

Lower Seeding

$$\frac{*1,677 \text{ Ac.} \times 255 \text{ lbs/Ac} \times 60\% \text{ (proper use)}}{800 \text{ lbs forage/AUMs}} = 320 \text{ AUMs}$$

$$\frac{1,677 \text{ Ac.}}{321 \text{ AUMs}} = 5.2 \text{ Ac/AUMs}$$

Deer Flat Seeding

$$\frac{*1,023 \text{ Ac.} \times 590 \text{ lbs/Ac} \times 60\% \text{ (proper use)}}{800 \text{ lbs forage/AUMs}} = 452 \text{ AUMs}$$

$$\frac{1,023 \text{ Ac.}}{453 \text{ AUMs}} = 2.3 \text{ Ac/AUMs}$$

* The acreage figures represent the treated acres within the pasture.

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Appendix I cont.

Stocking Level for Native Range from 79 Survey

SITE #	SITE TYPE	ACRES PER/AUM	ACRES	AUMS
1	ARTR-SIHY	104.12	6,733	64.70
3	ARTR	36.78	70	1.90
4	ARTR-SIHY	183.76	2,826	15.38
5	PIMO-SIHY	146.86	282	1.92
6	ARTR-EULA	28.67	2,479	86.47
8	ARTR-ARNO	130.70	227	1.74
9	ARTR-SIHY	55.66	1,190	21.38
10	EULA-SIHY	8.69	330	37.98
11	EULA-ARSP	17.01	243	14.29
12	ARNO-ORHY	85.32	78	.91
17	AGCR-ARNO	6.28	25	3.98
18	ARNO-PUTR	50.50	4,897	96.97
19	PIMO-PUTR	97.51	1,783	18.29
24	ARTR-EULA	193.69	1,282	6.62
25	EULA-ARSP	36.56	1,256	34.36
26	ARTR-SIHY	161.65	5,842	36.14
27	ARTR-EULA	69.19	2,052	29.66
28	EULA	13.01	879	67.56
29	CHVI-EULA	32.59	129	3.96
30	ARTR-EULA	42.14	1,354	32.13
32	PIMO-SYMP	186.63	5,574	29.87
34	EULA	9.19	734	79.87
35	ARTR-EULA	716.67	1,189	1.66
37	PIMO-CELE	322.82	3,382	10.48
38	CHVI-ORHY	26.59	1,773	66.68
39	ARTR-SIHY	286.67	46	.16
41	ARTR-STCO	94.19	43	.46
43	EULA-ORHY	8.53	105	12.31

TOTAL AUMS/778

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APPENDIX II

ALLOTMENT: COTTONWOOD - LIVESTOCK OBJECTIVES (Seedings)

Study No.	Key Area Location	Ecological Site No.	Key Species	PRESENT SITUATION			LONG TERM OBJECTIVE		SHORT TERM OBJECTIVE			
				Key Spp % Comp By Weight	Livestock Forage Condition	Maintain or Improve	Key Spp % Comp By Weight	Livestock Forage Condition	Allowable Use Level	Season of Use	Met or Not Met	Rationale
C01	Upper Pasture	N/A	AGCR	79%	Good	Maintain	>79%	Good	60%	3/09-06/30	Not Met	Allowable Use Levels Exceeded
C02	Upper Pasture	N/A	AGCR	61%	Good	Improve	70%	Good	60%	3/09-06/30	Not Met	Allowable Use Levels Exceeded
C03	Deer Flat Pasture	N/A	AGCR	71%	Good	Maintain	>71%	Good	60%	3/09-06/30	Not Met	Allowable Use Levels Exceeded
C04	Deer Flat Pasture	N/A	AGCR	79%	Good	Maintain	>79%	Good	60%	3/09-06/30	Not Met	Allowable Use Levels Exceeded
C05	Lower Pasture	N/A	AGCR	73%	Good	Maintain	>73%	Good	60%	3/09-06/30	Not Met	Allowable Use Levels Exceeded
C06	Middle Pasture	N/A	AGCR	50%	Fair	Improve	70%	Good	60%	3/09-06/30	Not Met	Allowable Use Levels Exceeded

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APPENDIX II (con't)

ALLOTMENT: COTTONWOOD - LIVESTOCK OBJECTIVES (Native)

Study No.	Key Area Location	Ecological Site No.	Key Species	PRESENT SITUATION		LONG TERM OBJECTIVE			SHORT TERM OBJECTIVE			
				Key Spp % Comp By Weight	Seral Stage (% of PNC)	Maintain or Improve	Key Spp % Comp By Weight	Seral Stage (% of PNC)	Allowable Use Level	Season of Use	Met or Not Met	Rationale
CAW01	T. 9 N., R. 68 E., Sec 14	028BY011NV	ORHY EULA ARARN	2 1 66	Mid 41	Improve	5 5 <66	Late 55 - 60	50% 45% 45%	11/1- 3/26	Not Met	Allowable Use Level Was Exceeded

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APPENDIX III

ALLOTMENT: COTTONWOOD - WILDLIFE OBJECTIVE

Study No.	Key Area Location	Key Species	PRESENT SITUATION		LONG TERM OBJECTIVE		SHORT TERM OBJECTIVE		
			Habitat Condition Rating 1/	Maintain or Improve	Habitat Condition Improve	Allowable Use Level	Season of Use	Met or Not Met	Rationale
South Spring Valley AKG	T. 9 N., R. 68 E., Sec. 14	PHLOX ORHY ARARN	42(Fair)	Improve	>61% (good)	40% 40% 45%	Yearlong	Not Met	Habitat condition is less than good

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APPENDIX IV

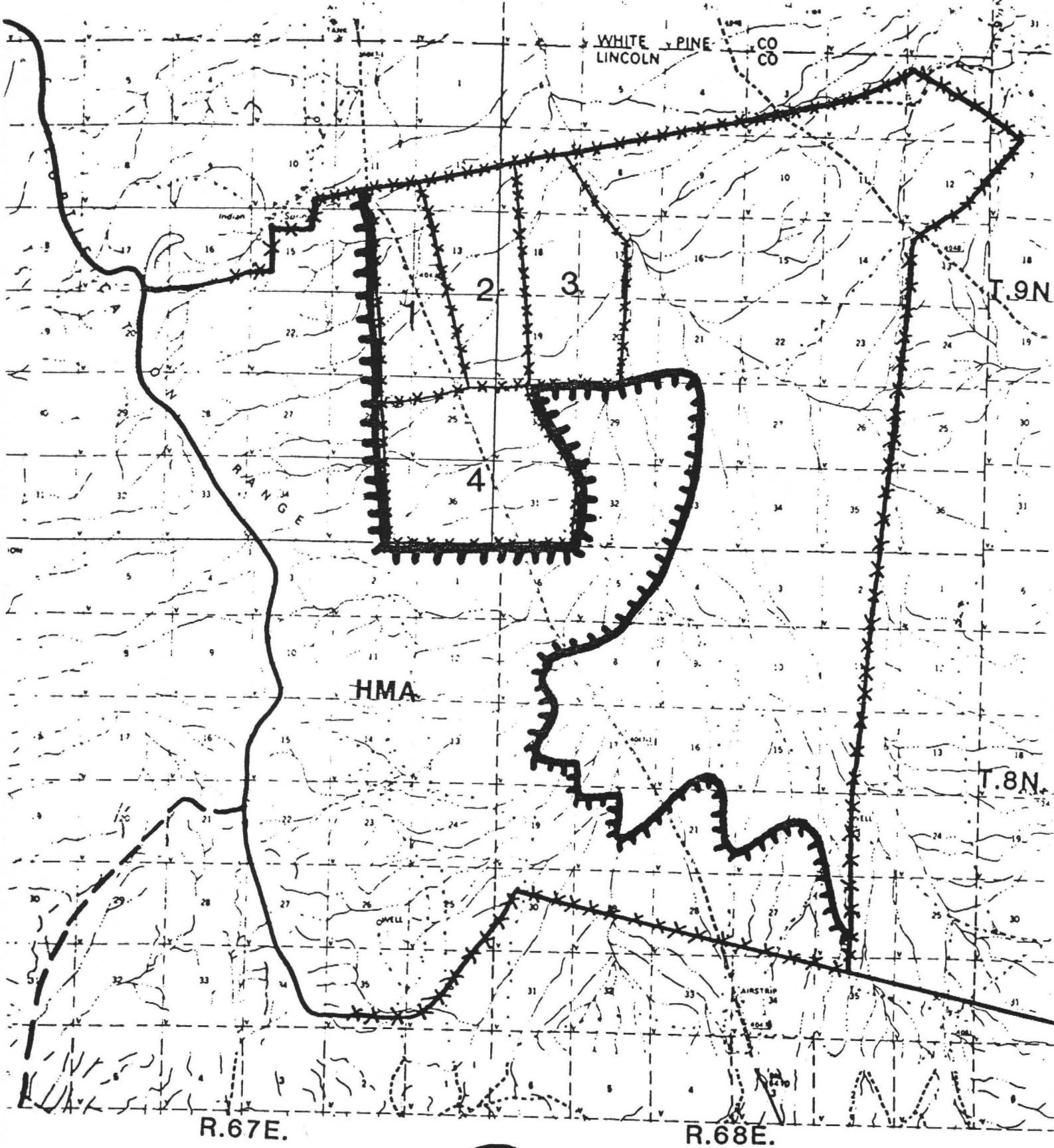
ALLOTMENT: COTTONWOOD - RIPARIAN OBJECTIVES

Study No.	Key Area Location	Ecological Site No.	Key Species	PRESENT SITUATION		LONG TERM OBJECTIVE		SHORT TERM OBJECTIVE			Rationale
				Key Spp % Comp By Weight	Seral Stage (% of PNC)	Maintain or Improve	Key Spp % Comp By Weight	Seral Stage (% of PNC)	Allowable Use Level	Season of Use	
Pipe Spring	T. 8 N., R. 67 E., Sec. 3, SWSE	Unknown	SALIX	No Ecological Status Survey Completed to Date		50%	Yearlong	Met	Allowable Use Levels Not Exceeded		
Cottonwood Spring	T. 9 N., R. 67 E., Sec. 27, SENE	Unknown	POA ELCI2 SALIX	No Ecological Status Survey completed to Date		50% 50%	Yearlong	Met	Allowable Use Levels Not Exceeded		

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COTTONWOOD ALLOTMENT (00132)

MAP 1



WILSON CREEK HMA BOUNDARY



1-UPPER PASTURE

3-LOWER PASTURE

2-MIDDLE PASTURE

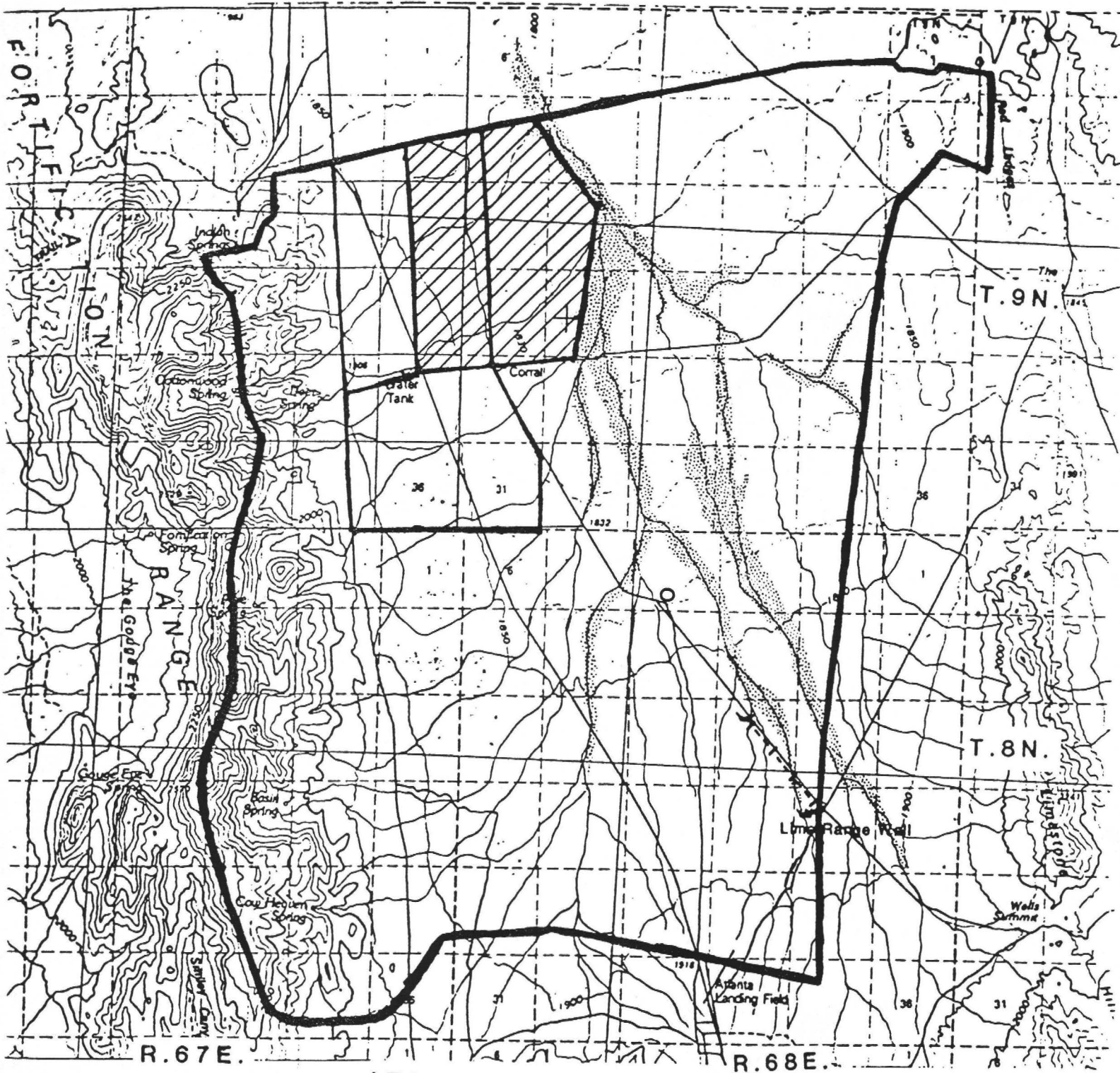
4-DEERFLAT PASTURE

DRAFT

COTTONWOOD ALLOTMENT (00132)

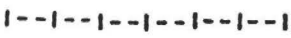
Proposed Range Improvements

MAP 2



LEGEND

Seeding Maintenance 

Pipeline 

Water Haul Point 

DRAFT