Form 1271-1b
(June 1992)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
OFFICIAL FILE COVER

Copy IV

Subject Code

4160/4400

File Title

N2-93-10 - COMMISSION FOR THE PRESERVATION OF W/H - Paiute Meadows Allotment

Cross References and Remarks:

PERIOD COVERED

From

May 12, 1993

To

Indef.

RECORDS SCHEDULE CITATION

Bureau

4/21a2

General

DISPOSITION INFORMATION

Retain in local office

2 years after cutoff Years

Transfer Date to Records Center

Retain in Records Center

Years

Date for Offer to Archives

DESTRUCTION DATE

26 years after cutoff

IMPORTANT

This file constitutes a part of the official records of the Bureau of Land Management and should not be separated or papers withdrawn without notifying the person in charge of the files.

*U.S. Government Printing Office: 1992 — 676-033

Black Rock East HMA
Paiute Meadows Allot
5-12-93

N2 93 10

Form 1850-2
(December 1979)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

GRAZING APPEAL TRANSMITTAL

TO:

State Director: 931.1

The appeal identified herein has been filed and is forwarded to you, together with copies of the pertinent District Office records, for action and transmittal to an Administrative Law Judge in accordance with 43 CFR 4.470.

1. Name(s) of appellant(s)

Commission for the Preservation of Wild Horses
Stewart Facility
Capitol Complex
Carson City, NV 89710

Appeal #N2-93-10

2. Appeal was filed *(date)*	3. Decision appealed from was served on appellant(s) *(date)*
May 12, 1993	April 13, 1993

4a. [X] I do *not* recommend that a motion to dismiss the appeal be filed
b. [ ] I recommend that motion to dismiss the appeal be filed. I am submitting my recommendations in a separate memorandum to you

5. Recommendations as to approximate time for hearing *(specify week or month)*

a. Preferred time	b. Alternative acceptable time
*See Remarks	

* *If preferred time is more than 90 days hence, give reasons under "Remarks" item 8.*

6. Estimated time *(in days)* hearing will require	7. Approximate number of other range users who may request to intervene
4	7

8. Remarks *(See item 5 above; also include any other information helpful to the Administrative Law Judge in making his arrangements for the hearing; continue on reverse side, if necessary)*

We request that this appeal be heard in conjunction with the following appeals:

N2-92-9 on November 15, 1993
N2-93-8
N2-93-9
N2-93-11

Winnemucca District

June 21, 1993
(Date)

Ron Wenker
(Signature of Authorized Officer)

Copy to: Office of Hearings and Appeals, Salt Lake City, Utah
Director, (220) Washington, D.C.

Forward with this transmittal: (1) related grazing application(s); and (2) Authorized Officer's final decision on application(s) with evidence of service upon the applicant(s).

GPO 853-888

N? 93 10

Appeal N2-93-10
Commission for the Preservation of Wild Horses
Paiute Meadows Allotment
Table of Contents

N2 93 10

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Winnemucca District Office
705 East Fourth Street
Winnemucca, Nevada 89445

In reply refer to:
4400 (NV024.14)

Memorandum

To: State Director, Nevada, NV-931.1

From: District Manager, Winnemucca

Subject: Appeal Narrative Summary, Appeal No. N2-93-10

A. CHRONOLOGICAL SUMMARY OF ISSUES, EVENTS, AND ACTIONS LEADING TO THE APPEAL:

September 18, 1981 the Record of Decision for the Paradise-Denio Environmental Impact Statement was issued.

July 9, 1982 the Paradise-Denio Management Framework Plan decisions were issued for the Range and Wildlife programs.

October 14, 1983 the Paradise-Denio Rangeland Program Summary was issued listing program objectives for the Range and Wildlife Programs on the Paiute Meadows Allotment.

September 23, 1986 W.O. Instruction Memo No. 86-706 on rangeland monitoring was issued.

February 17, 1987 W.O. Instruction Memo No. 87-274 on Riparian Area Management was issued.

1st DRAFT ?

November 5, 1992 the second draft Paiute Meadows Allotment Evaluation was sent out to permittee and affected interests for review and comment.

December 4, 1992 written comments received from the Commission for the Preservation of Wild Horses.

December 17, 1992 meeting with affected interest was held in Winnemucca to discuss comments on Paiute Meadows Allotment Evaluation.

January 4, 1993 conversation with Cathy Barcomb of the Commission for the Preservation of Wild Horses concerning public meeting dates for discussion of the Paiute Meadows Allotment Evaluation.

March 2, 1993 a proposed decision was issued for the Paiute Meadows

Allotment setting the Appropriate Management Level (AML) for wild horses, prescribing the grazing practices to be conducted on the allotment and stating the multiple use objectives under which grazing use on the Paiute Meadows Allotment would be monitored and evaluated. A copy of the final Paiute Meadows Allotment evaluation was sent with the proposed decision.

March 3, 1993 the notice of the proposed decision was received by the Commission for the Preservation of Wild Horses.

KNEW THEY WOULD BE APPEALED

March 18, 1993 letter received from the Commission for the Preservation of Wild Horses protesting the proposed decision dated March 2, 1993.

March 24, 1993 concurrence from the Winnemucca District Manager to issue the Final Decision for the Paiute Meadows Allotment Full Force and Effect.

March 30, 1993 an interdisciplinary trip was made to the Paiute Meadows Allotment by Scott Billing, Shane Deforest, Dave Stockdale, and Amanda McCutcheon to determine whether or not an April 1, 1993 livestock turnout could be permitted on the Paiute Meadows Allotment.

April 12, 1993 a notice of the Final Full Force and Effect Multiple-Use Decision (MUD) was issued for the Paiute Meadows Allotment along with a letter addressing the Points of Protest for the Proposed Decision issued March 2, 1993.

April 13, 1993 the notice of the Final Full Force and Effect MUD was received by the Commission for the Preservation of Wild Horses.

May 12, 1993 a copy of the 1993 grazing authorizations for the Paiute Meadows Allotment were faxed to Dawn Lappin of WHOA and Cathy Barcomb of the Commission for the Preservation of Wild Horses.

May 12, 1993 letter received from the Commission for the Preservation of Wild Horses appealing the Final Full Force and Effect MUD issued April 12, 1993.

B. Responses to Appeal Points

Appeal Point 1:

"Overallocation of the habitat which is in violation of BLM Regulations and Management Policies."

Response:

According to CFR 43 4110.3-3(a) "Changes in active use in excess of 10 percent shall be implemented over a five year period...." and according to the Strategic Plan for the Management of Wild Horses and Burros on Public Lands, only adoptable wild horses (5 years and younger) shall be removed from the public lands. Due to these constraints, the reduction in AUMs for livestock is being phased in and the wild horse population will require two gathers to reach AML. The resource damage will

may continue to occur we have to follow the regulations for reducing both the Active Preference and the Wild Horse population.

Appeal Point 2:

"Setting the AML for the new "Black Rock Mountain HMA" is arbitrary and capricious."

Response:

Both Resource Areas calculated carrying capacities for their respective allotments using 50% utilization by the end of the grazing season. The Sonoma-Gerlach Resource Area is also using a 10% utilization for wild horses from the end of the livestock grazing season to the end of the grazing year, thus the 60% utilization level for the Soldier Meadows Allotment.

The recommended AML has been derived by using the monitoring data from the Paiute Meadows and Soldier Meadows allotments to calculate carrying capacity. Land Use Plan proportions were then used to determine the amount of AUMs to be allocated to wild horses in both the Paiute Meadows and Soldier Meadows allotments. These numbers were then added together and divided in half to determine the amount of AUMs that would be provided for wild horses on the Paiute Meadows Allotment.

assuming even distribution

Appeal Point 3:

"The carrying capacities of the Final Decision will cause resource damage and not result in a thriving ecological balance."

Response:

See response to Points of Appeal 1 & 2.

Appeal Point 4:

"Use of Full Force and Effect is not equitable to Wild Horses."

Response:

The use of Full Force and Effect is a method by which the Bureau implements decisions. It does not allow the Bureau to set aside the Code of Federal Regulations.

CFR 4110.3-1(a) states "...The authorized officer may place the final decision in full force and effect in an emergency to stop resource deterioration. Full force and effect decisions shall take effect on the date specified, regardless of an appeal."

Therefore, placing the Final Decision for the Paiute Meadows Allotment initiated a decrease in the active use by livestock and wild horses instead of suspending the decision and allowing continued resource damage.

Appeal Point 5:

"The Proposed Decision modifies allotment specific objectives essential in determining stocking rates and appropriate management levels (AML) for livestock and wild horses, respectively."

Response:

The stocking rates for livestock and the AML for wild horses are set by short term monitoring studies such as actual use, utilization, and climate. The short term objectives are used to evaluate whether or not the present management practices are adequate for achieving the long term objectives.

Appeal Point 6:

"Carrying capacities were computed improperly and not in accordance to Bureau of Land Management procedures."

Response:

One of the prime considerations on which livestock reductions were based in the decision was the heavy and severe use on riparian habitats, particularly along the creeks. Carrying capacity was calculated at the 50% utilization level using heavy and severe use found along creeks and on the uplands. This is outlined in Technical Report 4400-7.

The selected management action addresses the problem of over use on riparian areas by modifying the season of use in the North Paiute Use Area from 5/1 to 11/5 to 3/15 to 7/15, upon full implementation of the decision. This represents an elimination of nearly four months of grazing during the hottest period of the year. This modification of the grazing season is well documented in the current literature as a method of reducing the grazing pressure on riparian and meadow areas. It is the opinion of the Bureau that a reduction in the season of use to eliminate hot season grazing will make significant progress, during the next grazing cycle, towards attaining the wetland/riparian objectives.

Appeal Point 7:

"Available forage was not allocated appropriately to range users or wildlife."

Response:

The Bureau did not assume that the land use plan reasonable numbers for wildlife and wild horses and the actual preference for livestock were at carrying capacity. Carrying capacity methodology requires two essential pieces of information. Without some reliable estimates of animal numbers, and baseline data on the effect those animals are having on their habitat, carrying capacity estimates would be arbitrary.

In the case of livestock and wild horse carrying capacity, the Bureau has and continues to obtain accurate actual use estimates of the numbers

of animals in a particular allotment. The Bureau has also established methods of accurately assessing the impacts (level of use) that horses and livestock are incurring on their particular vegetative resource. Given the availability of these two essential pieces of information and the accepted proper use factors for grass species, as identified in the short-term objectives, carrying capacities can and are developed.

In the case of wildlife, the Bureau has been unable to obtain accurate estimates of actual wildlife use in a given allotment. The Bureau has also failed to obtain any estimate from NDOW concerning target population sizes on a hunt unit or mountain range basis which could be extrapolated from and used as a goal to manage for on an allotment basis. Another important factor which is often overlooked is that the Bureau's allocations of forage to livestock and horses are based on estimates of grass production in the allotment and not key wildlife browse species such as forbs and shrubs. Given this information, a forage allocation for wildlife is unnecessary due to minimal dietary overlap with livestock and horses, and the nature of the forage type used in calculating carrying capacity and allocating forage for livestock and horses.

Appeal Point 8:

"The Use of Full Force and Effect."

Response:

The Paiute Meadows Allotment Evaluation indicated that the range resource on the allotment has been over obligated. The over obligation is attributed to both the population of wild horses and the authorized use for livestock.

Monitoring data indicates that heavy use has occurred on parts of the allotment since 1987. The wild horse population has been reduced twice since 1987 and the active livestock use has been reduced once. These measures still have produced heavy use in some areas of the allotment.

Another concern is the hot season of use by livestock and wild horses of the riparian habitats associated with Paiute, Battle, and Bartlett Creeks. Continuing with this heavy use during the hot season would cause further degradation of these habitats. The North Fork of Battle Creek is being recommended as a recovery stream for Lahontan Cutthroat Trout.

Ecological Site information from the South end of the allotment indicates that the proper vegetation for the range site is not present as described by National Standards. This can be partially attributed to the continued heavy use and partially to the climatic conditions over the past six years.

The Full Force and Effect Decision gives the Bureau the opportunity to start phasing in the reduction of active use and implement the new season of use for the livestock operation without any delay due to appeals. This is necessary to protect the riparian areas within the

allotment.

It also provides the opportunity for the Bureau to plan for a gather of wild horses this fall. It is not likely that we would reach the AML with one gather but delaying the process because of an appeal would result in continued heavy use of the resources and prolong the recovery period for the range resource.

Therefore, the Final Multiple Use Decision for the Paiute Meadows Allotment was placed in Full Force and Effect.

C. SUMMARY OF DECISION RATIONALE

The Paiute Meadows Allotment evaluation and decision were developed in accordance with W.O. IM No. 86-706. The evaluation analyzed available monitoring data to determine if current livestock management was consistent with multiple use objectives. A decision was issued in accordance with guidance set forth in NSO IM NV-89-268 and was issued to affirm the terms and conditions of the grazing permit for the Paiute Meadows Allotment.

The Paiute Meadows Allotment Evaluation concluded that the short term multiple use objectives are not being met and therefore progress towards long term objectives is not being achieved. The analysis and evaluation of the monitoring data indicates that a change in the current grazing practices and the wild horse population is warranted.

The appeal filed by the Commission for the Preservation of Wild Horses deals primarily with modified allotment objectives, carrying capacity, allocation of forage, and the use of Full Force and Effect.

Ron Wenker

BOB MILLER
Governor

STATE OF NEVADA

N2 93 10

CATHERINE BARCOMB
Executive Director

COMMISSIONERS

Dan Kelserman
Las Vegas, Nevada

Michael Kirk, D.V.M., Chairman
Reno, Nevada

Paula S. Askew
Carson City, Nevada

Steven Fulstone
Smith Valley, Nevada

Dawn Lappin
Reno, Nevada

COMMISSION FOR THE PRESERVATION OF WILD HORSES

Stewart Facility
Capitol Complex
Carson City, Nevada 89710
(702) 687-5589

May 12, 1993

Scott Billing, Area Manager
Paradise-Denio Resource Area
BLM-Winnemucca District Office
705 East 4th Street
Winnemucca, Nevada 89445

RE: Appeal of Final Full Force and Effect Multiple Use Decision
Paiute Meadows Allotment

Dear Mr. Billing,

Thank you for the opportunity to review and comment on the Final Full Force and Effect Multiple Use Decision for the Paiute Meadows Allotment.

The Commission formally appeals this decision for the following reasons:

Overallocation of the habitat which is in violation of BLM Regulations and management policies.

We are appealing the issuance of a livestock license with livestock AUMs in addition to the horses that are currently using the allotment. As was one of our protest points in the draft, Wild horses are scheduled for removal (subject to available funding), in the fall of 1993. Currently with the population of approximately 351 wild horses in Black Rock East, in addition to the permitted turnout of 2,500 AUMs of livestock prior to that removal, you will not stay within the carrying capacity of the range. You cannot provide for the additional AUMs necessary for the current population of 351 wild horses (4,212 AUMs), with the 2,500 scheduled AUMs necessary for livestock.? Your answer was that "Changes in active use in excess of 10% shall be implemented over a five year period..." That doesn't answer our question of how you will prevent resource damage. You are issuing this decision full force and effect against horses to protect the resource but are intentionally overallocating the resource by licensing maximum livestock use prior to the scheduled removal of wild horses.

Setting the AML for the new "Black Rock Mountain HMA" is arbitrary and capricious.

The wild horse information presented in your decision and the

(82)-1974

N2 93 10

information presented in the Soldier Meadows draft decision are contrary to each other. The determination of AML must be set under the same criteria and objectives. We fully agree with combining the two areas to create one HMA with a combined AML as was agreed to in the agreement signed by ourselves and the Nevada State Director Billy Templeton. However the combined AML of 186 wild horses is arbitrary in that the carrying capacity for Black Rock East is calculated at 50% utilization for upland grasses whereas Black Rock West is calculated at 60% utilization. There is no monitoring data to substantiate this decision.

You have also taken AUMs away from wild horses only to replace them with livestock use. Page 7 of your decision, "The reduction in the wild horse AML, resulted in an additional 372 AUMs available for livestock on the Paiute Meadows Allotment." This is an arbitrary decision on your part. The Paiute Meadows wild horses have not received the protection and management of their habitat to sustain a healthy, viable population. It is arbitrary, in light of the monitoring data, to allocate wild horse use at 8%, livestock use at 92%, and wildlife at 0%, and then call this multiple use!

The carrying capacities of the Final Decision will cause resource damage and not result in a thriving ecological balance.

Carrying capacities for the Black Rock Range Herd have not be established by manager decisions. The Draft Soldier Meadows Allotment Evaluation presented carrying capacity computations with different assumptions than the Final Paiute Meadows Allotment Evaluation. These different assumptions make significant differences in the carrying capacities and proportional allocation of available forage for wild horses and livestock. The Soldier Meadows Multiple Use Decision is pending.

All carrying capacity computation for the Paiute Meadows and Soldier Meadows Allotments do not establish stocking rates or appropriate management levels for livestock and wild horses, respectively, that will meet all Short Term Objectives. Specifically, Sonoma-Gerlach Resource Area computation for Soldier Meadows Allotment assumes 60% desired utilization while Paradise-Denio Resource Area computations for Paiute Meadows Allotment assumes 50% desired utilization. Neither Resource area computation considers the 30% utilization rate for key stream bank riparian vegetation found in both allotments specific Short Term Objectives. Therefore, the Winnemucca District is not being consistent in carrying capacity computations and are not managing for stream bank riparian habitats in either Resource Area affecting the Black Rock Range.

The District's assumptions that the land use plan initial livestock stocking rates and wild horse numbers were at carrying capacities and in proper proportion in 1982, is not correct. Numbers expressed in the land use plan were to initiate monitoring to make adjustment, if necessary, to meet multiple use and

N2 93 10

sustained yield mandates of FLMPA. The Final Decisions's rationale to allocate available forage to livestock and wild horses in the proportions found in the land use plan is not based upon monitoring data presented in the Paiute Meadows Allotment Evaluation.

Use of Full Force and Effect is not equitable to Wild Horses.
Full Force and Effect is to stop resource damage and allow the Bureau of Land Management greater discretion to meet immediate resource needs. This regulatory discretion allows necessary actions for resource protection and exemption from regulations requiring livestock reductions of greater than 10% be phased in over five years. While we may agree with the immediate reduction of wild horses necessary to stop resource damage, the Final Decision merely replaces horses with livestock in the North Pasture. Monitoring data and recommendations from your range conservationist in 1992 showed that the livestock stocking rates and seasons of use for the North Pasture will exceed Short Term Objectives.

Finally, the Commission, supports the arguments of the Department of Wildlife as follows, and wishes these appeal points to be included in addition to our points of appeal:

The Final Decision modifies allotment specific objectives essential in determining stocking rates and appropriate management levels for livestock and wild horses, respectively.
The Short Term Objective is amended to read "Utilization data will be collected at the end of the grazing period." After-the-fact monitoring has allowed for livestock to exceed the allowable use levels of key species within key management areas. These limitations on vegetation are the basis for the protection or restoration of critical fish and wildlife habitats. It is the our position as well as that of the Department of Wildlife, Natural Resource Defense Council, Sierra Club, and Fish and Wildlife Service that these limitations are not mere "targets", but attainable, measurable and meaningful parameters to manage public lands.
The issue of setting allotment specific objectives and meeting these objectives annually has been debated with the Paradise-Denio Resource Area since 1988. This issue is found in the appeals of the Department and Natural Resource Defense Council pertaining to the original 13 livestock agreements issued in 1988. The Department has directly addressed the attempt to modify Short Term Objectives found in the draft Bullhead Allotment Evaluation. The U.S. Fish and Wildlife Service addressed this issue in their comments to the draft Little Owyhee Allotment Evaluation.
Mid-season monitoring of the Paiute Meadows Allotment was accomplished by the Paradise-Denio Resource Area on July 6-9, 1992, by range conservationist, Ms. Abbie Josie. According to your

files, the 1992 grazing authorization of 700 cattle in the North Pasture from May 1, 1992 to July 31, 1992 (2,117 AUMs), contributed to heavy utilization of stream bank and wetland riparian habitats. Ms. Josie recommended taking non-use for the remainder of the grazing season to avoid exceeding the Short Term Objectives and the carrying capacity causing degradation to riparian habitats. In spite of this recommendation, the Resource Manager re-authorized livestock use in the North Pasture an additional four months or 1,101 AUMs on August 9, 1992. These actions by the Paradise-Denio Resource Area clearly show no good effort to enforce existing allotment specific objectives to protect critical riparian habitat of the Paiute Meadows Allotment. Therefore, the modification of Short Term Objectives to eliminate mid-season monitoring and limitations on key riparian species is not in the best interest of the natural resources of the Paiute Meadows Allotment.

Carrying capacities were computed improperly and not in accordance to Bureau of Land Management procedures.

Technical Manual 4400-7 does not allow for average/weighted average utilization data for pastures that do not have uniform production or use. Use pattern mapping data collected in all years on all pastures show production and use to be non-uniform.

Short Term Objectives for stream bank riparian vegetation allows only 30% use of key species. Average/weighted averaging used in the Paiute Meadows Allotment Evaluation's carrying capacity computations assumed 50% as a desired utilization level. The Final Decision authorizes between 2,154 to 2,686 AUMs of Active Use in the North Pasture from March 15 to August 18 and allowing adjustments to be phased in over the next five years. Present monitoring data shows that at these levels of livestock use, under identical terms and conditions of past grazing authorizations, will result in exceeding the Short Term Objectives and carrying capacity of the North Pasture of the Paiute Meadows Allotment.

Wild horse appropriate management levels for the Black Rock Range Herd have not been established. Carrying capacity computations found in the Final Paiute Meadows Allotment Evaluation and Draft Soldier Meadows Allotment Evaluation are different. Present Monitoring data indicate wild horse use of wetland riparian habitat can exceed the Short Term Objective. Therefore, it is important that wild horse and livestock carrying capacities be determined properly and consistent to the protection of the resource.

Available forage was not allocated appropriately to range users or wildlife.

The Final Paiute Meadows Allotment Evaluation makes the improper assumption that the actual numbers for wildlife, active preference for livestock and wild horses, cited in the 1982 land use plan, were at carrying capacity for the allotment. These Scott

numbers of ungulates were to be monitored and adjusted, if necessary, with rangeland monitoring data. These numbers and their proportions were not at a thriving ecological balance and range conditions ere not at acceptable levels in 1982. The Final Decision allocation of forage is inappropriate.

Since carrying capacity computations resulted in stocking levels known not to meet Short Term Objectives, the allocation of all available forage to livestock and wild horses is arbitrary. As previously stated, wetland meadows and stream bank riparian habitat will be grazed heavily and not provide forage or cover for wildlife species. No forage was allocated to wildlife.

The use of Full Force and Effect

The Winnemucca District used Full Force and Effect to endorse the November 19, 1991, Livestock Agreement with Mr. Dan Russell, permittee. This livestock agreement modified the allotment specific objectives now found in this Final Decision. In spite of this action in previous decisions, the Final Decision further endorses this vacated livestock agreement.

As previously stated in this appeal, the Resource Area's failure to recognize Short Term Objectives or proper utilization levels for key species of riparian habitats in previous grazing authorizations has resulted in exceeding the carrying capacity of the allotment.

Use of Full Force and Effect is to stop resource damage with a significant action. Where Full Force and Effect may be appropriate to reduce wild horses, its application to livestock management will maintain management practices known to cause resource damage.

If you have any questions, please feel free to call. Also, if you would care to discuss our concerns at a meeting we would welcome the opportunity.

Sincerely,

Catherine Barcomb

CATHERINE BARCOMB
Executive Director

Lynda Jackson

********** -COMM.JOURNAL- ********** DATE MAY-12-1993 ***** TIME 13:54 **** P.1

MODE = TRANSMISSION START=MAY-12 13:39 END=MAY-12 13:54

NO.	COM	SPEED DIAL	STATION NAME/ TELEPHONE NO.	PAGES	PRG.NO.	PROGRAM NAME
001	OK	#	87026875631	005		

N2 93 10

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BUREAU OF LAND MANAGEMENT
WINNEMUCCA DISTRICT OFFICE
705 EAST 4TH ST., WINNEMUCCA, NEVADA 89445

(702) 623-1500 FAX (702) 623-1503

N2 93 10

DATE	NO. OF PGS (inc. cover)	FILE CODE	DISPOSITION OF ORIGINAL
5/12/93	5		☐ RETURN ☐ MAIL ☐ RECYCLE ☐ CENTRAL RECORDS

TO (Name, Office, FAX #)	FROM (Name, Office)
Cathy Barcomb & Dawn Lappin 687-5631	Lynnda Jackson

SUBJECT

Attached are the 1993 grazing authorizations for Paiute Meadows Allotment that you requested.

Thanks,

Lynnda

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

DUE DATE MARCH 31, 1993

TOTAL DUE $204.60

STATE	(1)	NV
OFFICE	(2)	024
OPERATOR NUMBER	(3)	272173
PREFERENCE CODE	(4)	03
SCHEDULE NUMBER	(5)	6
BILL NUMBER	(6)	G272173320
BILL DATE	(7)	03/31/93
BILL CODE	(8)	1
AMOUNT COLLECTED	(9)	$204.60
FOR BLM USE ONLY		

PAIUTE MEADOWS RANCH
DAN RUSSELL
2991 GOLD CANAL DR
SUITE B
RANCHO CORDOVA, CA 95670

BUREAU OF LAND MANAGEMENT
WINNEMUCCA D.O.
705 EAST 4TH STREET
WINNEMUCCA, NV 89445

MAKE REMITTANCE TO: US DEPT. OF THE INTERIOR-BLM. PLEASE RETURN THE TOP PORTION OF THIS NOTICE WITH YOUR PAYMENT, AND KEEP THE BOTTOM PORTION. THIS NOTICE SHOWS THE AMOUNT DUE IN GRAZING FEES FOR LIVESTOCK GRAZING USE OFFERED TO YOU. YOUR CANCELED CHECK IS YOUR RECEIPT. A SERVICE CHARGE OF $10.00 WILL BE MADE FOR EACH APPLICATION REQUIRING A REPLACEMENT OR SUPPLEMENTAL BILL.

BILL NUMBER: G272173320 PAIUTE MEADOWS RANCH

ALLOT PASTURE	NUMBER	K	LIVESTOCK BEGIN PERIOD	END PERIOD	%PL	U	AUM'S	AUM COST	FEE AMOUNT
00057 PAIUTE MEADOWS	230	C	04/01/93	04/15/93	97	A	110	$1.86	$204.60
								SUBTOTAL	$204.60
								SERVICE CHARGE	$.00
								TOTAL DUE	$204.60

TERMS AND CONDITIONS:

1. GRAZING USE WILL BE AS FOLLOWS:
   NORTH PAIUTE USE AREA - [illegible]

   CATTLE WILL BE TURNED OUT FROM PAIUTE MEADOWS RANCH AND CLARK FIELD INTO THE NORTH PAIUTE USE AREA AND PUSHED OUT TO PINTO MOUNTAIN.

   SALT AND/OR MINERAL BLOCKS SHALL NOT BE PLACED WITHIN ONE QUARTER (1/4) MILE OF SPRINGS, MEADOWS, STREAMS, RIPARIAN HABITATS OR ASPEN STANDS.

PAID
$204.60
Date 4-5-93
DEPARTMENT OF THE INTERIOR
Bureau of Land Management
By Eleanor M. Bracken

Form 1370-37 (June 1990) CASE FOLDER

BILL NUMBER: 827217322

N2 93 10

SALT AND/OR MINERAL BLOCKS SHALL NOT BE PLACED WITHIN ONE QUARTER (1/4) MILE OF SPRINGS, MEADOWS, STREAMS, RIPARIAN HABITATS OR ASPEN STANDS.

YOU ARE REQUIRED TO PERFORM NORMAL MAINTENANCE ON THE RANGE IMPROVEMENTS FOR WHICH YOU HAVE MAINTENANCE RESPONSIBILITY AS PER YOUR SIGNED COOPERATIVE AGREEMENTS.

YOUR CERTIFIED ACTUAL USE REPORT, BY PASTURE, IS DUE 15 DAYS AFTER THE END OF YOUR AUTHORIZED GRAZING PERIOD.

IF PAYMENT IS NOT RECEIVED WITHIN 15 DAYS OF THE DUE DATE, YOU WILL BE CHARGED A LATE FEE ASSESSMENT OF $25.00 OR 10% OF THE GRAZING BILL, WHICHEVER IS GREATER, NOT TO EXCEED $250.00. FAILURE TO MAKE PAYMENT WITHIN 30 DAYS OF THE DUE DATE MAY RESULT IN TRESPASS ACTION.

YEAR TO DATE AUTHORIZED

ALLOT	PREF ACTIVE	NOT SCHED	AUTHORIZED ACTIVE	NONUSE	FR USE	EQU	TRAIL	TEMP
00057	7827	5327	2500					

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

DUE DATE APRIL 16, 1993

TOTAL DUE $4,445.40

STATE	(1) NV	
OFFICE	(2) 024	
OPERATOR NUMBER	(3) 272173	
PREFERENCE CODE	(4) 03	
SCHEDULE NUMBER	(5) 1	
BILL NUMBER	(6) G27217322	
BILL DATE	(7) 04/13/93	
BILL CODE	(8) 1	
AMOUNT COLLECTED	(9) $4,445.40	
FOR BLM USE ONLY		

PAIUTE MEADOWS RANCH
DON RUSSELL
2991 GOLD CANAL DR
SUITE B
RANCHO CORDOVA, CA 95670

BUREAU OF LAND MANAGEMENT
WINNEMUCCA D.O.
705 EAST 4TH STREET
WINNEMUCCA, NV 89445

MAKE REMITTANCE TO: US DEPT. OF THE INTERIOR-BLM. PLEASE RETURN THE TOP PORTION OF THIS NOTICE WITH YOUR PAYMENT, AND KEEP THE BOTTOM PORTION. THIS NOTICE SHOWS THE AMOUNT DUE IN GRAZING FEES FOR LIVESTOCK GRAZING USE OFFERED TO YOU. YOUR CANCELED CHECK IS YOUR RECEIPT. A SERVICE CHARGE OF $10.00 WILL BE MADE FOR EACH APPLICATION REQUIRING A REPLACEMENT OR SUPPLEMENTAL BILL.

BILL NUMBER: G27217322 PAIUTE MEADOWS RANCH

ALLOT PASTURE		LIVESTOCK NUMBER	K	BEGIN PERIOD	END PERIOD	%PL	U	AUM'S	AUM COST	FEE AMOUNT
00057	PAIUTE MEADOWS									
		230	C	04/16/93	05/15/93	97	A	220	$1.86	$409.20
		540	C	05/16/93	09/18/93	97	A	2170	$1.86	$4,036.20
								SUBTOTAL		$4,445.40
								SERVICE CHARGE		$.00
								TOTAL DUE		$4,445.40

TERMS AND CONDITIONS:

GRAZING SHALL BE IN ACCORDANCE WITH [illegible] FINAL DECISION DATED APRIL 12, 1993.

YOUR 1993 SCHEDULE IS AS FOLLOWS:
NORTH PAIUTE USE AREA
LOW ELEVATION 230 CATTLE 04/16 TO 05/15
540 CATTLE 05/16 TO 05/31
HIGH ELEVATION 540 CATTLE 06/01 TO 09/18

HERDING/SALTING PRACTICES ARE REQUIRED AND SHOULD BE DESIGNED SO THAT LIVESTOCK DRIFT DOES NOT OCCUR INTO USE AREAS WHEN NOT SCHEDULED FOR USE.

PAID
$ 4445.40
Date 4-21-93
DEPARTMENT OF THE INTERIOR
Bureau of Land Management
By Eleanor M. Bradford

Form 1370-37 (June 1990)

CASE FOLDER

N2 93 10

BILL NUMBER: 627217320

YOU ARE REQUIRED TO PERFORM NORMAL MAINTENANCE ON THE RANGE IMPROVEMENTS FOR WHICH YOU HAVE MAINTENANCE RESPONSIBILITY AS PER YOUR SIGNED COOPERATIVE AGREEMENTS.

VOID

YOUR CERTIFIED ACTUAL USE REPORT, BY PASTURE, IS DUE 15 DAYS AFTER THE END OF YOUR AUTHORIZED GRAZING PERIOD.

IF PAYMENT IS NOT RECEIVED WITHIN 15 DAYS OF THE DUE DATE, YOU WILL BE CHARGED A LATE FEE ASSESSMENT OF $25.00 OR 10% OF THE GRAZING BILL, WHICHEVER IS GREATER, NOT TO EXCEED $250.00. FAILURE TO MAKE PAYMENT WITHIN 30 DAYS OF THE DUE DATE MAY RESULT IN TRESPASS ACTION.

YEAR TO DATE AUTHORIZED				AUTHORIZED				
ALLOT	PREF ACTIVE	NOT SCHED	ACTIVE	NONUSE	FR USE	EQU	TRAIL	TEMP
00057	782	717	110					

Form 1370-37 (June 1990)

CASE FOLDER

N2 93 10

0241.4 4130 4160

Is your RETURN ADDRESS completed on the reverse side?

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Ms. Cathy Barcomb
Commission for the Preservation
of Wild Horses and Burros
Stewart Facility
Capitol Complex
Carson City, NV 89710

4a. Article Number
P374309814

4b. Service Type
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery
13 APR

5. Signature (Addressee)
Dave Rabe

6. Signature (Agent)

8. Addressee's Address (Only if requested and fee is paid)

PS Form 3811, December 1991 ★U.S. GPO: 1992—323-402 **DOMESTIC RETURN RECEIPT**

MAIL ROOM COMPLEX
CARSON CITY, NEV 89710

Thank you for using Return Receipt Service.

YELLOW

N2 93 10

United States Department of the Interior

TAKE PRIDE IN AMERICA

BUREAU OF LAND MANAGEMENT
Winnemucca District Office
705 East 4th Street
Winnemucca, Nevada 89445

IN REPLY REFER TO:
4130, 4160
(NV-024.14)

April 12, 1993

CERTIFIED MAIL NO. P111845566
RETURN RECEIPT REQUESTED

FINAL FULL FORCE AND EFFECT MULTIPLE USE DECISION
PAIUTE MEADOWS ALLOTMENT

Bill & Gail Phillips
P.O. Box 2991
Winnemucca, NV 89446

Dear Mr. & Mrs. Phillips:

The record of Decision of the Paradise-Denio Environmental Impact Statement was issued on 09/18/81. The Paradise-Denio Management Framework Plan was issued on 07/09/82. These documents guide the management of public lands within the Paradise-Denio Resource Area and more specifically within the Paiute Meadows Allotment. Monitoring data has been collected on this allotment and in accordance with Bureau policy and regulations, this data has been evaluated in order to determine progress in meeting management objectives for the Paiute Meadows Allotment and to determine if management adjustments may be necessary to meet the management objectives.

The following are the multiple use management objectives under which grazing on the Paiute Meadows Allotment will be monitored and evaluated.

1. Short Term

   a) The objective for utilization of key streambank riparian plant species (CAREX, JUNCUS, SALIX, POTR5, ROWO, POA spp.) on Paiute, Battle and Bartlett Creeks is 30%. Utilization data will be collected at the end of the grazing period.

   b) The objective for utilization of key plant species (CAREX, JUNCUS and POA spp.) in wetland riparian habitats is 50%. Utilization data will be collected at the end of the grazing period.

c) The objective for utilization of key plant species (STTH2, AGSP, FEID, ELCI, POA, ORHY, AMAL, PUTR, SYMPH, EPHEDRA, EULA) in upland habitats is 50%. Utilization data will be collected at the end of the grazing period.

2. Long Term

a) Manage, maintain, or improve public rangeland conditions to provide forage on a sustained yield basis for big game, with an initial forage demand of 1,838 AUMs for mule deer, 307 AUMs for pronghorn, and 180 AUMs for bighorn sheep.

1) Improve to or maintain 2,134 acres in Black Rock DY-13, 41,678 acres in Black Rock DW-10, and 45,856 acres in Black Rock DS-6 in good or excellent mule deer habitat condition.

2) Improve to or maintain 45,965 acres in Black Rock PS-15 in good pronghorn habitat condition. Improve to or maintain 35,274 acres in Black Rock PY-14, 2,623 acres in Leonard Creek PW-17, and 31,466 acres in Paiute Creek PW-16 in fair or good pronghorn habitat condition.

3) Improve to or maintain 69,939 acres in Black Rock BY-15 in good to excellent bighorn sheep habitat condition.

b) Improve public rangeland conditions to provide forage on a sustained yield basis for livestock, with a stocking level of 7,827 AUMs.

c) Improve range condition from poor to fair on 161,158 acres and from fair to good on 15,938 acres.

d) Maintain and improve the free-roaming behavior of wild horses by protecting and enhancing their home ranges.

1) Manage, maintain, or improve public rangeland conditions to provide 1116 AUMs of forage on a sustained yield basis for wild horses.

2) Maintain and improve wild horse habitat by assuring free access to water.

Ecological status will be used to redefine/quantify the following five objectives where applicable.

e) Improve to or maintain 86 acres of ceanothus habitat types in good condition.

f) Improve to or maintain 345 acres of mahogany habitat types in good condition.

g) Improve to or maintain 188 acres of aspen habitat types in good condition.

h) Improve to or maintain 529 acres of riparian and meadow habitat types in good condition.

i) Improve to or maintain 15 acres of serviceberry, 82 acres of bitterbrush, 55 acres of ephedra, and 112 acres of winterfat vegetation types in good condition.

j) Improve to and maintain stream habitat conditions from the 1988 levels of 43% on Paiute Creek, 58% on Battle Creek, and 50% on Bartlett Creek to an overall optimum of 60% or above.

   1) Streambank cover 60% or above.
   2) Streambank stability 60% or above.
   3) Maximum summer water temperatures below 70° F.
   4) Sedimentation below 10%.

k) Protect sage grouse strutting grounds and brooding areas. Maintain the big sagebrush sites within two miles of active strutting grounds in mid to late seral stage with a minimum of 30% shrub composition by weight or 30% canopy cover.

l) Improve to and maintain the water quality of Paiute, Battle and Bartlett Creeks to the State criteria set for the following beneficial uses: livestock drinking water, cold water aquatic life, wading (water contact recreation), and wildlife propagation.

Based upon the evaluation of monitoring data for the Paiute Meadows Allotment, consultation with the permittee and other affected interests, recommendations from my staff, and the Paiute Meadows Allotment final evaluation dated February 25, 1993, it is my final decision to:

CARRYING CAPACITY

Designate the carrying capacity for livestock and wild horses as 4,666 AUMs. Of this total, 3,550 AUMs are designated for livestock and 1,116 AUMs are designated for wild horses.

The Paiute Meadows Allotment is divided into two use areas, North of Paiute Creek and South of Paiute Creek. The carrying capacity for livestock and wild horses in the North Paiute use area is 2634 AUMS and 2032 AUMs in the South Paiute use area.

The livestock operation will be licensed according to available forage left after wild horse allocations. The difference in AUMs between the permittee's active preference and the active use will be held in non-use for conservation purposes.

RATIONALE:

This carrying capacity was calculated using monitoring data collected on the allotment from 1987 through 1990. Monitoring data collected in 1991 and 1992 support these calculations. Monitoring data has indicated that vegetative objectives are not being achieved in both the North Paiute and the South Paiute use areas of the allotment. Therefore, an adjustment is needed in the authorized use by livestock and the wild horse population size to achieve a thriving natural ecological balance within the allotment.

23 %

N2 93 10

WILDLIFE MANAGEMENT DECISION

Based upon the final evaluation of monitoring data for the Paiute Meadows Allotment, consultation with the permittee and other affected interests, and recommendations from my staff, it is my final decision for wildlife to:

1. Continue with the reasonable numbers as outlined in the Land Use Plan (LUP).

2. Recommend to the Nevada Department of Wildlife and the U.S. Fish and Wildlife Service that the North Fork of Battle Creek be designated as a stream for the recovery of Lahontan cutthroat trout.

3. Construct corridor fencing on the North Fork of Battle Creek within the Paiute Meadows Allotment, due to riparian/aquatic conditions which did not meet management objectives.

RATIONALE:

The analysis of monitoring data indicates that the multiple-use objectives for the Paiute Meadows Allotment are not being met. The analysis of utilization and use pattern mapping determined that livestock and wild horses were the primary factors inhibiting achievement of the multiple-use objectives in the allotment. Analysis of the existing management of wildlife indicates that wildlife populations in the Paiute Meadows Allotment are not contributing to the failure in meeting the multiple-use objectives. Therefore, a change in the existing wildlife populations or the existing wildlife management within the Paiute Meadows Allotment is not warranted. Reasonable numbers for wildlife will remain as follows:

Mule Deer	Pronghorn Antelope	Bighorn Sheep
1838 AUMs	307 AUMs	180 AUMs

The North Fork of Battle Creek is the most desireable stream within the allotment to be managed for recovery of Lahontan cutthroat trout based on the following:

The entire Battle Creek watershed lies within the Paiute Meadows Allotment and nearly all of the North Fork of Battle Creek (about 6 miles) lies within public lands.

There is no existing fishery in the Battle Creek drainage. There would be no fish eradication costs associated with the introduction of cutthroat trout into the North Fork of Battle Creek.

The existing stream habitat condition for the North Fork of Battle Creek is highly recoverable. The 1992 stream habitat conditions indicate that the North Fork of Battle Creek could be recovered more rapidly than Bartlett Creek.

With good to excellent stream habitat potential, lack of an existing fishery, nearly 100 percent public land ownership, and absence of mining activities, the North Fork of Battle Creek lends itself for the recovery of Lahontan cutthroat trout.

AUTHORITY: The authority for this decision is contained in Title 43 of the Code of Federal Regulations, which states in pertinent part:

> 1725.3-3(b) "Management of public lands for fish and wildlife development and utilization involves the protection, regulated use, and development of habitat on public lands and waters to obtain a sustained yield of fish and wildlife and provision and maintenance of public access to fish and wildlife resources."

Within 30 days of receipt of this decision, you have the right of appeal to the Board of Land Appeals, Office of the Secretary, in accordance with the regulations at 43 CFR 4.4. If an appeal is taken, you must follow the procedures outlined in the enclosed Form 1842-1, Information on Taking Appeals to the Board of Land Appeals. Within 30 days after you appeal, you are required to provide a Statement of Reasons to the Board of Land Appeals and a copy to the Regional Solicitor's Office listed in Item 3 on the form. Please provide a copy of your appeal and Statement of Reasons to the Area Manager, Paradise-Denio Resource Area at 705 East Fourth Street, Winnemucca, Nevada 89445. Copies of your appeal and Statement of Reasons must also be served upon any parties adversely affected by this decision. The appellant has the burden of showing that the decision appealed from is in error.

In addition, within 30 days of receipt of this decision you have the right to file a petition for a stay (suspension) of the decision <u>together</u> with your appeal in accordance with the regulations at 43 CFR 4.21. The petition must be served upon the parties specified above. The appellant has the burden of proof to demonstrate that a stay should be granted.

N2 93 10

FULL FORCE AND EFFECT
WILD HORSE MANAGEMENT DECISION

Based on the final evaluation of the monitoring data for the Paiute Meadows Allotment, consultation with the permittee and affected interests and recommendations of my staff, my final decision, effective on April 15, 1993, for wild horses is to:

1. Combine the Black Rock Range East Herd Management Area (HMA) and the Black Rock Range West HMA with a combined appropriate management level (AML) of 186 adult horses. The AML will be managed within the range of 121 to 186 adult wild horses. The combined HMA will be called the Black Rock Mountain HMA.

2. Schedule a removal for the fall or early winter of 1993 to reduce the population of horses to the Appropriate Management Level if funding is available for such gather.

RATIONALE:

Removals have occasionally been conducted on the Black Rock Range East HMA and not the Black Rock Range West HMA, creating a niche in the habitat, which is filled in by migrating horses, making retention of the population at, or close to, a manageable number impossible. Therefore, we are combining these HMA's in order to manage for one AML.

Census and distribution data show a heavy migration pattern between the HMAs from Slumgullion and Paiute Creek southward. These natural tendencies for the animals to distribute through both HMAs/allotments should result in approximately 93 animals utilizing the Black Rock Range East HMA year round. This estimate is based on historical distribution and census data that indicates that the proportional distribution of wild horses between the two HMAs is approximately 50% in the West HMA and 50% in the East HMA. This would result in a total of 1116 AUMs used by wild horses in the Paiute Meadows Allotment (approximately 480 AUMs in the north and 636 AUMs south of Paiute Creek).

AML made on Soldier Meadows

Adjustments were made to the wild horse AML as described in the proposed decision, due to an adjustment in the amount of AUMs available for wild horses in the Soldier Meadows allotment. This adjustment reduced the AML for the Black Rock Mountain HMA.

The reduction in the wild horse AML, resulted in an additional 372 AUMs available for livestock on the Paiute Meadows allotment.

AUTHORITY: The authority for this decision is contained in Sec. 3(a) and (b) of the Wild-Free-Roaming Horse and Burro Act (P.L. 92-195) as amended and in Title 43 of the Code of Federal Regulations, which states in pertinent parts:

4700.0-6(a) "Wild horses and burros shall be managed as self-sustaining populations of healthy animals in balance with other uses and the productive capacity of their habitat."

4710.4 "Management of wild horses and burros shall be undertaken with the objective of limiting the animals' distribution to herd areas. Management shall be at the minimum level necessary to attain the objectives identified in approved land use plans and herd management areas plans."

4720.1 "Upon examination of current information and a determination by the authorized officer that an excess of wild horses or burros exists, the authorized officer shall remove the excess animals immediately..."

4770.3(c) "The authorized officer may place in full force and effect decisions to remove wild horses or burros from public or private lands if removal is required by applicable law or to preserve or maintain a thriving ecological balance and multiple use relationship. Full force and effect decisions shall take effect on the date specified, regardless of an appeal. Appeals and petitions for stay of decisions shall be filed with the Interior Board of Land Appeals as specified in this part."

Within 30 days of receipt of this decision, you have the right of appeal to the Board of Land Appeals, Office of the Secretary, in accordance with the regulations at 43 CFR 4.4. If an appeal is taken, you must follow the procedures outlined in the enclosed Form 1842-1, Information on Taking Appeals to the Board of Land Appeals. Within 30 days after you appeal, you are required to provide a Statement of Reasons to the Board of Land Appeals and a copy to the Regional Solicitor's Office listed in Item 3 on the form. Please provide a copy of your appeal and Statement of Reasons to the Area Manager, Paradise-Denio Resource Area at 705 East Fourth Street, Winnemucca, Nevada 89445. Copies of your appeal and Statement of Reasons must also be served upon any parties adversely affected by this decision. The appellant has the burden of showing that the decision appealed from is in error.

In addition, within 30 days of receipt of this decision you have the right to file a petition for a stay (suspension) of the decision <u>together</u> with your appeal in accordance with the regulations at 43 CFR 4.21. The petition must be served upon the parties specified above. The appellant has the burden of proof to demonstrate that a stay should be granted.

FULL FORCE AND EFFECT
LIVESTOCK DECISION

Based upon the final evaluation of monitoring data for the Paiute Meadows Allotment, consultation with the permittee and other affected interests and recommendations from my staff, it is my final decision, effective April 15, 1993, for livestock to:

1. Change the management:

FROM (Description of existing use)

A. Grazing Preference (AUMs)

1.	Total preference	9,932
2.	Suspended preference	2,105
3.	Active preference	7,827
	Active Use	4,350
	Non-Use	3,477

The active use for the Paiute Meadows Allotment during 1990 was adjusted to 4350 AUMs in conjunction with the transfer of grazing preference to Dan Russell dated 01/05/90.

B. Season of Use

Summer and Fall Use
05/01 to 11/05

C. Kind and Class of Livestock - Cattle, Cow/Calf

D. Percent Federal Range - 97%

E. Grazing System

The active preference during the evaluation period was 7,827 AUMs from 1983 until 1990. In accordance with the transfer of grazing preference to Dan Russell on January 5, 1990, the active use was adjusted to 4,350 AUMs, with 3,477 AUMs in non-use.

From 1988 to 1992, grazing use was authorized north of Paiute Creek with herding practices designed to control livestock drift into the area south of Paiute Creek.

TO: GRAZING SYSTEM TO BE IMPLEMENTED

A. Grazing Preference Status (AUMs)

1.	Total preference	9,932
2.	Suspended preference	6,382
3.	Active preference	3,550
	Active Use	2,154
	Non-Use	1,396

B. Season of Use

Spring and Early Summer Use
03/15 to 07/15

C. Kind and Class of Livestock - Cattle, Cow/Calf

D. Percent Federal Range - 97%

E. Grazing System

The grazing system listed below is for the next evaluation period and will be implemented over a five year period.

North Paiute Use Area

Low Elevation 540 cattle	03/15 to 05/15	1068 AUMs
High Elevation 540 cattle	05/16 to 07/17	1086 AUMs

Use will begin in the lower elevations east of the Leonard Creek Road. This area would include all the lower foothills and alluvial fans along the eastern portion of the allotment north of Paiute Creek that fall below 1550 meters in elevation.

Livestock use of the higher elevations will be deferred until after May 01 by salting and herding practices. The high elevation use area would include Paiute Creek above the drift fence and higher country above 1550 meters in elevation.

All livestock will be removed from the allotment prior to July 17 of each year. Winter use by livestock will not be authorized due to direct

conflicts with wildlife and wild horse use of the area during winter months.

South Paiute Use Area

As identified in the February 25, 1993 allotment evaluation for Paiute Meadows, the use area south of Paiute Creek is lacking in grass species due to excessive use by wild horses and livestock and the past six years of drought conditions. Livestock use will not be authorized in this area until the following specific criteria are met as determined by the District Soil Scientist and the range staff in the Paradise-Denio Resource Area.

Criteria

Utilizing the 1992 Ecological Site Inventory data collected in this allotment, three key range sites were selected from the soil mapping units that represented the majority of the use area. The range sites selected were ones that would respond to changes in management and represent various elevations. The following is a description of the range sites:

South Slope 12-16 P.Z. 023XY016NV ARVA2/AGSP
Soil Map Unit 177 write-up number DJ-60 will be used for monitoring. The reference site is DJ-54.

Loamy Slope 10-14 P.Z. 023XY039NV ARTR2/AGSP
Soil Map Unit 965 write-up number DJ-63 will be used for monitoring. The reference site is DJ-52.

Sandy 5-8 P.Z. 027XY009NV ORHY/STCO4
Soil Map Unit 378 write-up number DJ-27 will be used for monitoring. The reference site is DJ-10.

Criteria for Resuming Livestock Grazing

023XY016NV	Increase AGSP from 6% present by weight in the monitoring site to 15% by weight. Site potential for AGSP is 60 to 70%. AGSP reference site is 14%.

023XY037NV — Increase AGSP from 2% present by weight in the monitoring site to 15% by weight. Site potential for AGSP is 40 to 60%. AGSP reference site is 22%.

Increase STTH2 from 3% present by weight in the monitoring site to 5% by weight. Site potential for STTH2 is 10 to 20%. STTH2 reference site is 6%.

027XY009NV — Increase ORHY from 6% present by weight in the monitoring site to 15% by weight. Site potential for ORHY is 50 to 70%. ORHY reference site is 12%.

The control sites (clipped plots) will be compared in the future with the ocular sites to determine progress. The first monitoring is scheduled for 1995.

The active use will be phased in using the following schedule:

Year	Total Preference	Suspended Preference	Active Preference	Active Use	Non-use
1993	9932	6382	3550	2500	1050
1995	9932	6382	3550	2686	864
1997	9932	6382	3550	2154	1396

Season of Use Phase In:

1993 and 1994	03/15 to 09/18
1995 and 1996	03/15 to 08/17
1997	03/15 to 07/17

1993 Grazing Schedule
North Paiute

Low Elevation			
230	cattle	04/01 to 05/15	330 AUMs
540	cattle	05/16 to 05/31	276 AUMs
High Elevation			
540	cattle	06/01 to 09/18	1894 AUMs

1994 Grazing Schedule
North Paiute
Low Elevation
540 cattle 03/15 to 05/31 1343 AUMs
High Elevation
540 cattle 06/01 to 09/18 1894 AUMs

A specific grazing schedule for 1995 and 1996 will be determined after evaluating the 1993 and 1994 monitoring data.

Terms and Conditions:

Herding/salting practices are required and should be designed so that livestock drift does not occur into use areas not scheduled for use.

Salt and/or mineral blocks shall not be placed within one quarter (1/4) mile of springs, streams, meadows, riparian habitats or aspen stands.

You are required to perform normal maintenance on the range improvements as per your signed cooperative agreements prior to turning out.

Your certified actual use report by pasture is due 15 days after the end of the authorized grazing period.

2. Reconstruct the existing Soldier Meadows/Paiute Meadows drift fence from the Pine Forest Allotment south and extend the fence to Burnt Springs with offset gates at major horse trails.

3. Removal of the fence from the Paiute Seeding.

RATIONALE:

This carrying capacity was derived from monitoring data collected on the allotment from 1987 through 1990. Monitoring data has indicated that vegetative objectives are not being achieved in both the North Paiute and the South Paiute use areas of the allotment. Therefore, an adjustment is needed in the authorized use by livestock and the wild horse population size to achieve the thriving natural ecological balance of the allotment.

In addition, long term stream habitat objectives have not been met in the North Paiute use area. Previous to the transfer of the grazing preference to the current permittee, and authorization of 56% of the grazing permit, improvement in stream habitats was noted. A reduction in the season of use for livestock is necessary to ensure continued growth of riparian vegetation and improvement towards long term streambank riparian

habitat conditions in the absence of riparian habitat fences. The reduction in active use combined with the season of use will ensure that progress.

When monitoring indicates the vegetation has recovered south of Paiute Creek the permittee will be authorized to activate those AUMs placed in non-use before adjustments will be made to the wild horse AML.

Adjustments were made to the wild horse AML as described in the proposed decision, due to an adjustment in the amount of AUMs available for wild horses in the Soldier Meadows Allotment. This adjustment reduced the AML for the Black Rock Mountain HMA.

The reduction in the wild horse AML, resulted in an additional 372 AUMs available for livestock on the Paiute Meadows Allotment.

The season of use will be phased in from 03/15 - 09/18 to 03/15 - 07/17 to provide a period of adjustment in ranching operations for the permittee.

The reconstruction and extension of the Soldier Meadows/Paiute Meadows drift fence would stop livestock drift from Paiute Meadows into Coleman, Snow, Summer Camp and Mahogany Creek areas of the Soldier Meadows Allotment. The extension of the drift fence would run through the North Black Rock Wilderness Study Area (WSA NV-020-622). All surveys, designs, and environmental assessments will be coordinated with interested parties.

A solid fence, as opposed to "gap" fencing, would ensure that the livestock drift would be stopped. Wild horses would create trails around the "gap" fencing which the cattle would then follow.

Distribution data shows that when horse populations are within an acceptable level, the concentration of horses are on the southern end of the Paiute Meadows Allotment where most of the migration occurs, therefore, conflicts with wild horse migration and fencing north of Burnt Springs will be minimized.

A cost estimate has been prepared for reconstruction of the Paiute Seeding fence, this estimate approximates $28,000. It does not appear to be logical to expend this amount of money on a seeding that is over 35 years old.

Therefore, removal of the Paiute Seeding boundary fence will reduce the existing hazard of tangled barbed wire to wildlife, wild horses, and livestock .

AUTHORITY: The authority for this decision is contained in Title 43 of the Code of Federal Regulations, which states in pertinent parts:

4100.0-8 "The authorized officer shall manage livestock grazing on public lands under the principle of multiple use and sustained yield and in accordance with applicable land use plans. Land use plans shall establish allowable resource uses (either singly or in combination), related levels of production or use to be maintained, areas of use and resource condition goals and objectives to be obtained. The plans also set forth program constraints and general management practices needed to achieve management objectives. Livestock grazing activities and management actions approved by the authorized officer shall be in conformance with the land use plan as defined at 43 CFR 1601.0-5(b)."

4100.3 "The authorized officer shall periodically review the grazing preference specified in a grazing permit or grazing lease and may make changes in the grazing preference status. These changes shall be supported by monitoring, as evidenced by rangeland studies conducted over time, unless the change is either specified in an applicable land use plan or necessary to manage, maintain or improve rangeland productivity.

4110.3-3(c) "When the authorized officer determines that the soil, vegetation, or other resources on the public lands require temporary protection because of conditions such as drought, fire, flood, or insect infestation, after consultation with affected interests, actions shall be taken to close allotments or portions of allotments to grazing by any kind of livestock or to modify grazing use. Notices of closure and decisions requiring modification of authorized grazing use shall be issued as final decisions which are placed in full force and effect under 4160.3(c)."

4130.6-1(a) "The authorized officer shall specify the kind and number livestock, the period(s) of use, the allotment(s) to be used, and the amount of use, in animal unit months, for every grazing permit or lease. The authorized livestock grazing use shall not exceed the livestock carrying capacity as determined through monitoring and adjusted as necessary under 4110.3-1 and 4110.3-2."

4130.6-2 "The authorized officer may specify in grazing permits and leases other terms and conditions which will assist in achieving management objectives, provide for proper range management or assist in the orderly administration of the public rangelands..."

4160.3(c) "...The authorized officer may place the final decision in full force and effect in an emergency to stop resource deterioration. Full force and effect decisions shall take effect on the date specified, regardless of an appeal.

If you wish to appeal this decision for the purpose of a hearing before an Administrative Law Judge, in accordance with 43 CFR 4160.4 and 4.470, you are allowed thirty (30) days from receipt of this notice within which to file such appeal with the Paradise-Denio Resource Area Manager, Bureau of Land Management, Winnemucca District, 705 E. 4th Street, Winnemucca, NV 89445. An appeal shall state the reasons, clearly and concisely, as to why you think the decision is in error.

N2 93 10

FUTURE MONITORING AND GRAZING ADJUSTMENTS

The Paradise-Denio Resource Area will continue to monitor the Paiute Meadows Allotment. The monitoring data will continue to be collected in the future to provide the necessary information for subsequent evaluations. These evaluations are necessary to determine if the allotment specific objectives are being met under the new grazing management strategy. In addition, these subsequent evaluations will determine if adjustments are required to meet the established allotment specific objectives.

The Paiute Meadows Allotment is scheduled to be re-evaluated in 1994.

Sincerely yours,

Area Manager
Paradise-Denio Resource Area

certified cc: NRDC P111845580
Sierra Club-Toiyabe Chapter P111845581
Craig Downer P111845582
Wilderness Society P111845583
NV Outdoor Recreation Assoc. P111845584
Paul Clifford P111845515
Desert Bighorn Council P111845585
NDOW (Fallon) P111845586
John Marvel P111845589
Nevada Land Action P111845590
Thomas Van Horne P374309908
Andy Johas P374309909
William Cummings P374309910
NV Farm Bureau Federation P111845567
Nevada Cattlemen's Assoc. P111845568
USFW P111845569
Trout Unlimited, Sagebrush Chapter P111845542
WHOA P111845543
Animal Protection Institute P374309813
Commission for the Preservation of
Wild Horses & Burros P374309814
Inat'l. Society for the Protection of
Mustangs & Burros P374309815
American Horse Protection Assn. P111845573
US Humane Society P111845574
Claudia Richards P111845575
Daniel & Sammye Ugalde P111845576
NDOW (Winnemucca) P111845577
Humboldt County Commissioners P111845578
Jerry Reno P111845579
Lyman Youngberg P111845587
Dan Russell P111845588

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United States Department of the Interior

TAKE PRIDE IN AMERICA

BUREAU OF LAND MANAGEMENT
Winnemucca District Office
705 East 4th Street
Winnemucca, Nevada 89445

IN REPLY REFER TO:
4130,4160
(NV-024.14)

APR 12 1993

CERTIFIED MAIL NO. P111845566
RETURN RECEIPT REQUESTED

Bill and Gail Phillips
P.O. Box 2991
Winnemucca, NV 89446

Dear Mr. & Mrs. Phillips:

On March 2, 1993, a proposed decision was issued to you for the Paiute Meadows Allotment. Protests of that decision were received from Nevada Department of Wildlife (NDOW) on March 10, 1993, Sierra Club on March 18, 1993, Commission for the Preservation of Wild Horses on March 18, 1993, the Law Offices of Thomas Van Horne on March 19, 1993, and the Nevada Outdoor Recreation Association on March 22, 1993.

WLFOA?

The following are the points of protest as they pertain to the Paiute Meadows Allotment and also a response to those points. I am issuing these responses in hopes of providing a better understanding of the allotment evaluation process and the intent of the proposed decision.

NDOW Points of Protest

1. "The Proposed Decision modifies allotment specific objectives essential in determining stocking rates and appropriate management levels (AML) for livestock and wild horses, respectively."

   Response: The stocking rates for livestock and the AML for wild horses are set by short term monitoring studies such as actual use, utilization, and climate. The short term objectives are used to evaluate whether or not the present management practices are adequate for achieving the long term objectives.

2. "Carrying capacities were computed improperly and not in accordance to Bureau of Land Management procedures."

   Response: One of the prime considerations on which livestock reductions were based in the decision was the heavy and severe use on riparian habitats, particularly along the creeks. Carrying capacity was calculated at the 50% utilization level using heavy and severe use found along creeks and on the uplands. This is outlined in Technical Report 4400-7.

3. "Available forage was not allocated appropriately to range users or wildlife."

Response: The Bureau did not assume that the Land Use Plan initial numbers for wildlife, wild horses, and the actual preference for livestock were established at carrying capacity. For this evaluation period, we have concentrated our monitoring efforts on the vegetative resource that is being used by wild horses and livestock. The monitoring indicates that the use by livestock and wild horses should be decreased in order to meet our allotment specific objectives. Future monitoring will also include the vegetative resource used by wildlife. Hopefully, the Nevada Department of Wildlife will be able to supply the District with wildlife population information.

4. "The Final Decision must be Full Force and Effect."

Response: Consideration is being given to place the Final Decision for the Paiute Meadows Allotment in Full Force and Effect.

Sierra Club Points of Protest

1. "Without putting this decision in full force and effect, the BLM cannot effectively make any changes in livestock numbers or practices. While the 1991 decision was issued full force and effect in order to remove excess wild horses from this allotment, the proposed 1993 decision to protect the allotment from excessive livestock numbers and grazing practices which are damaging the environment is equally qualified to be full force and effect, and thereby implementable, whether appealed or not. Otherwise, the decision is a sham. If appealed, it will result in no on-the-ground improvements in resource conditions, no changes in livestock numbers or grazing practices, and continuing damage to public lands and resources by excessive ungulates."

Response: See response to NDOW Points of Protest #4.

2. "Inadequate use of monitoring data. Stocking rates were apparently estimated using only 1989 and 1990 monitoring data. The allotment evaluation clearly shows that heavy and severe livestock impacts were documented in 1991 and 1992. The carrying capacity calculation is therefore biased and inadequate to correct identified and documented livestock overgrazing problems."

Response: Stocking rates were determined using monitoring data from 1987 through 1990. Monitoring data collected in 1991 was incomplete. Therefore, it could not be used in the average/weighted average utilization formula. The utilization cages and wild horse key areas were checked in 1991 and this data reflected the same type of results as the 1987-1990 monitoring. The 1992 data could not be used, as the grazing season does not end until February 28 and the livestock actual use could not be completed until after this date.

3. "The proposed decision violates the agreement reached in 1991 between the Bureau and affected interests to coordinate management of wild horses between adjacent wild horse management areas in Paiute Meadows and Soldier Meadows. There is no evidence that necessary coordination has been done. Wild horse forage allocations are based on "data" which are not presented in the final Allotment Evaluation. Where is this "data"? The decision proposes to put livestock into the northern part of the allotment in a WMA in which wild horses are excessive and before excess numbers can be removed, thus making a gross overstocking problem even worse. And carrying capacity and allocation computations for wild horse AMLs were different for the two allotments."

   Response: Both the Sonoma-Gerlach and the Paradise-Denio Resource Areas have worked closely on combining the Black Rock Range West and the Black Rock Range East HMAs. Therefore the final documents and multiple use decisions shall compliment one another.

4. "Again, no protection is provided for riparian areas in the northern part of the allotment from continuing livestock degradation. Instead, the decision relies on permittee "riding" and salting to prevent cattle from devastating riparian areas. Since the lack of active management has resulted in the current unsatisfactory conditions, why does the Bureau believe that relying on riding will actually protect public resources in the future? Has the permittee complied with terms and conditions of the permit, to date? Is there any record of trespass on the this allotment? What provisions has BLM made to ensure that riparian areas will be protected - additional monitoring, etc.?"

   Response: The Proposed Multiple Use Decision issued on March 2, 1993, for the Paiute Meadows Allotment plainly states that corridor fencing shall be constructed on the North Fork of Battle Creek, due to riparian/aquatic conditions which did not meet management objectives. Also stated in the decision, wild horse and livestock use will be reduced, and the season of use for livestock will be changed to 3/15 to 7/15 to ensure that the streams receive minimal use by livestock during the hot season.

5. "While supporting the proposed reduction in livestock use, we believe that carrying capacity estimates are flawed and will result in continued overallocation of forage in this abused allotment. All of the monitoring data was not used. No provision is made for wildlife forage. The average/weighted average formula was used in this allotment which does not have uniform production or usage in any area, thus overestimating forage availability. And, lastly, the estimates do not consider riparian protection requirements in the calculations."

   Response: The average/weighted average utilization formula is not based on uniform production or usage, but shows the Potential Actual Use, which is the level of use required to achieve the desired average utilization uniformly throughout the pasture, assuming utilization patterns could be uniform. Carrying capacity calculations were based on the heavy and severe use occurring in the riparian areas. The reduced use and the season of use adjustment for livestock should provide the necessary protection for the riparian areas.

6. "While we can support the concept of closing the So. Paiute use area to livestock grazing until this area - devastated by drought and excessive numbers of cattle and wild horses over the last two years - has recovered, we do not find any documentation in the proposed decision that the criteria for resuming livestock grazing have any scientific basis as a measure of satisfactory recovery. Will achievement of all of the 5 criteria result in good or excellent condition range? Is partial achievement or, euphemistically, "progress towards achieving" these vegetation objectives good enough to trigger BLM permission for grazing resumption? Exactly how will monitoring occur to evaluate whether vegetation objectives have been met?"

Response: The Public Rangelands Improvement Act of 1978 (PL 95-514) Sec. 2(b)(1) states,"The Congress therefore hereby establishes and reaffirms a national policy and commitment to: (1) inventory and identify current public rangelands conditions and trends as a part of the inventory process required by section 201(a) of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1711)" and Sec. 3(d) states, "The term "range condition" means the quality of the land reflected in its ability in specific vegetative areas to support various levels of productivity in accordance with range management objectives and the land use planning process, and relates to soil quality, forage values (whether seasonal or year round), wildlife habitat, watershed and plant communities, the present state of vegetation of a range site in relation to the potential plant community for that site, and the relative degree to which the kinds, proportions, and amounts of vegetation in a plant community resemble that of the desired community for that site."

Range sites and ecological site are synonymous as described in the National Range Handbook (NRH-1) Sec. 302.1 and BLM Manual H-4410-1 Sec.210.

The BLM adopted the range site (ecological site) inventory method for determining range condition, as described in the NRH-1, Sec. 300. The Nevada Rangeland Monitoring Handbook describes the purpose for determining ecological status from the ecological site inventory method, on page 6..."The primary purpose of determining ecological status in long term monitoring is to provide a basis for comparing or monitoring the extent and direction of changes in the plant community as a result of specific treatment or management. When establishing key area studies for native plant communities, the ecological status should be determined to facilitate monitoring the accomplishment of specific monitoring objectives.

7. "We object to the use of utilization "limits" as mere "targets" and not firm levels on which to change poor grazing practices or overgrazing. We question whether monitoring at the end of the grazing period will be sufficient to establish which ungulate is using the forage, especially if livestock use is ended before the grazing period is over. Please explain."

Response: Target utilization levels and allowable use levels are both terms used to define a desired use of forage species. Short term

utilization data (target utilization) will be used to determine needed adjustments in management actions and is used as the basis for adjusting grazing use. (BLM 1984 TR-4400-3)

Commission for the Preservation of Wild Horses Points of Protest

1. "For wild horses, wildlife, and livestock, you have stated that, "This carrying capacity was derived from monitoring data collected on the allotment from 1987 through 1990." Your data from those years indicated that vegetative objectives were not being achieved. In fact, in 1990, you reported 1% of the allotment in heavy to severe condition. This was prior to Mr. Russell taking possession of the allotment. Mr. Russell took over in 1990, by 1992 your data indicated the allotment went from 1% to 49% severely degraded."

   "Why are you only analyzing data up to 1990? The allotment was not that severely damaged prior to that date. You are making use determinations for this 1993 and 1993 grazing seasons based on data prior to the permit transfer to Mr. Russell. We wonder what the evaluation would say if you include the 1991 and 1992 severely degraded and overuse years combined with the drought conditions? Please provide that data in your final document for inclusion in evaluating the current carrying capacity of the allotment."

   Response: See responses to NDOW Points of Protest #2 and Sierra Club Points of Protest #5.

2. "Wild horses are scheduled for removal (subject to available funding), in the fall of 1993. Currently with the population of approximately 351 wild horses in Black Rock East, in addition to the permitted turnout of 2,054 AUM's of livestock prior to that removal, how will you still stay within the carrying capacity of the range. How will you provide for the additional AUM's necessary for the current population of 351 wild horses (4,212 AUM's), with the 2, 054 scheduled AUM's necessary for livestock?"

   Response: According to CFR 43 4110.3-3(a) "Changes in active use in excess of 10 percent shall be implemented over a five year period...." Due to this constraint, the reduction in AUMs for livestock is being phased in.

3. "We have one last question, on page 70, you responded to our question of evaluating both areas saying that "The Soldier Meadows allotment re-evaluation has been sent out for public comment." In checking with Tom Seley today (March 17, 1993), he notified me that Soldier Meadows will not be available until around September 30, 1993. How can your Resource Area staff evaluate data that the Sonoma Gerlach staff has yet to evaluate themselves?"

Response: The Soldier Meadows Draft Allotment Re-evaluation went out for public comment on January 12, 1993. Our office received comments from your organization, Commission for the Preservation of Wild Horses, for the Soldier Meadows Re-evaluation on February 12, 1992. The September 30, 1993 date is when the Final Re-evaluation and proposed action is expected to be through the Formal Section 7 Consultation with the U.S. Fish and Wildlife Service. The final re-evaluation and the proposed decision will then be issued.

Permittee Points of Protest (Thomas Van Horne)

1. "The objectives giving rise to the decisions are not the land use planning objectives. The objectives were not established in the development or revision of the allotment management plan subject to review by CRMP process. Thusly the allotment objectives giving rise to the decision are in violation of the land use plan."

   Response: The allotment specific objectives were derived from the LUP objectives which were general in nature. Quantification of the LUP objectives was necessary to evaluate the grazing management on individual allotments. The allotment specific objectives are Bureau objectives for the management of the resources. The Bureau is mandated the responsibility for the management of the public lands under its jurisdiction.

   The Bureau's Range Manual does state "...management objectives should be written so data from short term studies such as actual use, utilization and climate can be used to determine if objectives are being met." The short term objectives were developed to determine progress towards long term objectives and thereby towards LUP objectives.

2. "Utilization objectives should consider factors over a number of years and not for a single year."

   Response: Monitoring data is collected over a period of years and is then evaluated to determine whether or not the short term objectives have been achieved and whether or not we are progressing towards the long term objectives.

3. "Trend studies have not been done by the Bureau of Land Management for the allotment and are necessary to properly evaluate the long term ecological condition of the allotment."

   Response: The Nevada Rangeland Monitoring Handbook and BLM Manual both give guidance for use of short term monitoring data in evaluating progress towards meeting long term objectives. The key areas for trend (long term monitoring) will be established in 1993.

4. "The utilization data collected by the Bureau of Land Management is not sufficient to justify the decision in that its frequency of collection and methodology of collection is inadequate."

   Response: You have not been specific enough with your comments for us to determine why the frequency of collection and the methodology of collection is inadequate.

5. "Utilization data does not address the climate related factors and are therefore insufficient."

   Response: Climatic factors are taken into consideration at the time which the utilization data collected.

6. "The five objectives to be used in the re-definition of ecological status (objectives 2E through 2I) must be deleted until they are positively located and identified in the allotment and until the criteria for determining good condition for the various types are clearly identified."

   Response: Ecological Site Inventory (ESI) data has been collected for this allotment. This inventory identifies the areas where these vegetation types occur and their condition. These objectives will be changed to reflect the desired plant community once the raw field data has been analyzed.

7. "The proposed criterion to improve or maintain stream habitat conditions is unnecessarily restrictive."

   Response: The setting of livestock utilization standards within a grazing prescription is for the purpose of maintaining adequate riparian functionality. This must be done to accomplish two main criteria. First, time spent in the riparian zone must be low enough that mechanical damage by soil compaction and bank shearing are below the level that can be restored by normal channel evolution processes during the period before the next use by livestock occurs. Second, consumption of riparian plants must be low enough that the plants can maintain canopy cover to avoid warming of the stream water and ground cover and root mass (in the face of pressure from invading upland species) to prevent accelerated erosion, particularly during high flow events in the spring. As a corollary of the second criterion, stubble height of riparian graminoids must either be left sufficiently high to resist floodplain erosion and dissipate the energy of high flows, or be allowed sufficient time before cold weather slows growth processes so that the stubble height sufficient for that purpose can be restored by regrowth.

   Satisfaction of the requirements of proper livestock management allows adequate riparian function. Sediment loads from normal erosion processes in the watershed are effectively filtered and bound so as to retard their movement and keep them below levels which would clog fish gills and the spaces between gravel which would suffocate trout eggs in spawning beds. Aggradation of the channel builds water depth in the channel, better allowing fish to withstand temperature extremes during

the summer and winter. Increases in the volume of fine-textured bank materials provides greater storage capacities for alluvial flows. This improves the regime of the system, decreasing the volume of erosive water during high flow events and increasing the volume of cool water available to sustain late summer flows when precipitation inputs are minimal.

8. "The proposed long term objectives regarding stream habitat conditions should not apply to streams except where a practical objective of establishing a meaningful fishery has not been duly adopted. The stream condition objectives are primarily designed for obtaining optimum fish habitat conditions. Streams not subject to a properly determined objective in the land use plan to establish an active fishery should not be considered as fisheries habitat."

   Response: Objective WLA-1 in the Land Use Plan states, "Improve and maintain the condition of the aquatic habitat of each stream, lake, or reservoir having the potential to support a sport fishery at a level conducive to the establishment and maintenance of a healthy fish community." Three major streams are located within the Paiute Meadows Allotment; Paiute, Battle, and Bartlett Creeks. Bartlett Creek currently supports a salmonid fishery. All three streams have been identified by the BLM Winnemucca District as "Proposed Lahontan Cutthroat Trout Habitats" and Battle Creek has been identified in the U.S. Fish and Wildlife Service Draft LCT Recovery Plan.

   Even if the three major streams located within this allotment were not managed for active fisheries, they would undoubtedly be managed for properly functioning riparian systems.

9. "The primary use of water originating in the allotment is irrigation. Currently there is no fishery in the allotment, therefore water quality standard objectives related thereto should reflect the primary use (irrigation)."

   Response: The primary use for water in the Paiute Meadows allotment is not only for irrigation. According to the 1989 NDOW stream survey report, Bartlett Creek supports an active trout fishery as well as a non-game fishery. Water quality standards for the Paiute Meadows allotment were designated according to the State criteria set for the following beneficial uses: livestock drinking water, cold water aquatic life, wading (water contact recreation), and wildlife propagation.

10. "The proposed decision does not set forth an adequate plan stating proposed ways to achieve the currently established objective of providing forage on a sustained yield basis for livestock with a stocking level of 7,827 AUM's."

    Response: This objective should be met by reducing the wild horse population to an appropriate management level, reducing the number of livestock and the season of use, and closing the south end of the allotment until production (ESI) criteria has been met.

11. "Grazing adjustments are not based on the CRMP process."

Response: We have used an informal CRMP process in evaluating the allotment. This process has given the permittee and other interested parties an opportunity to provide information and to comment on a range of alternatives.

12. "Adjustments in livestock numbers should not be considered until excessive wild horses have been removed from the allotment. A fair and accurate assessment of livestock stocking rates cannot be conducted until wild horse numbers have been controlled. The Bureau of Land Management has refused to properly gather excessive horses pursuant to the commitment made in conjunction with the decision of November 22, 1991."

Response: The Paradise-Denio Resource Area, through evaluation of the monitoring data collected on the Paiute Meadows allotment, determined that the short and long term objectives were not being met. Adjusting the stocking rate to the carrying capacity as determined through the evaluation of the monitoring data was necessary. This carrying capacity was calculated in accordance with BLM Manual 4400-7. The Bureau is striving to implement the Strategic Plan for management of the wild horses.

13. "Livestock grazing (legal multiple use) should not be replaced by wild horse grazing (another legal multiple use)."

Response: Based on the monitoring data, both the livestock and wild horse use are being reduced to stay within the carrying capacity of the allotment.

14. "A total carrying capacity of the allotment is substantially higher than that proposed by the proposed decision."

Response: See response to #12.

15. "The grazing system for the north and south Paiute use areas is inconsistent with the established seasons of use and impractical."

Response: We have tried to design a system that will benefit the resources within the allotment along with being compatible with the livestock operation.

16. "The constraint against grazing in the south Paiute area does not fulfill multiple use criterion as it allocated all forages to horses and the criterion for re-establishment of grazing is insufficient and not consistent with the established rules of the land use planning process."

Response: The constraint against livestock grazing in the Southern use area of the Paiute Meadows allotment was issued to prevent further resource damage from occurring. When monitoring data shows that there is available forage, the AUMs in non-use for livestock will be activated, before any AUMs are given to wild horses.

17. "The reconstruction of the existing drift fence as stated in the proposed decision fails to allocate responsibility for construction and maintenance between the appropriate parties."

Response: The assigning of maintenance responsibility for projects is completed during the project planning through a cooperative agreement.

18. "The removal of the fence from the Paiute seeding will destroy an established range improvement which was established and has been supported by a combination of private and public funds for many years."

Response: All range improvements have a life expectancy for the initial dollar investment. In this case, the Paiute seeding was first seeded in 1954 followed by a partial reseeding in 1956. The initial fence around the seeding was constructed in 1955 with an interior division fence constructed in 1957 to protect the reseeded area.

A cost estimate to reconstruct the fence has been prepared, with the estimated cost being $27,930.00.

With a seeding that is over 35 years old, it seems that an additional investment of almost $28,000.00 would not be cost effective.

19. "The elimination of winter use by livestock is inconsistent with the existing grazing season of use and is inappropriate in that it proposes winter use by horses in areas beyond historical horse use areas."

Response: Winter use has not been a part of the normal grazing system for this allotment. The normal use period has been May to November each year.

20. "The proposed decision causes each of the protesting parties irreparable economic harm."

Response: We are phasing the reduction in active use in over a five year period so that adjustments in the livestock operation can be made. If these adjustments are not made then damage of the natural resources will continue.

21. "The proposed decision is inconsistent with the full force and effect decision issued November 22, 1991 vacated by decision May 11, which decision to vacate has been appealed. This proposed decision is unwarranted and untimely until such appeal has been resolved."

Response: The November 1991 Decision was vacated and is null and void. The second draft evaluation of the Paiute Meadows allotment, contains additional data, and the carrying capacity for the allotment was recalculated. Therefore, the proposed decision for the Paiute Meadows allotment has also changed.

22. "All inconsistencies between the full force and effect decision of November 22, 1991 and this proposed decision should be governed by the full force and effect decision pending resolution of such appeal."

Response: See response to #21.

23. "The Bureau has established an appropriate management level of 59 horses and that level has been established to be the "thriving natural ecological balance" of the area pursuant to a properly issued full force and effect decision by the bureau. This proposed decision to increase the number of horses and combine the herd management areas is not supported by the planning process, adequate facts, and is not procedurally correct under the circumstances. The proposed combination of the herd management areas brings together management by different offices of Bureau of Land Management and will make overall management of the horse herds impossible."

Response: The Bureau identified a population of wild horses that was present within the allotment on July 1, 1982 as a starting point for monitoring if an AML had not been established by some other mechanism.

We have used our vegetative monitoring data to establish a carrying capacity for livestock and wild horses within each allotment. From this information we determined the number of adult wild horses that would be appropriate in order to meet the objectives of each allotment.

Our monitoring data indicates that the wild horses are moving between the Black Rock Range East and the Black Rock Range West HMA's, so the Bureau has elected to manage them as one unit with one AML. The census and distribution data over a period of time indicates that the wild horse population tends to distribute itself evenly through the two herd areas.

Therefore, we have determined the number of horses that are likely to use the vegetative resource in each area and subtracted those AUMs from the calculated carrying capacity.

24. "The proposed decision does not limit the use of horses to historically established areas. To the contrary, the proposed decision allocates forages to horses in areas beyond the established historical use and is thusly inconsistent with the land use plan objectives and the duty of the bureau to "maintain wild horses and burros on public lands where there was wild horse or burro use as of December 15, 1971 and maintain a natural ecological balance on the public lands." Any proposal to increase the appropriate management level of horses without a concrete methodology of constraining the use to historical areas will simply increase the use beyond those historical areas and is therefore contrary to the planning process and contrary to law."

Response: Boundaries of wild horse use areas were established in the 1981 Paradise-Denio Grazing EIS. These boundaries encompassed the known horse use areas at the time the Wild Horse and Burro Act was passed. All lands within the Black Rock Range East HMA boundary are "historical use areas." Likewise, the Black Rock West HMA boundary as delineated in

the Sonoma-Gerlach Grazing EIS represents the historical use in that area. The animals outside the historical use area are most likely using the area because of the population level at the current time. As the population is reduced, the Bureau would expect the remaining horses to use the historical areas.

25. "The proposed decision is contrary to the Wild Free Roaming Horse and Burro Act in that it fails to adequately balance horse use with other uses."

Response: The proposed decision allocates forage among all consumptive users: wild horses, livestock so as not to exceed the determined carrying capacity of the allotment. Wildlife are not allocated AUMs, instead reasonable numbers have been carried forward from the Land Use Plan. The Bureau is trying to balance the wild horse use and the livestock use with the available forage resource.

26. "A decision regarding number of horses and use thereby is insufficient in that it does not take into account the fact that horses consume more hoards per animal than other uses."

Response: The Bureau does not employ conversion ratios for AUMs utilized on public lands. Current procedures employ a strict 1:1 ratio for cows:horses, cow:cow/calf, cow:steer. This applies to both wild and domestic horses.

27. "The proposed adjustment to the appropriate management level must be done through a proper land use planning process and not by decision. To the extent that determinations regarding horse use in appropriate numbers were dependant upon the population model for wild horses as described in the Paiute Meadows Draft Allotment Evaluation, the conclusions therefrom are invalid as the model is in error."

Response: The AML for the Paiute Meadows allotment has been set through the evaluation process. This is consistent with the MFP III at WHB 1.1. This process is considered an informal CRMP process with all affected interests involved. The population model was not used to determine the AML for wild horses on the Paiute Meadows allotment. It was included in the document to show the potential amount of wild horse gathers and years it will take to achieve the AML from the current population of wild horses based on the "Strategic Plan for Management of Wild Horses and Burros on Public Lands".

Points of Protest from Nevada Outdoor Recreation Association, Inc. (NORA) and Paul C. Clifford, Jr.

1. "Notification of interested parties. BLM districts routinely send notification of all matters relating to and affecting Wilderness Study Areas to recognized interested parties. Mr. Clifford is such an interested party as an individual. The Nevada Outdoor Recreation Association is a recognized interested party as an organization. The management of this allotment directly affects the Black Rock Desert WSA's and, if Mr. Clifford's experience is typical, wilderness interested parties were not notified and therefore could not participate

in the public input on the Multiple Use Decision (MUD). Therefore, the requirement of public input has not been met, and the MUD should be set aside until this deficiency is remedied as required by NEPA and FLPMA. If wilderness issue oriented interested parties were involved, why was Mr. Clifford not on the mailing list?

Response: On October 2, 1992, the Bureau of Land Management sent letters to interested parties informing them of the evaluation process for Paiute Meadows allotment. This letter was sent to the Nevada Outdoor Recreation Association (NORA). We did not receive a response from NORA indicating that they wanted to participate in the evaluation process. Individuals and associations that want to participate should respond to our letters so we can be made aware of their interest to participate.

2. "The multiple use management objectives under which grazing on the allotment will be monitored and evaluated in the short term (a,b, and c) are inappropriate because they do not meet requirements of CFR Title 43 4100.0-8, 4110.3, and 4110.3-2(b) among others because the proposed criteria as stated are insufficient to determine the state and/or trend of the affected range on either a short or long term basis. This deficiency is the result of the failure of the objectives to establish a definitive basis for evaluation. As stated in the MUD, the objective is to monitor the percent of utilization of key species during the grazing period. No mention of the amount of the given species actually present at the start of the grazing period, or relative to previous years, is specified. Both are critical. If the observed level of utilization is sufficiently severe, a reduced level of effective germination and growth will result in a reduced basis the following and subsequent grazing periods without necessarily violating the objective of the specified percentage of utilization. That this can be a real problem is demonstrated by the fact that livestock and wild horse grazing has effectively removed grass as a usable resource in the south pasture of this allotment. Under CFR 4110.3, the MUD must be set aside until meaningful evaluation objectives have been established."

Response: Approximately 30 utilization cages have been places at strategic points within the Paiute Meadows allotment. These cages are over the key forage plants that are representative to that area. Utilization is determined by comparing the stubble height of the plants outside the cages with the vegetative growth within the cage that represents a particular area.

3. "The multiple use management objectives under which grazing on the allotment will be monitored and evaluated in the long term (items a, c, e, f, g, h, i) are inappropriate because they do not meet requirements of CFR Title 43 4100.0-8, 4110.3 and 4110.3-2(b) among others because of the proposed criteria as stated in the MUD are insufficient to determine the state and/or trend of the affected range on either a short or long term basis. This deficiency is the result of the failure of the objectives to establish a definitive basis for evaluation. The terms "poor", "fair", "good", and "excellent" have no evaluative utility as employed in these criteria. The terms are not defined in the document, nor are they referenced to regulatory definitions. As a result, there

is no statement of current conditions of the health of the range, and there is no meaningful way to determine if objectives have been or are being met. The MUD must be set aside until such time as current base conditions have been adequately described, and objectives posited which can be numerically or objectively evaluated.

Response: See response to Permittee Points-of-Protest #6.

4. "The methodology of determination, and hence the resulting carrying capacity of the allotment for livestock and wild horses are inaccurate and inappropriate."

Response: Refer to NDOW protest point #2.

5. "The Wildlife Management Decision proposes to construct corridor fencing on the North Fork of Battle Creek with the ultimate goal of reintroduction Lahontan cutthroat trout. We wish to protest this fencing as inadequate unless it comprises an actual, physically effective exclosure. If it is an adequate exclosure for livestock and wild horses, some means must be found to provide water for livestock and wild horse other than periodic sacrifice zones usually called "water gaps". Water gaps are unacceptable because they do not protect the riparian values where the gaps occur and will lead to significant degradation of stream quality down stream will beyond the water gap. Further, the permittee must agree to maintain, and in fact maintain the exclosure in an effective state of repair under the express penalty of suspension of grazing privilege, if the fence is not maintained, under authority of CFR 43 1725.3-3(b), 4100.0-8, and 4110.3-3(c). Similarly, and under the same authority as above, the exclosure proposed but not recommended for Bartlett Creek must be constructed so as to protect both the existing fishery and riparian values. Only an impractical level of herding will consistently keep livestock and wild horse use of such a riparian area to acceptable levels in a desert environment. This fence too must be maintained by the permittee."

Response: Leaving water gaps is a part of our design philosophy for exclosures along a stream. The enhanced riparian conditions in the exclosure will offset the use within the water gaps. We have stated in the rationale of the selected management action that we feel the shortened season of use will be enough to stimulated the riparian response in Bartlett Creek.

6. "The Wild Horse Management Decision proposes to schedule a removal for the fall of 1993 to reduce the population of wild horses to the Appropriate Management Level if funding is available for such a gather. This portion of the decision is incompatible with CFR 43 4720.1 which mandates that the authorized officer shall remove the excess animals immediately...One might delay to ensure the welfare of the underlying resource until the fall for the protection of mares and foals, but there is no leeway granted for the availability of funding. Under the regulation a gather is mandated, and must move forward if the District has any funds for anything. The removal under a full force and effect decision is further required by CFR 43 4770.3(c) because of undue and unnecessary degradation of the range resource due to illegal excess horses."

Response: We do have some direction given to us for expenditure of funds from other activities. Each program has its priority projects that need to be accomplished. Due to the large wild horse population in Nevada, under the Strategic Plan, horse removals will occur in 1/3 of the state each year. Prioritization for gathers is determined yearly.

7. "The Livestock Decision proposes a period of use which is unacceptable. As raised in Issue #3 above it is problematic if ANY period of use can permit the recovery of the range resource as set forth in the objectives. The proposed period of use will impact the plants every year just as they are trying to establish vigor in the spring and early summer. On the north pasture there will be little opportunity for grasses to set and ripen seed. This will adversely affect other multiple uses and is precluded under CFR 43 4100.0-8."

Response: Our season of use will account for your concerns. By removing livestock from the lower area by May 15th, and the higher elevations by July 15, we are allowing regrowth on the vegetative resource.

8. "The period of use has an additional problem. The MUD represents a contract between the BLM, the public and the permittee. In order for a contract to be enforceable, it must be able to be performed. As set forth, the decision calls for the permittee to instantaneously remove 500 to 700 cattle from the lover north use area by 12 midnight of 5/15 of each year, by does not permit him to put them anywhere reasonable as he cannot legally occupy the upper north use area until 12:00:01 AM 3/16 of each year. This clause of the decision is not practicable unless the permittee entirely removes all livestock form the allotment before he must vacate, and then return them only to the upper north use area on or after 3/16. This is unnecessary and stupid. Sloppy contract writing invites abuse. The permittee must have a period of grace in which to legally and practically move his stock from one pasture to the other. This period must be spelled out in the contract, and limit the total number of head in both pastures to the number then legally allowed in the allotment."

Response: The turnout date for the low elevation will be March 15 through May 15, which during this time the livestock are gradually moving up in elevation. Then from May 16 through July 15 the livestock utilize the high elevations in the North Paiute Use Area. It is up to the permittee to gradually remove the livestock and be off the Paiute Meadows allotment by July 15. There are no pastures within the allotment, just established use areas.

9. "The Criteria for Resuming Livestock Grazing on the south use area are fatally flawed. As in Issue 2 above, only percentages are specified. One must define a percentage as a per hundred of WHAT. The criteria may say by weight - by weight of what? Even is "what" is defined, it is not sufficient . As a practical evaluation tool either the overall composition or seral stage must be stated in order to evaluate progress. If all the plants were effectively removed, say by fire, and a few bunches of grass per acre came up, the criteria of resumption have been met, even if there are no actual AUM's present! In order to resume

grazing, one must specify both the desired seral stage and the desired actual AUM's available per acre or total pasture as criteria for resumption of grazing. Such an approach is mandated by CFR 43 4100.0-8, 4110.3, and 4110.3-2(b) among others."

Response: The National Range Handbook states in Section 606.4:

Inventorying Composition for Conservation Planning

Making a range condition inventory involves determining the species composition for each range condition class of each range site in a pasture. This can be determined by:

(a) Directly estimating total production per acre and production by species and then converting to percentage composition,

(b) Estimating and harvesting or estimating a series of plots in the area to determine production by species and then converting to percentage composition, or

(c) Directly estimating species composition percentages of the entire areas as a unit.

During conservation planning, it is often necessary to determine plant composition when plant growth is not ideal for making such determinations. Some pastures are grazed at the time of planning. In other places, estimates must be made at different stages of plant growth or when plant vigor varies from pasture to pasture. In some years production is obviously much higher or lower than normal because of weather extremes. In making production estimates, therefore, it is often necessary to mentally reconstruct plant growth as it would most likely appear if undisturbed at the end of an "average" growing season.

Also see response to Sierra Club point of protest #6.

10. "In determining appropriate livestock levels there are two potential adjustments which must be made to the determined carrying capacity. One is the contribution of forage from non-BLM lands to the forage base. In the case of the Paiute Meadows Allotment 97% and BLM and 3% other. Distribution of AUM's by use area and ownership must be evaluated if this allowance is to be taken and the AUM's increased. The non-BLM land may be better, the same, or worse. The other adjustment is the period of use. The BLM uses a period of 30.4167 days per month in computing the AUM. There are 62 days of permitted operation between 5/16 and 7/15 inclusive. An animal would therefore use 2.038 AUM's during the first period and 2.005 AUM's during the second. If either of these adjustments are used to determine allowable stocking level (and both should be the ideal case) then they must be set forth and accounted for in the MUD. If these adjustments were not used in the MUD, the AUM's and stocking levels are not arithmetically consistent in the MUD. The final MUD must fully set forth the criterion and mathematics for arriving at allowable livestock use levels. The public must also be informed of the partitioning and AUM value of non-BLM lands and the basis of that evaluation.

N2 93 10

Response: The carrying capacity for the allotment was calculated using only the BLM lands which comprise 97% of the allotment.

Thank you for your participation in helping to evaluate the Paiute Meadows allotment. If you have any questions, you may refer them to Bob Hopper at (702) 623-1500.

Sincerely yours,

Area Manager
Paradise-Denio Resource Area

Enclosure - Final Full Force and Effect Decision for Paiute Meadows dated April 12, 1993

N2 93 10

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Winnemucca District Office
705 East Fourth Street
Winnemucca, Nevada 89445

In reply refer to:
4130
NV-024.14

Memorandum

4/30/93

To: Paradise Denio Area Manager
Supervisory Range Con
Paiute Meadows Monitoring and Section 3 Files

From: Mandy McCutcheon, Range Con

Subject: Range Readiness

On March 30, 1993, Scott Billing, Shane DeForest, Dave Stockdale, and myself went out to the Paiute Meadows Allotment to inspect the new growth on the vegetation. This visit was precipitated by the permittee applying to turn out 230 cows on April 1.

We inspected only the lower elevations of the North Paiute Use Area. The first area looked at was the foothills near the mouth of Rough Canyon. There was an abundance of Bud Sage (ARSP) and Spiny Hopsage (GRSP), with Bottlebrush Squirreltail (SIHY) and bluegrass (POA++) scattered throughout the area. The ARSP and the GRSP had a lot of new growth and the SIHY and POA++ had approximately 2 to 3 inches of new growth.

We then inspected the greasewood flat, south of the Battle Creek Ranch, from the county road west to Pinto Mountain Spring. The main species found throughout this area were greasewood (SAVE), ARSP, and GRSP. Both the ARSP and the GRSP had an abundance of new growth, which both cattle and horses will consume.

There was also a substantial amount of water on the flat which can be utilized by both plants and animals.

We discussed both an early turnout and phasing in a reduction in the season of use among ourselves. From our assessment of the vegetation and the topography of the allotment, it was decided that there was enough available forage on the flat to sustain an early turnout of the cattle. The cattle will be turned out on the flat from Paiute Meadows Ranch and Clark Field and pushed over to the base of Pinto Mountain. This would allow the cattle to work their way back across the flat to the foothills of the Black Rock Range.

Mandy McCutcheon
4/26/93

N2 93 10

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Winnemucca District Office
705 East Fourth Street
Winnemucca, Nevada 89445

In reply refer to:

4700 (NV-240)

MAR 2 4 1993

Memorandum

To: District Manager, Winnemucca

From: Area Manager, Paradise-Denio Resource Area

Subject: Full Force and Effect Decision--Paiute Meadows

I am placing the Final Multiple Use Decision for Paiute Meadows in Full Force and Effect.

Our allotment evaluation indicates that we are over obligating the range resource on the Paiute Meadows allotment. The over obligation is attributed to both the population of wild horses and to the authorized use for livestock.

In reviewing the monitoring data for the allotment, it appears that heavy use has occurred on parts of the allotment since 1987. We have removed wild horses on the allotment twice since 1987 and we have reduced the active use on the allotment once. These measures still have produced heavy use in some areas of the allotment.

Another concern is the hot season of use by livestock and wild horses of the aquatic habitats associated with Paiute, Battle, and Bartlett Creeks. Continuing with this heavy use during the hot season will cause further degradation of these habitats. The North Fork of Battle creek is being recommended as a recovery stream for Lahontan cutthroat trout.

Ecological Site information from the South end of the allotment indicates that we do not have the proper vegetation present for the range site as described by National Standards. I suspect that this can be partially attributed to the continued heavy use and partially to the climatic conditions present over the last 6 years.

The full force and effect decision will give us the opportunity to start phasing in the reduction of active use and implement the new season of use for the livestock operation without any delays for appeals. This is necessary to protect the riparian areas within the allotment.

It will also give us the opportunity to plan for a gather of wild horses this fall. We may not be able to get to AML with one gather, but delaying the

process because of an appeal will put us further away from reaching the AML within this allotment. A delay will mean further heavy use and prolong the recovery period for the range resource.

Therefore I am placing the Final MUD for the Paiute Meadows allotment in Full Force and Effect.

Scott Billing

I concur:
Ron Wenker
3/24/93

BOB MILLER
Governor

STATE OF NEVADA

N2-93-10

CATHERINE BARCOMB
Executive Director

COMMISSIONERS

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Las Vegas, Nevada

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South Valley, Nevada

Dawn Lappin
Reno, Nevada

COMMISSION FOR THE PRESERVATION OF WILD HORSES

Stewart Facility
Capitol Complex
Carson City, Nevada 89710
(702) 687-5589

March 17, 1993

RECEIVED
MAR 18 1993
DISTRICT OFFICE
WINNEMUCCA, NEVADA

Scott Billing, Area Manager
Paradise Denio Resource Area
BLM-Winnemucca District Office
705 East 4th Street
Winnemucca, Nevada 89445

RE: Paiute Meadows Final Allotment Evaluation Summary and the Proposed Multiple Use Decision

Dear Mr. Billing,

Thank you for the opportunity to review and comment on the Paiute Meadows Final Allotment Evaluation Summary and the Proposed Multiple Use Decision.

First, we must commend your District on recognizing the need for adjustments in the use on Paiute Meadows considering the conditions there and the need for improvement of the habitat for all users. We applaud the coordination between the two Resource Areas on this one herd area.

We received the document on March 4, 1993, and are protesting parts of this document within the 15 day protest period allowed us according to 43 CFR.

Our reasons for protest are as follows:

1) For wild horses, wildlife, and livestock, you have stated that "This carrying capacity was derived from monitoring data collected on the allotment from 1987 through 1990." Your data from those years indicated that vegetative objectives were not being achieved. In fact, in 1990, you reported 1% of the allotment in heavy to severe condition. This was prior to Mr. Russell taking possession of the allotment. Mr. Russell took over in 1990, by 1992 you data indicated the allotment went from 1% to 49% severely degraded.

Why are you only analyzing data up to 1990? The allotment was not that severely damaged prior to that date. You are making use determinations for this 1993 and 1993 grazing seasons based on data prior to the permit transfer to Mr. Russell. We wonder what the evaluation would say if you include the 1991 and 1992 severely degraded and overuse years combined with the drought conditions? Please provide that data in your final document for inclusion in evaluating the current carrying capacity of the allotment.

101-1874

2) Wild horses are scheduled for removal (subject to available funding), in the fall of 1993. Currently with the population of approximately 351 wild horses in Black Rock East, in addition to the permitted turnout of 2,054 AUM's of livestock prior to that removal, how will you still stay within the carrying capacity of the range. How will you provide for the additional AUM's necessary for the current population of 351 wild horses (4,212 AUM's), with the 2,054 scheduled AUM's necessary for livestock?

3) We have one last question, on page 70, you responded to our question of evaluating both areas saying that "The Soldier Meadows allotment re-evaluation has been sent out for public comment." In checking with Tom Seley today (March 17, 1993), he notified me that Soldier Meadows will not be available until around September 30, 1993. How can your Resource Area staff evaluate data that the Sonoma Gerlach staff has yet to evaluate themselves?

If you have any questions, or would care to discuss this further with us, we would welcome the opportunity to meet with you to go over our concerns with you prior to issuance of the final.

Most Sincerely,

Catherine Barcomb

CATHERINE BARCOMB
Executive Director

N2 93 10

Is your RETURN ADDRESS completed on the reverse side?

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Ms. Cathy Barcomb
Commission for the Preservation of Wild Horses and Burros
Stewart Facility
Capitol Complex
Carson City, NV 89710

4a. Article Number
P374309873

4b. Service Type
☐ Registered ☐ Insured
☐ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery
3 MAR

5. Signature (Addressee)
Dave Rabe

6. Signature (Agent)

8. Addressee's Address (Only if requested and fee is paid)

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Thank you for using Return Receipt Service.

N2 93 10

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Winnemucca District Office
705 East 4th Street
Winnemucca, Nevada 89445

TAKE PRIDE IN AMERICA

IN REPLY REFER TO:

MAR 0 2 1993

4130, 4160
(NV-024.14)

YELLOW

CERTIFIED MAIL NO. P374309849
RETURN RECEIPT REQUESTED

PROPOSED MULTIPLE USE DECISION
PAIUTE MEADOWS ALLOTMENT

Gail & Bill Phillips
P.O. Box 2991
Winnemucca, NV 89446

Dear Mr. and Mrs. Phillips:

The record of Decision of the Paradise-Denio Environmental Impact Statement was issued on 09/18/81. The Paradise-Denio Management Framework Plan was issued on 07/09/82. These documents guide the management of public lands within the Paradise-Denio Resource Area and more specifically within the Paiute Meadows Allotment. Monitoring data has been collected on this allotment and in accordance with Bureau policy and regulations, this data has been evaluated in order to determine progress in meeting management objectives for the Paiute Meadows Allotment and to determine if management adjustments may be necessary to meet the management objectives.

On July 3, 1991, an allotment evaluation was sent to you for your review and comment. On November 5, 1992, a second allotment evaluation was sent to you for your review and comment.

The following are the multiple use management objectives under which grazing on the Paiute Meadows Allotment will be monitored and evaluated.

1. Short Term

   a) The objective for utilization of key streambank riparian plant species (CAREX, JUNCUS, SALIX, POTR5, ROWO, POA spp.) on Paiute, Battle and Bartlett Creeks is 30%. Utilization data will be collected at the end of the grazing period.

b) The objective for utilization of key plant species (CAREX, JUNCUS and POA spp.) in wetland riparian habitats is 50%. Utilization data will be collected at the end of the grazing period.

c) The objective for utilization of key plant species (STTH, AGSP, FEID, ELCI, POA, ORHY, AMAL, PUTR, SYMPH, EPHEDRA, EULA) in upland habitats is 50%. Utilization data will be collected at the end of the grazing period.

2. Long Term

a) Manage, maintain, or improve public rangeland conditions to provide forage on a sustained yield basis for big game, with an initial forage demand of 1,838 AUMs for mule deer, 307 AUMs for pronghorn, and 180 AUMs for bighorn sheep.

1) Improve to or maintain 2,134 acres in Black Rock DY-13, 41,678 acres in Black Rock DW-10, and 45,856 acres in Black Rock DS-6 in good or excellent mule deer habitat condition.

2) Improve to or maintain 45,965 acres in Black Rock PS-15 in good pronghorn habitat condition. Improve to or maintain 35,274 acres in Black Rock PY-14, 2,623 acres in Leonard Creek PW-17, and 31,466 acres in Paiute Creek PW-16 in fair or good pronghorn habitat condition.

3) Improve to or maintain 69,939 acres in Black Rock BY-15 in good to excellent bighorn sheep habitat condition.

b) Improve public rangeland conditions to provide forage on a sustained yield basis for livestock, with a stocking level of 7,827 AUMs.

c) Improve range condition from poor to fair on 161,158 acres and from fair to good on 15,938 acres.

d) Maintain and improve the free-roaming behavior of wild horses by protecting and enhancing their home ranges.

1) Manage, maintain, or improve public rangeland conditions to provide 1488 AUMs of forage on a sustained yield basis for wild horses.

2) Maintain and improve wild horse habitat by assuring free access to water.

Ecological status will be used to redefine/quantify the following five objectives where applicable.

e) Improve to or maintain 86 acres of ceanothus habitat types in good condition.

f) Improve to or maintain 345 acres of mahogany habitat types in good condition.

g) Improve to or maintain 188 acres of aspen habitat types in good condition.

h) Improve to or maintain 529 acres of riparian and meadow habitat types in good condition.

i) Improve to or maintain 15 acres of serviceberry, 82 acres of bitterbrush, 55 acres of ephedra, and 112 acres of winterfat vegetation types in good condition.

j) Improve to and maintain stream habitat conditions from the 1988 levels of 43% on Paiute Creek, 58% on Battle Creek, and 50% on Bartlett Creek to an overall optimum of 60% or above.

1) Streambank cover 60% or above.
2) Streambank stability 60% or above.
3) Maximum summer water temperatures below 70° F.
4) Sedimentation below 10%.

k) Protect sage grouse strutting grounds and brooding areas. Maintain the big sagebrush sites within two miles of active strutting grounds in mid to late seral stage with a minimum of 30% shrub composition by weight or 30% canopy cover.

l) Improve to and maintain the water quality of Paiute, Battle and Bartlett Creeks to the State criteria set for the following beneficial uses: livestock drinking water, cold water aquatic life, wading (water contact recreation), and wildlife propagation.

Based upon the evaluation of monitoring data for the Paiute Meadows Allotment, consultation with the permittee and other affected interests, recommendations from my staff, and the Paiute Meadows Allotment final evaluation dated February 25, 1993, it is my proposed decision to:

CARRYING CAPACITY

Designate the carrying capacity for livestock and wild horses as 4,666 AUMs. Of this total, 3,178 AUMs are designated for livestock and 1,488 AUMs are designated for wild horses.

The Paiute Meadows Allotment is divided into two use areas, North of Paiute Creek and South of Paiute Creek. The carrying capacity for livestock and wild horses in the North Paiute use area is 2634 AUMS and 2032 AUMs in the South Paiute use area.

The livestock operation will be licensed according to available forage left after wild horse allocations. The difference in AUMs between the permittee's active preference and the active use will be held in non-use for conservation purposes.

RATIONALE:

This carrying capacity was derived from monitoring data collected on the allotment from 1987 through 1990. Monitoring data has indicated that vegetative objectives are not being achieved in both the North Paiute and the South Paiute use areas of the allotment. Therefore, an adjustment is needed in the authorized use by livestock and the wild horse population size to achieve a thriving natural ecological balance within the allotment.

WILDLIFE MANAGEMENT DECISION

Based upon the final evaluation of monitoring data for the Paiute Meadows Allotment, consultation with the permittee and other affected interests, and recommendations from my staff, it is my proposed decision for wildlife to:

1. Continue with the reasonable numbers as outlined in the Land Use Plan (LUP).

2. Recommend to the Nevada Department of Wildlife and the U.S. Fish and Wildlife Service that the North Fork of Battle Creek be designated as a stream for the recovery of Lahontan cutthroat trout.

3. Construct corridor fencing on the North Fork of Battle Creek within the Paiute Meadows Allotment, due to riparian/aquatic conditions which did not meet management objectives.

RATIONALE:

The analysis of monitoring data indicates that the multiple-use objectives for the Paiute Meadows Allotment are not being met. The analysis of utilization and use pattern mapping determined that livestock and wild horses were the primary factors inhibiting achievement of the multiple-use objectives in the allotment. Analysis of the existing management of wildlife indicates that wildlife populations in the Paiute Meadows Allotment are not contributing to the failure in meeting the multiple-use objectives. Therefore, a change in the existing wildlife populations or the existing wildlife management within the Paiute Meadows Allotment is not warranted. Reasonable numbers for wildlife will remain as follows:

Mule Deer	Pronghorn Antelope	Bighorn Sheep
1838 AUMs	307 AUMs	180 AUMs

The North Fork of Battle Creek is the most desirable stream within the allotment to be managed for recovery of Lahontan cutthroat trout based on the following:

The entire Battle Creek watershed lies within the Paiute Meadows Allotment and nearly all of the North Fork of Battle Creek (about 6 miles) lies within public lands.

There is no existing fishery in the Battle Creek drainage. There would be no fish eradication costs associated with the introduction of cutthroat trout into the North Fork of Battle Creek.

The existing stream habitat condition for the North Fork of Battle Creek is highly recoverable. The 1992 stream habitat conditions indicate that the North Fork of Battle Creek could be recovered more rapidly than Bartlett Creek.

With good to excellent stream habitat potential, lack of an existing fishery, nearly 100 percent public land ownership, and absence of mining activities, the North Fork of Battle Creek lends itself for the recovery of Lahontan cutthroat trout.

AUTHORITY: The authority for this decision is contained in Title 43 of the Code of Federal Regulations, which states in pertinent part:

> 1725.3-3(b) "Management of public lands for fish and wildlife development and utilization involves the protection, regulated use, and development of habitat on public lands and waters to obtain a sustained yield of fish and wildlife and provision and maintenance of public access to fish and wildlife resources."

If you wish to protest this wildlife management decision in accordance with 43 CFR 4160.2 you are allowed fifteen (15) days from receipt of this notice within which to file such protest with the Paradise-Denio Resource Area Manager, Bureau of Land Management, Winnemucca District, 705 East Fourth St. Winnemucca, NV 89445. Subsequent to the fifteen day protest period, a final decision will be issued which will provide opportunity for appeal in accordance with 43 CFR 4160.4 and 43 CFR 4.470.

WILD HORSE MANAGEMENT DECISION

Based on the final evaluation of the monitoring data for the Paiute Meadows Allotment, consultation with the permittee and affected interests and recommendations of my staff, my proposed decision for wild horses is to:

1. Combine the Black Rock Range East Herd Management Area (HMA) and the Black Rock Range West HMA with a combined appropriate management level (AML) of 247 adult horses. The AML will be managed within the range of 204 to 290 adult wild horses. The combined HMA will be called the Black Rock Mountain HMA.

2. Schedule a removal for the fall of 1993 to reduce the population of horses to the Appropriate Management Level if funding is available for such gather.

RATIONALE:

Removals have occasionally been conducted on the Black Rock Range East HMA and not the Black Rock Range West HMA, creating a niche in the habitat, which is filled in by migrating horses, making retention of the population at, or close to, a manageable number impossible.

Census and distribution data show a heavy migration pattern between the HMAs from Slumgullion and Paiute Creek southward. These natural tendencies for the animals to distribute through both HMAs/allotments should result in approximately 124 animals utilizing the Black Rock Range East HMA year round. This estimate is based on historical distribution and census data that indicates that the proportional distribution of wild horses between the two HMAs is approximately 50% in the West HMA and 50% in the East HMA. This would result in a total of 1,488 AUMs used by wild horses in the Paiute Meadows Allotment (approximately 636 AUMs in the north and 852 AUMs south of Paiute Creek).

AUTHORITY: The authority for this decision is contained in Sec. 3(a) and (b) of the Wild-Free-Roaming Horse and Burro Act (P.L. 92-195) as amended and in Title 43 of the Code of Federal Regulations, which states in pertinent parts:

> 4700.0-6(a) "Wild horses and burros shall be managed as self-sustaining populations of healthy animals in balance with other uses and the productive capacity of their habitat."

YELLOW

4710.4 "Management of wild horses and burros shall be undertaken with the objective of limiting the animals' distribution to herd areas. Management shall be at the minimum level necessary to attain the objectives identified in approved land use plans and herd management areas plans."

4720.1 "Upon examination of current information and a determination by the authorized officer that an excess of wild horses or burros exists, the authorized officer shall remove the excess animals immediately..."

4770.3(c) "The authorized officer may place in full force and effect decisions to remove wild horses or burros from public or private lands if removal is required by applicable law or to preserve or maintain a thriving ecological balance and multiple use relationship. Full force and effect decisions shall take effect on the date specified, regardless of an appeal. Appeals and petitions for stay of decisions shall be filed with the Interior Board of Land Appeals as specified in this part."

If you wish to protest this decision for wild horse management, in accordance with 43 CFR you are allowed fifteen (15) days from receipt of this notice within which to file such protest with the Paradise-Denio Area Manager, Bureau of Land Management, Winnemucca District, 705 East Fourth St., Winnemucca, NV 89445. Subsequent to the fifteen day protest period a final decision will be issued which will provide opportunity for appeal in accordance with 43 CFR 4160.4 and 43 CFR 4.470. Consideration is being given to place the final decision in Full Force and Effect.

LIVESTOCK DECISION

Based upon the final evaluation of monitoring data for the Paiute Meadows Allotment, consultation with the permittee and other affected interests and recommendations from my staff, it is my proposed decision for livestock to:

1. Change the management:

FROM (Description of existing use)

A. Grazing Preference (AUMs)

1.	Total preference	9,932
2.	Suspended preference	2,105
3.	Active preference	7,827
	Active Use	4,350
	Non-Use	3,477

The active use for the Paiute Meadows Allotment during 1990 was adjusted to 4350 AUMs in conjunction with the transfer of grazing preference to Dan Russell dated 01/05/90.

B. Season of Use

Summer and Fall Use
05/01 to 11/05

C. Kind and Class of Livestock - Cattle, Cow/Calf

D. Percent Federal Range - 97%

E. Grazing System

The active preference during the evaluation period was 7,827 AUMs from 1983 until 1990. In accordance with the transfer of grazing preference to Dan Russell on January 5, 1990, the active use was adjusted to 4,350 AUMs, with 3,477 AUMs in non-use.

From 1988 to 1992, grazing use was authorized north of Paiute Creek with herding practices designed to control livestock drift into the area south of Paiute Creek.

YELLOW

TO: GRAZING SYSTEM TO BE IMPLEMENTED

A. Grazing Preference Status (AUMs)

1.	Total preference	9,932
2.	Suspended preference	6,754
3.	Active preference	3,178
	Active Use	1,998
	Non-Use	1,180

B. Season of Use

Spring and Early Summer Use
03/15 to 07/15

C. Kind and Class of Livestock - Cattle, Cow/Calf

D. Percent Federal Range - 97%

E. Grazing System

The grazing system listed below is for the next evaluation period.

North Paiute Use Area

Low Elevation		
509 cattle	03/15 to 05/15	1006 AUMs
High Elevation		
509 cattle	05/16 to 07/15	992 AUMs

Use will begin in the lower elevations east of the Leonard Creek Road. This area would include all the lower foothills and alluvial fans along the eastern portion of the allotment north of Paiute Creek that fall below 1550 meters in elevation.

Livestock use of the higher elevations will be deferred until after May 01 by salting and herding practices. The high elevation use area would include Paiute Creek above the drift fence and higher country above 1550 meters in elevation.

All livestock will be removed from the allotment prior to July 15 of each year. Winter use by livestock will not be authorized due to direct conflicts with wildlife and wild horse use of the area during winter months.

South Paiute Use Area

As identified in the February 25, 1993 allotment evaluation for Paiute Meadows, the use area south of Paiute Creek is lacking in grass species due to excessive use by wild horses and livestock and the past six years of drought conditions. Livestock use will not be authorized in this area until the following specific criteria are met as determined by the District Soil Scientist and the range staff in the Paradise-Denio Resource Area.

Criteria

Utilizing the 1992 Ecological Site Inventory data collected in this allotment, three key range sites were selected from the soil mapping units that represented the majority of the use area. The range sites selected were ones that would respond to changes in management and represent various elevations. The following is a description of the range sites:

South Slope 12-16 P.Z. 023XY016NV ARVA2/AGSP
Soil Map Unit 177 write-up number DJ 60

Clay Slopes 8-12 P.Z. 023XY037NV ARTEM/AGSP
Soil Map Unit 965 write-up number DJ 62 correlated with DJ 80

Sandy 5-8 P.Z. 027XY009NV ORHY/STCO4
Soil Map Unit 378 write-up number DJ 27 correlated with DJ 10

Criteria for Resuming Livestock Grazing

023XY016NV	Increase AGSP from 15% present by weight to 35% by weight.
023XY037NV	Increase AGSP from 0% present by weight to 15% by weight.
	Increase STTH2 from 0% present by weight to 5% by weight.
027XY009NV	Increase ORHY from 6% present by weight to 15% by weight.
	Increase STCO4 from 0% present by weight to 5% by weight.

The control sites (clipped plots) will be compared in the future with the ocular sites to determine progress. The first monitoring is scheduled for 1995.

The active use will be phased in using the following schedule:

Year	Total Preference	Suspended Preference	Active Preference	Active Use	Non-use
1993	9932	6754	3178	2054	1124
1995	9932	6754	3178	2293	885
1997	9932	6754	3178	1998	1180

1993 Grazing Schedule
North Paiute
Low Elevation
700 cattle 04/15 to 05/15 692 AUMs
High Elevation
700 cattle 05/16 to 07/15 1362 AUMs

1994 Grazing Schedule
North Paiute
Low Elevation
660 cattle 03/15 to 05/15 1304 AUMs
High Elevation
660 cattle 05/16 to 07/15 1284 AUMs

This decision changes the season of use for livestock and establishes the Appropriate Management Level for wild horses. The grazing schedule has been shortened for the 1993 grazing year due to the high population of horses using the North Paiute Use Area and the process of finalizing the decision for the Paiute Meadows Allotment.

Therefore, there is a greater decrease in the Active Use for 1993 than 1994. In 1994, with the proposed reduction in the wild horse population the permittee will be authorized a longer season of use.

Livestock numbers will be recalculated after evaluating the 1993 and 1994 monitoring data.

Terms and Conditions:

Herding/salting practices are required and should be designed so that livestock drift does not occur into use areas not scheduled for use.

Salt and/or mineral blocks shall not be placed within one quarter (1/4) mile of springs, streams, meadows, riparian habitats or aspen stands.

You are required to perform normal maintenance on the range improvements as per your signed cooperative agreements prior to turning out.
Your certified actual use report by pasture is due 15 days after the end of the authorized grazing period.

2. Reconstruct the existing Soldier Meadows/Paiute Meadows drift fence from the Pine Forest Allotment south and extend the fence to Burnt Springs with offset gates at major horse trails.

3. Removal of the fence from the Paiute Seeding.

RATIONALE:

This carrying capacity was derived from monitoring data collected on the allotment from 1987 through 1990. Monitoring data has indicated that vegetative objectives are not being achieved in both the North Paiute and the South Paiute use areas of the allotment. Therefore, an adjustment is needed in the authorized use by livestock and the wild horse population size to achieve the thriving natural ecological balance of the allotment.

In addition, long term stream habitat objectives have not been met in the North Paiute use area. Previous to the transfer of the grazing preference to the current permittee, and authorization of 56% of the grazing permit, improvement in stream habitats was noted. A reduction in the season of use for livestock is necessary to ensure continued growth of riparian vegetation and improvement towards long term streambank riparian habitat conditions in the absence of riparian habitat fences. The reduction in active use combined with the season of use will ensure that progress.

When monitoring indicates the vegetation has recovered south of Paiute Creek the permittee will be authorized to activate those AUMs placed in non-use before adjustments will be made to the wild horse AML.

The reconstruction and extension of the Soldier Meadows/Paiute Meadows drift fence would stop livestock drift from Paiute Meadows into Coleman, Snow, Summer Camp and Mahogany Creek areas of the Soldier Meadows Allotment. The extension of the drift fence would run through the North Black Rock Wilderness Study Area (WSA NV-020-622). All surveys, designs, and environmental assessments will be coordinated with interested parties.

A solid fence, as opposed to "gap" fencing, would ensure that the livestock drift would be stopped. Wild horses would create trails around the "gap" fencing which the cattle would then follow.

Distribution data shows that when horse populations are within an acceptable level, the concentration of horses are on the southern end of the Paiute Meadows allotment where most of the migration occurs, therefore, conflicts with wild horse migration and fencing north of Burnt Springs will be minimized.

The Paiute Seeding area is in poor to fair condition following over 10 years of use without adequate fencing. Wild horses and wildlife populations rely upon the existing reservoir in the seeding for water during the summer months and it becomes a critical water source for them during drought years.

Therefore, removal of the Paiute Seeding boundary fence would benefit both wildlife and wild horses.

AUTHORITY: The authority for this decision is contained in Title 43 of the Code of Federal Regulations, which states in pertinent parts:

> 4100.0-8 "The authorized officer shall manage livestock grazing on public lands under the principle of multiple use and sustained yield and in accordance with applicable land use plans. Land use plans shall establish allowable resource uses (either singly or in combination), related levels of production or use to be maintained, areas of use and resource condition goals and objectives to be obtained. The plans also set forth program constraints and general management practices needed to achieve management objectives. Livestock grazing activities and management actions approved by the authorized officer shall be in conformance with the land use plan as defined at 43 CFR 1601.0-5(b)."
>
> 4110.3 "The authorized officer shall periodically review the grazing preference specified in a grazing permit or grazing lease and may make changes in the grazing preference status. These changes shall be supported by monitoring, as evidenced by rangeland studies conducted over time, unless the change is either specified in an applicable land use plan or necessary to manage, maintain or improve rangeland productivity."

4110.3-2(b) "When monitoring shows active use is causing an unacceptable level or pattern of utilization or exceeds the livestock carrying capacity as determined through monitoring, the authorized officer shall reduce active use if necessary to maintain or improve rangeland productivity, unless the authorized officer determines a change in management practices would achieve the management objectives."

4110.3-2(c) "Where active use is reduced it shall be held in suspension or in non-use for conservation/protection purposes, until the authorized officer determines that active use may resume."

4110.3-3(a) "Changes in active use in excess of 10 percent shall be implemented over a 5-year period, unless after consultation with the affected permittees or lessees and other affected interests, an agreement is reached to implement the increase or decrease in less than 5 years."

4110.3-3(b) "After consultation, coordination, and cooperation, suspensions of preference shall be implemented through a documented agreement or by decision. If data acceptable to the authorized officer are available, an initial reduction shall be taken on the effective date of the agreement or decision and the balance taken in the third and fifth years following that effective date, except as provided in 4110.3-3(a). If data acceptable to the authorized officer to support an initial reduction are not available, additional data will be collected through monitoring. Adjustments based on the additional data shall be implemented by agreement or decision that will initiate the 5-year implementation period."

4110.3-3(c) "When the authorized officer determines that the soil, vegetation, or other resources on the public lands require temporary protection because of conditions such as drought, fire, flood, or insect infestation, after consultation with affected interests, actions shall be taken to close allotments or portions of allotments to grazing by any kind of livestock or to modify grazing use. Notices of closure and decisions requiring modification of authorized grazing use shall be issued as final decisions which are placed in full force and effect under 4160.3(c)."

4130.6-1(a) "The authorized officer shall specify the kind and number livestock, the period(s) of use, the allotment(s) to be used, and the amount of use, in animal unit months, for every grazing permit or lease. The authorized livestock grazing use shall not exceed the livestock carrying capacity as determined through monitoring and adjusted as necessary under 4110.3, 4110.3-1 and 4110.3-2."

4130.6-2 "The authorized officer may specify in grazing permits and leases other terms and conditions which will assist in achieving management objectives, provide for proper range management or assist in the orderly administration of the public rangelands..."

4160.3(c) "...The authorized officer may place the final decision in full force and effect in an emergency to stop resource deterioration. Full force and effect decisions shall take effect on the date specified, regardless of an appeal."

If you wish to protest this decision for livestock management, in accordance with 43 CFR 4160.2 you are allowed fifteen (15) days from receipt of this notice within which to file such protest with the Paradise-Denio Resource Area Manager, Bureau of Land Management, Winnemucca District, 705 E. 4th Street, Winnemucca, NV 89445. Subsequent to the fifteen day protest period a final decision will be issued which will provide opportunity for appeal in accordance with 43 CFR 4160.4 and 43 CFR 4.470. Consideration is being given to place the final decision in Full Force and Effect.

FUTURE MONITORING AND GRAZING ADJUSTMENTS

The Paradise-Denio Resource Area will continue to monitor the Paiute Meadows Allotment. The monitoring data will continue to be collected in the future to provide the necessary information for subsequent evaluations. These evaluations are necessary to determine if the allotment specific objectives are being met under the new grazing management strategy. In addition, these subsequent evaluations will determine if adjustments are required to meet the established allotment specific objectives.

The Paiute Meadows Allotment is scheduled to be reevaluated in 1994.

Sincerely yours,

Area Manager
Paradise-Denio Resource Area

cc: NRDC
Sierra Club
Craig Downer
Wilderness Society
NV Outdoor Recreation Assoc.
Desert Bighorn Council
Dept. of Wildlife - Fallon
John Marvel
Nevada Land Action Assoc.
Daniel and Sammye Ugalde
Thomas Van Horne
Andy Johas
NV Farm Bureau
Dept. of Wildlife - Winnemucca
Humboldt County Commissioners
Western Farm & Ranch Service
Lyman Youngberg
Dan Russell
Dave Cassinelli
R.C. Roberts
USFWS
Trout Unlimited
WHOA
Animal Protection Institute
Commission for the Preservation of WH
Int'l Society for the Protection of WH&B
American Horse Protection Assoc.
Humane Society of the US
Claudia Richards
William Cummings

N2 93 10

February 25, 1993

Paiute Meadows

PAIUTE MEADOWS FINAL ALLOTMENT EVALUATION

I. INTRODUCTION

A. Paiute Meadows Allotment (00057)

B. Permittee - Daniel H. Russell

C. Evaluation Period - 10/14/83 to present

D. Selective Management Category I

II. INITIAL STOCKING LEVEL

A. Livestock Use

1. Grazing Preference (AUMs)

a.	Total Preference	- 9,932
b.	Suspended Preference	- 2,105
c.	Active Preference	- 7,827
d.	Not Scheduled (Nonuse)	- 3,477
e.	Scheduled Use	- 4,350

The authorized grazing use for the Paiute Meadows Allotment during 1990 was adjusted to 4,350 AUMs in accordance with the transfer of grazing preference to Dan Russell dated 01/05/90.

2. Season of Use - 05/01-11/05

During 1990 the season of use was also adjusted in accordance with the transfer of grazing preference to Dan Russell dated 01/05/90.

3. Kind and Class of Livestock - Cattle, Cow/Calf

4. Percent Federal - 97%

5. Grazing System

The active preference during the evaluation period was 7,827 AUMs from 1983 until 1990. In accordance with the transfer of grazing preference to Dan

Russell on January 5, 1990, the active preference was adjusted to 4,350 AUMs, with 3,477 AUMs in non-use.

There has not been a stable livestock operation in place since 1981. Traditionally, livestock have been turned out in the spring and gathered in the fall. Occasionally, winter use was authorized.

From 1988 to 1992, grazing use was authorized north of Paiute Creek with herding practices designed to control livestock drift into the area south of Paiute Creek.

During the evaluation period, 1983-1992, licensed livestock use has varied as follows:

1983	No use
1984	6,283 AUMs
1985	5,106 AUMs*
1986	No use
1987	No use
1988	1,519 AUMs
1989	2,759 AUMs
1990	4,350 AUMs
1991	4,350 AUMs
1992	4,125 AUMs

*Includes 210 AUMs Exchange-of-Use

B. Wild Horse and Burro Use

The Black Rock Range East Herd Management Area (HMA) encompasses a portion of the allotment. The identified level of use established by the Paradise-Denio Land Use Plan is 59 wild horses and 0 burros.

C. Wildlife Use

1. Reasonable Numbers by big game species

Mule Deer	Pronghorn Antelope	Bighorn Sheep
1,838 AUMs	307 AUMs	180 AUMs

2. Wildlife Use Areas within the allotment:

Black Rock DY-13	2,134 acres
Black Rock DW-10	41,678 acres
Black Rock DS-6	45,856 acres

Black Rock PS-15	45,965 acres
Black Rock PY-14	35,274 acres
Leonard Creek PW-17 (Concentration)	2,043 acres
Paiute Creek PW-16 (Concentration)	31,466 acres
Black Rock BY-15	69,939 acres

These measurements correspond to the wildlife use areas as of the URA update of 1986-1988. Since then, in consultation with Nevada Department of Wildlife (NDOW) the boundaries have been redrawn to reconcile discrepancies at the Sonoma-Gerlach/Paradise-Denio Resource Area Boundary along the crest of the Black Rock Range.

3. Sage Grouse

Two sage grouse strutting grounds have been identified in the Paiute Meadows allotment, one at the south end and one at the east end. One additional strutting ground is identified adjacent to the allotment in the Bartlett Creek drainage. However, several brooding areas have been identified in other areas of the allotment which would indicate that additional strutting grounds are present. Two winter use areas for sage grouse have also been identified; one each near the Paiute Creek and Bartlett Creek drainages.

4. Bighorn Sheep

Eleven California bighorn sheep were released onto the west side of the Black Rock Range in February 1992. Two bighorn sheep were observed approximately one mile north of White Rock Spring in March 1992.

III. ALLOTMENT PROFILE

A. Description

The Paiute Meadows Allotment is located in the western portion of Humboldt County. The allotment is approximately 40 air miles south, southwest of Denio, Nevada and encompasses the east side of the Black Rock Range. The allotment ranges in elevation from 4,000' to 8,631'. The lower elevations are dominated by shadscale and greasewood vegetation types. As elevation increases vegetation changes to sagebrush; mountain browse; aspen and mountain mahogany vegetation types.

B. Acreage

1. Allotment Acres

a.	Public acres	177,096 acres
b.	Private acres	5,170 acres
c.	Allotment Total	182,266 acres

C. Objectives

1. Land Use Plan Objectives

a. Objective RM-1

To provide forage on a sustained yield basis through natural regeneration. Reverse downward deterioration of public grazing lands by improving 1,000,000 acres in poor condition to fair condition, and 400,000 acres in fair condition to good condition within 30 years.

b. Objective RM-2

Increase existing allocatable livestock forage by artificial methods from the present 103,721 AUMs to approximately 193,472 AUMs (89,751 AUM increase) within 30 years.

c. Objective WLA-1

Improve and maintain the condition of all the aquatic habitat of each stream, lake, or reservoir having the potential to support a sport fishery at a level conducive to the establishment and maintenance of a healthy fish community.

d. Objective WL-1

Improvement and maintenance of a sufficient quantity, quality, and diversity of habitat for all species of wildlife in the planning area.

e. Objective W-1

Preservation and improvement of quality water necessary to support current and future uses.

f. Objective W-2

Provision of adequate water to support public land uses.

g. Objective W-3

Reduction of soil loss and associated flood and sediment damage from public lands caused by accelerated erosion (man-induced) from wind and water.

h. Objective WH/B-1

Maintain wild horses and burros on public lands, where there was wild horse or burro use as of December 15, 1971, and maintain a natural ecological balance on the public lands.

2. Rangeland Program Summary Objectives

a. Livestock Management Objectives

1) Increase available forage for livestock to sustain an active preference of 7,827 AUMs.

2) Improve range condition from poor to fair on 161,158 acres and fair to good on 15,938 acres.

3) Develop a livestock grazing plan that will alleviate the following problems:

a) Inadequate livestock distribution.
b) Excessive stocking rate.
c) Improper season of use.
d) Livestock Drift

b. Wildlife Management Objectives

1) Manage rangeland habitat and forage condition to support reasonable numbers of wildlife demand as follows:

Deer	1,838 AUMs
Antelope	307 AUMs
Bighorn Sheep	180 AUMs

2) Improve condition of deteriorating upland meadows.

3) Protect sage grouse breeding complexes.

4) Improve and maintain the condition of aquatic habitat and riparian zones having the potential to support a sport fishery on Battle, Bartlett, and Paiute Creeks.

c. Wild Horse Management Objective

1) Graze 59 (708 AUMs) wild horses in the Black Rock Range - East Herd Use Area.

3. Allotment Objectives

The allotment specific objectives tie the Land Use Plan and RPS Objectives together into quantified objectives for this allotment.

a. Short Term

1) Utilization of key streambank riparian plant species shall not exceed 30% on Paiute, Battle and Bartlett Creeks. [1]

2) Utilization of key plant species in wetland riparian habitats shall not exceed 50%. [1]

3) Utilization of key plant species in upland habitats shall not exceed 50%. [1]

4) Utilization of crested wheatgrass shall not exceed 50%. [1]

b. Long Term

1) Manage, maintain, or improve public rangeland conditions to provide forage on a sustained yield basis for big game, with an initial forage demand of 1,838 AUMs for mule deer, 307 AUMs for pronghorn, and 180 AUMs for bighorn sheep.
(WL-1, W-3, RPS b)

a) Improve to or maintain 2,134 acres in Black Rock DY-13, 41,678 acres in Black Rock DW-10, and 45,856 acres in Black Rock
DS-6 in good or excellent mule deer habitat condition.

b) Improve or maintain 45,965 acres in Black Rock PS-15 in good pronghorn habitat condition. Improve to or maintain 35,274 acres in Black Rock PY-14, 2,623 acres in Leonard Creek PW-17, and 31,466 acres in Paiute Creek PW-16 in fair or good pronghorn habitat condition.

c) Improve to or maintain 69,939 acres in Black Rock BY-15 in good to excellent bighorn sheep habitat condition.

2) Manage, maintain, or improve public rangeland conditions to provide forage on a sustained yield basis for livestock, with an initial stocking level of 7,827 AUMs. (RM-1 a, RPS a)

3) Improve range condition from poor to fair on 161,158 acres and from fair to good on 15,938 acres. [2] (RM-1, RM-2, RPS a.2)

4) Maintain and improve the free-roaming behavior of wild horses by protecting and enhancing their home ranges. (WH/B-1)

a) Manage, maintain, or improve public rangeland conditions to provide an initial level of 708 AUMs of forage on a sustained yield basis for 59 wild horses and maintain a thriving natural ecological balance. (WH/B-1, RPS c)

b) Maintain and improve wild horse habitat by assuring free access to water. (WH/B-1, RPS C.)

5) Improve to or maintain 86 acres of ceanothus habitat types in good condition. [2] (WL-1, RPS b.1)

6) Improve to or maintain 345 acres of mahogany habitat types in good condition. [2] (WL-1, RPS b.1)

7) Improve to or maintain 188 acres of aspen habitat types in good condition. [2] (WL-1, RPS b.1)

8) Improve to or maintain 529 acres of riparian and meadow habitat types in good condition. [2] (WL-1, W-3, RPS b 4.)

9) Improve to or maintain 15 acres of serviceberry, 82 acres of bitterbrush, 55 acres of ephedra, and 112 acres of winterfat vegetation types in good condition. [2]

10) Improve to, or maintain, stream habitat conditions from 67% (1990) on Paiute Creek, 45% (1992) on Battle Creek, and 50% (1989) on Bartlett Creek to an overall optimum of 60% or above. (WLA-1, RPS b.4)

Stream Habitat Condition Classification
(% of Habitat Optimum)
70-100% = Excellent
60-69% = Good
50-59% = Fair
0-49% = Poor

a) Streambank cover 60% or above.
b) Streambank stability 60% or above.
c) Maximum summer water temperatures below 70° F.
d) Sedimentation below 10%.

11) Protect sage grouse strutting grounds and brooding areas. Maintain a minimum of 30% cover of sagebrush for nesting and winter use. (WL-1, RPS b.3)

12) Improve to, or maintain, the water quality of Paiute, Battle and Bartlett Creeks to the State criteria set for the following beneficial uses: livestock drinking water, cold water aquatic life, wading (water contact recreation), and wildlife propagation. (WL-1)

13) Improve to or maintain the 1000 acre Paiute seeding in good condition. (5-10 acres per AUM) (RM-2)

[1] The utilization levels will be used to evaluate and adjust management practices over a period of time.

[2] Ecological status will be used to redefine/quantify these objectives where applicable.

D. Key Species Monitored

1. Upland Habitat

Symbol	Scientific Name	Common Name
STTH2	Stipa thurberiana	Thurber's needlegrass
FEID	Festuca idahoensis	Idaho Fescue
STCO3	Stipa columbiana	Columbia needlegrass
POSE	Poa secunda	Sandberg's bluegrass
ORHY	Oryzopsis hymenoides	Indian ricegrass
ELCI2	Elymus cinereus	basin wildrye
AGSP	Agropyron spicatum	bluebunch wheatgrass

Symbol	Scientific Name	Common Name
ATCO	Atriplex confertifolia	shadscale
BASA3	Balsamorhiza sagittata	arrowleaf balsamroot
CRAC2	Crepis acuminata	tapertip hawksbeard
AMAL2	Amelanchier alnifolia	serviceberry
ARSP	Artemisia spinescens	bud sagebrush
PUTR2	Purshia tridentata	antelope bitterbrush
SYOR	Symphoricarpos oreophilus	snowberry
EULA5	Eurotia lanata	winterfat
LUPIN	Lupinus	lupine
SIHY	Sitanion hystrix	bottlebrush squirreltail
EPHED	Ephedra	ephedra

2. Riparian Habitat

Symbol	Scientific Name	Common Name
AGIN2	Agropyron intermedium	intermediate wheatgrass
CAREX	Carex spp.	sedge
POA++	Poa spp.	bluegrass
JUNCUS	Juncus spp.	rush
POTR5	Populus tremuloides	quaking aspen
ROWO	Rosa woodsii	woods rose
SALIX	Salix spp.	willow

IV. MANAGEMENT EVALUATION

A. Purpose

The purpose of this monitoring evaluation is to assess if current management practices are meeting the allotment specific and LUP objectives and to identify management changes needed to meet objectives.

B. Summary of Studies Data

1. Actual Use

a. Livestock

Year	AUMs Used
1983	0
1984	6,283
1985	4,896
1986	0
1987	0
1988	1,487
1989	2,323
1990	2,521
1991	4,017
1992	Data not available until 2/28/93.

b. Wildlife (Existing Numbers)

The P-D EIS (1982) indicated the forage use was 1,869 AUMs for mule deer and 204 AUMs for pronghorn on this allotment for the period 1971-1975. The 1986 forage use was determined to be 2,552 AUMs for mule deer and 615 AUMs by pronghorn. Survey methods to determine forage use differed between the two time periods, so data is not comparable. In general population trends for big game animals has increased on the Black Rock Range in the last 10 years.

Eleven California bighorn sheep were released on the west side of the Black Rock Range in February 1992. Since that time several sheep have been observed on the east side of the Black Rock Range. The current forage use by bighorn sheep cannot be quantified at this time.

c. Wild Horses

1) Aerial Count

Records indicate that the Black Rock Range East HMA has had census or distribution flights conducted 23 times since 1969. These flights were either conducted by fixed wing (distribution) or helicopter (census).

A census is an attempt to count as accurately as possible all horses within the area. Distribution flights, as the name implies, are an attempt to determine the distribution of horses at the time of the flight, while counting the animals as accurately as possible. (A census also records distribution at the same time.) Census flights are flown with a helicopter. Using this aircraft type allows for a more accurate count, due to its slower speed and greater maneuverability. Distribution flights are flown with a fixed wing, due to cost constraints.

Data collected for the period 1969-1992 for both the Black Rock Range East and West HMAs is also presented and summarized in Appendix 3. Total numbers for the East HMA are as follows:

Distribution Flights

Year	Date	# Horses	Aircraft
1969	March 12	18	Unspecified
1970	Nov. 10	73	Unspecified
1974	Oct. 7	123	Super Cub
1975	July 1	115	Unspecified
1979	Feb. 6	261	Unspecified
1979	Sept. 17	471	Unspecified
1989	March 2	141	Cessna 206
1991	Jan. 30	322	Cessna 210
1991	July 26	435	Maule M5
1992	March 10	255	Maule M5
1992	May 23	525	Maule M5
1992	July 22	255	Maule M5
1992	Sept. 23	364	Maule M6

Census Flights

Year	Date	# Horses	Aircraft
1975	Feb. 10	92	Bell B-2
1977	Apr. 4-5	282	Bell B-1
1980	July 24-25	46	Bell B-1
1986	June 12	1075	Bell B-1
1987	Oct. 6,8	666	Bell B-1
1989	July 17-18	651	Bell Soloy
1990	Feb. 12-14	508	Bell Soloy
1991	Dec. 26-28	733	Hughes 500-D
1992*	Feb. 26	168	Hughes 500-D
1992	Oct. 22-23	351	Hiller SA/ Bell 47GB1

*Partial Census during horse gather.

The 1987, 1989, 1990, 1991 and 1992 distribution/census indicated wild horses were found north and south of Paiute Creek as follows:

Census Date	Paiute South	Paiute North	Total
1987 (October 6, 7)	448	218	666
1989 (July 17, 18)	458	193	651
1990 (February 12-14)	264	244	508
1991 (December 28)	455	278	733[1]
1992 (February 26)*	136	32	168[2]
1992 (October 22,23)	187	164	351

*Partial census conducted during horse gather

2) Wild Horse Removal Data

Four wild horse gathers have been completed on the Black Rock East and West HMA's since the winter of 1979-1980. The number of wild horses removed during each gather is as follows:

Year	Black Rock East	Black Rock West	Total
1979/1980	81	944	1,025
1986	27	166	193
1988	445	259	704
1992*	489	0	489

[1] 186 horses were counted east of the boundary

[2] 32 horses were outside of the HMA boundary

Paiute Meadows

February 25, 1993

*137 wild horses were released back into the HMA following the gather in accordance with Bureau policy on unadoptable animals. Approximately 60 wild horses identified within the HMA were never gathered, leaving the total in the HMA following completion of the gather at approximately 200.

3) Actual Use

Forage (AUMs) consumed by wild horses in the Black Rock East (HMA) for the years 1987-1990 indicates more forage was consumed south of Paiute Creek.

Black Rock East (HMA)--Forage Consumption

	South Paiute			North Paiute		
Year	# of Wild Horses	Period	AUMs	# of Wild Horses	Period	AUMs
1987[3]	448 H	03/01-12/31	4,507	218 H	03/01-12/31	2,193
	203 H	01/01-02/28	394	18 H	01/01-02/28	35
1988[4]	231 H	03/01-02/28	2,772	21 H	03/01-02/28	252
1989[5]	231 H	03/01-07/18	1,056	21 H	03/01-07/18	96
	408 H	07/19-02/14	2,830	243 H	07/19-02/14	1,345
	264 H	02/15-02/28	122	244 H	02/15-02/28	112
1990	264 H	03/01-02/28	3,168	244 H	03/01-02/28	2,928
1991	455 H	03/01-02/28	5,460	278 H	03/01-02/23	3,336
1992[6]	146 H	03/01-10/22	1,133	98 H	03/01-10/22	1,176
	187 H	01/23-02/28	793	164 H	10/23-02/28	696

[3] Horse numbers change due to gather in 12/87

[4] Population was increased by 14% as no census was conducted in 1988.

[5] Horse numbers change due to censuses in July 1989 and February 1990.

[6] Horse numbers adjusted to reflect census in October 1992.

2. Climatological Data

Climatological Data (NOAA 1983-1991):

Two NOAA stations are presented due to their locations in relation to the allotment. The Leonard Creek Station is approximately 15 air miles NW of Paiute Meadows Ranch, and the Gerlach Station is approximately 36 air miles SW of Paiute Meadows Ranch. 1986 was the first year data was collected at Gerlach.

Leonard Creek Ranch Station
Precipitation (inches)

Year	Growing Season	Annual Total
1983	6.94 M	17.24 M
1984	3.00 M	8.50 M
1985	2.48	6.82 M
1986	4.85 M	9.60 M
1987	5.42	9.30
1988	2.94	8.11
1989	3.98	7.48
1990	4.67	7.19
1991	4.70	8.68

Nine year annual average = 9.21 M

Gerlach Station
Precipitation in Inches

Year	Growing Season	Annual Total
1986	3.71	7.20
1987	6.74	8.82
1988	2.72	6.68 M
1989	3.80	6.69
1990	6.28	8.38 M
1991	4.63	8.47

Six year annual average = 7.70 M

Growing season March - August
M = Partial or incomplete data

It takes approximately five months to receive the precipitation data from NOAA following the data collection, therefore 1992 data is not available at this time.

A Remote Automated Weather Systems (RAWS) meteorological station (Dry Canyon) was installed in June of 1986 approximately nine miles north of Soldier Meadows Ranch on the west side of the Black Rock Range at an elevation of 4,900'. This station is approximately ten air miles from the Paiute Meadows Allotment.

Dry Canyon RAWS Data
Precipitation (Inches)

Year	Annual Total
1986	1.2 M
1987	8.7
1988	5.8
1989	5.6
1990	3.9

5 year annual average = 5.04 M

Growing season March - August
M = partial or incomplete data

3. Utilization Data

a. Use Pattern Mapping (UPM)

Use Pattern Mapping (UPM) has been conducted for four (4) years over the period 1987 through 1990. A partial UPM was completed in April of 1991. In 1991 and 1992 utilization data at the four key areas and additional utilization study sites was collected and is summarized in the next section.

Use pattern mapping data indicates that the areas with heavy and severe use, occurred both north and south of Paiute Creek.

The UPMs are on file at the Winnemucca Office. For the years 1988 through 1991, cattle were authorized north of Paiute Creek only with some drift south of Paiute Creek. In 1992 monitoring data was collected through mid-July, with use extending into November 1992. Monitoring data is generally collected following removal of the livestock from the allotment, prior to the winter use period by wild horses and wildlife.

In these summaries, percent of area is the percent of the area that was actually mapped, not the percent of the whole allotment.

1) North of Paiute Creek

a) 1987
UPM completed in Fall 1987 to map Spring/Summer use.
Wild horse use only.

Heavy grazing use covered approximately 2% of the north area and was also associated with the lower end of Paiute Creek.

b) 1988
UPM completed in Fall 1988 to map Spring/Summer use. Wild horse use only.

Heavy grazing use covered approximately 1% of the north area and was indicated near Burnt Springs and Butte Creek.

A small area of moderate use was recorded along Bartlett Creek. Battle Creek was not mapped in 1988.

c) 1988/1989
UPM completed Spring 1989 to map year-round use by wild horses and winter use by cattle.

Heavy grazing use covered approximately 1% of the north area and was indicated near the upper end of Paiute Creek. Battle Creek and Bartlett Creeks were not mapped.

d) 1989
UPM completed Fall 1989 to map Spring/Summer use.
Wild horse use only.

Severe grazing use covered less than 1% of the north area. No heavy use was recorded. Slight to light utilization of streambank riparian vegetation occurred along Paiute and Battle Creeks. Bartlett Creek was not mapped in 1989.

e) 1989/1990
UPM completed Spring 1990 to map year-round use by wild horses and winter use by cattle.

Heavy grazing use covered approximately 19% of the north area.

Slight to light utilization of streambank riparian vegetation occurred along Paiute Creek. Light use was recorded along Bartlett Creek and light to moderate use along Battle Creek.

f) 1990
UPM completed in Fall 1990 to map Spring/Summer use.
Wild horse and cattle use.

Heavy grazing use covered approximately 49% of the north area. Heavy use of streambank riparian vegetation occurred along the north and south forks of Battle Creek..

Severe grazing use covered less than 1% of the north area. Severe grazing use of streambank riparian vegetation occurred along Paiute Creek, Battle Creek and Bartlett Creek.

2) South of Paiute Creek

Utilization was by wild horses only, with some livestock drift into the southern use area.

a) 1987
UPM completed in Fall 1987 to map Spring/Summer use.
Wild horse use only.

Heavy grazing use covered approximately 10% of the south area and was indicated primarily near water sources including Opal and Sheep Spring.

Severe grazing use covered approximately 11% of the south area and was indicated primarily near Indian and Pigeon Springs.

b) 1988
UPM completed in Fall 1988 to map Spring/Summer use.
Wild horse use only.

Heavy grazing use covered approximately 2% of the south area.

Severe use covered approximately 1% of the south area primarily near the seeding.

c) 1989
UPM completed in Spring 1989 to map year-round use.
Wild horse use only.

Heavy use covered approximately 12% of the south area.

Severe use covered approximately 16% of the south area and was indicated near Indian Cave and Pigeon Springs.

d) 1989
UPM completed Fall 1989 to map Spring/Summer use.
Wild horse use only.

Heavy grazing use occurred on approximately 2% of the south area and was primarily near Horse, Cherry and Pigeon Springs.

Severe use was not recorded.

e) 1989/1990
UPM completed Spring 1990 to map year-round use.
Wild horse use only.

Heavy grazing use covered approximately 39% of the south area. The heavy use was located in three different areas. The first area was around the Paiute seeding, the second was west of Elephant Mountain, and the last area was south of Pidgeon Springs.

Severe grazing use covered approximately 18% of the south area, between Cain Springs and Pidgeon Springs.

f) 1990
UPM completed Fall 1990 to map Spring/Summer use.
Wild horse use only.

Heavy grazing use covered approximately 42% of the south area.

Severe grazing use was also recorded at Trough Spring, Cancer Spring, Indian Spring, and White Rock Spring.

3) Paiute Seeding--South Paiute

The following information is a description of the grazing use patterns by year and use periods for the Paiute Seeding, which was generally mapped concurrently with the South Paiute area.

a) 1987
Heavy grazing use covered approximately 100% of the seeded area.

b) 1988
Heavy grazing use covered approximately 62% of the seeded area.

Severe grazing use covered approximately 38% of the seeded area.

c) 1989
Severe grazing use covered approximately 100% of the seeded area.

d) 1990
Severe grazing use covered approximately 16% of the south area primarily on the Paiute Seeding.

b. Utilization Data

Four key areas were established during the spring of 1990.

Key Area	Location
Big Mountain (057-01)	T.39N., R.26E., Sec. 6, SE¼, South of Paiute Creek
Battle Ck. #1 (057-02)	T.41N., R.26E., Sec. 25, NW¼, North of Paiute Creek
Battle Ck. #2 (057-03)	T.41N., R.26E., Sec. 13, SE¼, North of Paiute Creek
Emigrant (057-04)	T.38N., R.27E., Sec. 30, NE¼, South of Paiute Creek

A total of 30 utilization cages were established, including those at the four key areas. Utilization data as per the Key Forage Plant Method has been collected at the study sites and/or the key areas since 1990. The following table summarizes the utilization data at the study sites. The summary is broken down into the general locations of the cages as well.

Utilization levels measured in the spring are based on the previous grazing year's entire growth (PYG) and utilization. It does not reflect utilization on the current year's growth of vegetation. Spring monitoring was completed prior to or just after livestock turnout on May 01. Summer or fall utilization is based on the amount of forage utilized to date of the current year's growth (CYG). Monitoring in the fall is conducted following removal of the livestock from the allotment.

PYG = Previous Years Growth
CYG = Current Years Growth
nc = Cage not checked

South of Paiute Creek--Low elevation:

Utilization Level

	1990		1991		1992	
Cage No.	PYG Summer	CYG Fall	PYG Spring	CYG Fall	PYG Spring	CYG Summer
1	nc	nc	nc	slight	slight	nc
2	nc	nc	nc	heavy	heavy	no use
3 (057-04)	light	heavy	heavy	moderate	heavy	slight
4	nc	nc	nc	moderate	light	slight
5	nc	nc	nc	slight	light	no use
6	nc	nc	nc	light	slight	moderate
7	nc	nc	nc	no use	no use	nc
8	nc	nc	nc	light	light	nc
9	nc	nc	nc	nc	nc	nc

South of Paiute Creek--High Elevation:

Utilization Level

	1990		1991		1992	
Cage No.	PYG Summer	CYG Fall	PYG Spring	CYG Fall	PYG Spring	CYG Summer
10	nc	nc	nc	light	moderate	light
11	nc	nc	nc	slight	light	no use
12	nc	nc	nc	light	light	light
13	nc	nc	nc	light	moderate	no use
14 (057-01)	slight	moderate	moderate	nc	moderate	light
15	nc	nc	nc	nc	moderate	moderate

North of Paiute Creek - High Elevation:

Utilization Level

Cage No.	1990 PYG Summer	1990 CYG Fall	1991 PYG Spring	1991 CYG Fall	1992 PYG Spring	1992 CYG Summer
16	nc	nc	nc	heavy	heavy	slight
17	nc	nc	nc	moderate	heavy	slight
18	nc	nc	nc	nc	nc	moderate
19	nc	nc	nc	severe	severe	heavy
20	nc	nc	nc	nc	heavy	moderate
21	nc	nc	nc	light	heavy	slight
22	nc	nc	nc	moderate	heavy	light
23	nc	nc	nc	slight	light	slight
24 (057-02)	light	light	moderate	light	heavy	moderate
25	nc	nc	nc	nc	nc	nc
26 (057-03)	slight	moderate	moderate	heavy	nc	slight
27	nc	nc	nc	nc	nc	light
28	nc	nc	nc	nc	moderate	heavy
29	nc	nc	nc	nc	moderate	heavy
30	nc	nc	nc	nc	nc	no use

nc = not checked due to access restrictions or time/manpower restraints

Riparian Key Forage Monitoring

Seven utilization cages were placed along Battle, Bartlett, and Paiute Creeks. There are three cages on both Battle and Bartlett Creeks, and one cage on Paiute Creek.

Key forage plant monitoring was conducted in the riparian zone of Paiute, the north fork of Battle, and Bartlett Creeks in 1991 and 1992.

Paiute Creek - Utilization levels on key plant species averaged > 80% in 1991 and 62% in 1992.

North Fork of Battle Creek - Utilization levels averaged 56% in 11/91; 48% in 7/92; and 55% in 10/92.

Bartlett Creek - Average utilization level in 7/92 was 61% and 57% in 09/92.

Utilization levels =

no use	
slight	(1-20%)
light	(21-40%)
moderate	(41-60%)
heavy	(61-80%)
severe	(81-100%)

All four of the key areas are located in upland sites. These key areas were selected in coordination with affected interests in a field tour conducted in the spring of 1990. No key areas were selected in riparian habitats at that time. The existing key areas indicate that use levels change dramatically from year to year and season to season in the uplands.

c. The Quadrat Frequency Trend study method was initiated at the four key areas during the spring of 1990. Additional data is needed to quantify a change or trend at each key area.

Trend data was collected in 1979 at the Paiute Seeding Exclosure. No further data has been collected at this location. More data is needed to quantify a change or trend.

The Paradise-Denio EIS identifies observed trend as downward. (Refer to PD EIS Appendix G. Table 6-1 and Chapter II, 209 PD EIS)

5. Range Survey Data

a. A phase one watershed inventory was conducted in portions of the Paradise-Denio Resource Area from 1971-1974. Livestock forage condition was determined based upon data extrapolation and computations from this inventory. This data extrapolation resulted in the following condition classifications for the Paiute Meadows Allotment:

Good	Fair	Poor
0	15,938	161,158

Appendix G, Pg-28 of the P-D EIS provides more discussion on livestock forage condition.

b. In 1978 a range survey was conducted using the Ocular Reconnaissance Method to provide baseline data for analysis purposes in the Paradise-Denio EIS. The survey, along with suitability criteria indicated that 1,403 AUMs were available in 1978 for livestock and wild

horse use in the Paiute Meadows allotment.

6. Ecological Status Inventory

The order 3 soil survey field work has been completed on this allotment. The Ecological Status Inventory was completed in the summer of 1992. The data has not been compiled.

Ecological status was collected at four key areas during the spring 1990. The ecological status is as follows:

Key Area	Ecological Status
Big Mountain (057-01)	Mid Seral (39%)
Battle Ck. #1 (057-02)	Mid Seral (42%)
Battle Ck. #2 (057-03)	Mid Seral (33%)
Emigrant (057-04)	Mid Seral (49%)

7. Wildlife Habitat Inventory

a. Priority Species: Mule deer, sage grouse, pronghorn, bighorn sheep and Lahontan cutthroat trout.

b. Battle and Bartlett Creeks are designated as potential recovery habitat for the threatened Lahontan cutthroat trout.

c. Other species: chukar, Hungarian partridge and California quail.

d. Special habitat features

1) A special habitat features inventory was conducted in 1977 and 1978. This inventory identified the location and acres of special habitats, listed observed plant and wildlife species, and documented ocular observations of the condition and utilization of these habitats. This information was analyzed in the Paradise-Denio EIS.

2) Special Habitat acreage calculations are approximate figures that will be field checked as time permits.

Riparian habitat	529 acres
Aspen	108 acres
Curlleaf mountain mahogany	345 acres
Ceanothus	86 acres
Serviceberry	15 acres
Bitterbrush	82 acres
Winterfat	112 acres
Ephedra	55 acres

e. Habitat Evaluation

A habitat evaluation has not been conducted on this allotment.

8. Riparian/Fisheries Habitat

a. Stream Survey

Summaries of the stream survey findings follow:

1) Bartlett Creek

The pool-riffle ratio index was 78% of optimum in 1976, with riffles being dominant. Quality pools were seldom observed. In 1989, the NDOW stream survey indicated the pool-riffle ratio index had declined to 69% with only 6% of the observed pools rated as "quality" pools.

The stream bottom had an improved proportion of desirable materials: 64% in 1976 versus 76% in 1988. There was also a slight reduction in sedimentation: 22% sand and silt in 1976 versus 18% in 1988. However, there was also a shift in the proportions of the coarser rock substrate materials, resulting in a reduction of spawning gravel from 48% to 26%. Desirable stream bottom materials were 64% in 1976, 76% in 1988, and 74% in 1989.

Bank cover and stability were 50% and 61% of optimum, respectively in 1976. This improved to 76% and 86% in 1988. In 1989, NDOW stream surveys showed a decline in both bank cover (54%) and bank stability (51%) ratings.

The most pronounced effect from livestock was bank trampling and sloughing.

In 1976, 56% of the surveyed reaches of Bartlett Creek were shaded. Densiometer readings in 1989 showed a mean canopy density of 28%.

In 1976, the water was relatively clear at the upper stations, but became increasingly turbid downstream (30 Jackson Turbidity Units (JTUs) at S-1). Turbidity was not measured in 1988.

The habitat was 54% of optimum in 1976, with the main limiting factors being the lack of quality pools and poor bank cover. In 1988, the percent habitat optimum dropped to 50%. 1988 data does show that improvements were made in bank cover and stability (up 26% and 25% respectively). However, these improvements were most likely offset by the poor pool quality rating as a result of drought conditions. In 1989, the % habitat optimum remained the same at 50%.

1989 NDOW stream surveys also found Rainbow trout throughout several reaches of Bartlett Creek (NDOW 1989).

Although a BLM stream survey was not conducted in 1992, visual observations and monitoring of key streambank riparian plant species were conducted in 1991 and 1992 by the resource area fishery biologist. Results of this data indicated moderate to heavy livestock use on key riparian plants and woody species (mean use on 7/16/92 was 61%). Several locations along Bartlett Creek are showing heavy trailing which is contributing significant amounts of sediment to the stream. Streambanks are not recovering as they should be due to continuous livestock use in the stream/riparian zone. Heavy to severe use on young aspen trees has also been observed. These young aspen are critical in providing streambank stability and cover.

2) Battle Creek

The BLM stream survey of Battle Creek in 1976 found that pools constituted 39% of the stream. Of this 39%, few (<5%) were quality pools. The lack of quality pools lowered the pool quality index to 41% of optimum. In 1988, BLM found only 24% of the stream in pools, with a pool quality index of 35%. In 1992, the NDOW stream survey showed a pool quality index of 22%.

The stream bottom materials of Battle Creek in 1976 included 59% desirable materials and 28% sediments. Spawning gravel made up 37% of the bottom materials. In 1988 the bottom materials were 89% desirable materials and 15% sediments. Spawning gravel had decreased

to 25% of the bottom materials. Gravel and rubble (preferred substrate material) constituted 62% of the stream bottom in 1989.

Bank cover and stability of Battle Creek were 52% and 64% of optimum, respectively, in 1976. Ungulate damage ranged from 10% to 50%. In 1988, bank cover was 50% and bank stability was 71%. Bank damage was rated at 91%. The long periods of livestock use on this portion of the allotment have contributed to the increased bank damage that was observed between 1976 and 1988. In 1989, bank cover rated good at 61%. Bank stability was good at 67%. Preliminary data collected by NDOW in 1992 showed a slight improvement for bank cover to 69%, and a decline in bank stability to 55%.

Only 34% of the stream was shaded in 1976. The peak water temperature recorded during the two day survey in July was 64°F. Neither the percentage shaded, nor water temperature were determined in 1988. During the summer of 1990, a recording thermograph placed in Battle Creek indicated a peak temperature of 67.8°F.

Battle Creek stream habitat rated 59% of optimum in 1976. In 1988, this dropped slightly to 58%. Lack of pools and poor quality were the chief limiting factors. In 1989, the percent of habitat optimum improved to 63% on public lands, then declined sharply in 1992 to 45%.
Data collected in the 1992 NDOW stream survey conducted on the North Fork of Battle Creek is not available at this time. However, visual observations and key forage plant monitoring conducted in 1991 and 1992 by the Paradise-Denio Fishery Biologist indicated that stream and riparian condition are declining. Six consecutive years of drought combined with hot season use by livestock are impeding progress towards recovery of the north fork of Battle Creek. Although adequate water flows are present year round, streambanks are being degraded faster than they can be recovered. Very few quality pools exist due to excessive sediment loads.

3) Paiute Creek

The pool-riffle ratio index for Paiute creek was 92% in 1976. However, the small number of quality pools reduced the pool quality rating to 26% of optimum. In 1990, the NDOW stream survey showed a significant decline in pool quality to 3.4%. This rating is the percent of pools for a stream or stream reach with class one, two, of three quality pools.

The stream bottom of Paiute Creek in 1976 was 41% desirable materials and 30% sediments. Spawning gravel made up 36% of the stream bottom. In 1988, desirable materials comprised 98% of the bottom materials. Sedimentation was 9%. Spawning gravel were reduced to 31%. In 1990, desirable materials dropped to 41%.

The majority of the banks were deeply eroded, reflected as ungulate damage ratings of 50% to 90% throughout the four stations surveyed in 1976. Bank cover and stability were 39% and 58%, respectively. In 1988, bank damage was rated at 100%; severe bank erosion and accelerated erosion and sloughing occurred over virtually all of the surveyed portions of the stream channel. Bank cover and stability were 53% and 63%. In 1990, the NDOW stream survey indicated that overall damage from livestock use was light (6%). Bank cover and stability improved to 81% and 79% respectively.

Only 37% of the stream was shaded in 1976. The creek averaged 0.16 feet deep, with a flow of 1.03 cfs. These factors resulted in a maximum water temperature of 80°F, exceeding water quality standards. The percentage shading and water temperature were not determined in 1988, however the depth averaged 0.20 feet and, as stated above, bank cover still did not meet the objective. In 1990, the mean canopy density was 47%. The average water temperature was 74°F, with a maximum recorded temperature of 84°F, which exceeds state water quality standards.

In 1976, the habitat condition index for Paiute Creek was 50%. Warm water temperatures, a scarcity of quality pools, and poor benthic composition were

the primary limiting factors. The habitat condition declined to 43% of optimum in 1988 without livestock use in 1986 and 1987. The lack of pools and the degree of damage to the streambanks, which counteracts channel development toward providing better pool structure, were still the most critical factors in the poor habitat conditions. In 1990, the habitat condition index for Paiute Creek improved to 67% (NDOW 1990). According to the NDOW survey in 1990, "It appears that the principal limiting factors for Paiute Creek are poor pool structure (quality pools) and stream bottom substrate." Preferred substrate material rated fair overall.

Visual observations by the Area Fishery Biologist and studies conducted utilizing key forage plant monitoring technique indicate that stream conditions in the mid to upper reaches of Paiute Creek are declining. Severe use along the creek has prevented streambank recovery and establishment of woody species.

Current impacts to the streams can be attributed primarily to the livestock and wild horse use. The current riparian conflicts on Battle and Bartlett Creeks tend to be the result of the livestock management on those portions of the allotment. In addition, there has been a significant increase in wild horse use of the Battle Creek and Bartlett Creek drainages in recent years. More wild horses were observed in the North Fork of Battle Creek in 1992 during collection of monitoring data than in 1991, even following a wild horse gather in 1992. Seasonal use of these drainages by wild horses which migrate between Black Rock Range West and East HMAs also contributes to excessive use during the hotter parts of the year.

Paiute Meadows Allotment Stream Survey Data

Date of Survey	Survey Agency	Percent of Optimum	Percent Sedimentation (% Opt.)	Bank Cover (% Opt.)	Bank Stability (% Opt.)	Water Temp. (°F)
(Objective Levels)		>60	<10	>60	>60	<70
Bartlett Creek (all stations)						
08/2/76	BLM	54	22	50	61	63
07/11/88	BLM	50	18	76	86	--
09/20/89	NDOW	50	33	54	49	67
Battle Creek (all stations)						
08/4/76	BLM	59	28	52	64	64
07/18/88	BLM	58	15	50	71	--
10/17/89	NDOW	66	28	61	69	60
09/14/92	NDOW	45	--	69	54	--
Paiute Creek (all stations)						
08/3/76	BLM	51	30	58	58	80
07/13/88	BLM	43	9	63	63	--
07/31/90	NDOW	67	--	81	79	74

9. Wild Horse and Burro Habitat

Population Data

Utilization data for the Black Rock Range East HMA as indicated by census data shows that forage utilization and populations are consistently greater south of Paiute Creek compared to north of Paiute Creek. For the period 1987 through 1992 forage consumed by horses south of Paiute Creek was 22,235 AUMs or 3,706 AUMs avg/year and north of Paiute Creek 12,169 or 2,028 AUMs avg/year for a total average of 5,734 AUMs.

UPM data collected from 1987 to 1990 indicated that the highest levels of utilization occurred south of Paiute Creek. Use patterns indicate the southeast portion of the HMA from Lone Spring and White Rock Spring south is the recognized winter use area. Horses are distributed throughout the allotment the remainder of the year.

Utilization data collected at utilization study sites and key areas throughout the allotment indicate seasonal use patterns by wild horses vary depending upon the climatic conditions. In the winter of 1991 to 1992, conditions were dry and mild. Wild horses were gathered from the lower elevations in February 1992, which reduced somewhat the amount of use during the remainder of the winter. However, concentrations of animals were still greatest in the lower elevations of the southern half of the allotment and HMA. The condition of the wild horses as they were removed varied from quite poor south of Paiute to fair north of Paiute. The utilization levels and patterns exhibited in 1991-1992 closely resembled those patterns and levels documented in the UPMs of 1987-1990. Some areas did receive much lighter use due to more open conditions over the winter. This allowed the wild horses to disperse to the higher elevations throughout the winter and spring months, than was apparent in past years.

Census data for 1987 through 1992 indicates an irregular population as well as distribution pattern in the Black Rock East HMA. Distribution in December 1991 placed 34% of the population north of Paiute Creek, and 66% south of Paiute Creek, demonstrating the key winter area of use is south of Paiute Creek. Distribution of wild horses following the 1992 gather has been erratic due to nearly immediate migration of animals from the West HMA into the East HMA following the conclusion of the gather. The October 1992 distribution flight indicates that at the present time there are 351 adult wild horses within the Black Rock Range East HMA. Of this population, 164 animals or 43% are

north of Paiute Creek, and 187 or 57% are south of Paiute Creek.

Data indicates that in 1980 the wild horse population on the HMA as observed by census was 46 animals. This census was conducted immediately following a wild horse removal from the East HMA. The 1986 census indicated a population increase to 1,075 animals. The number indicates a high probability of wild horses moving within the Black Rock Range between the West and East HMAs as this total far exceeds what would be expected from an isolated population. It is also possible that horses are migrating into the HMA from other HMAs. In 1986 and 1987 livestock were not turned out on the allotment providing an opportunity for horses to utilize unused areas.

Census data shows the population expands further out into the Black Rock West and East HMAs as the total population increases. Wild horses have moved east of the Black Rock East HMA and south out of both HMAs. The wild horses in both HMAs have expanded their range north beyond Rough Canyon and Summit Lake Mountain, and as far north as the Mahogany Creek Exclosure and Dry Lake.

10. Water Quality

Available data - Lab analysis of water quality was done in 1976 and 1979 on Bartlett Creek and Paiute Creek. Stream survey water quality analysis with a Hach Kit was done in 1976 and 1989 on Battle, Bartlett, and Paiute Creeks.

Battle Creek - Temperatures are consistently too high for cold water aquatic life and fecal coliform and turbidity may also be problems, but more data is needed. TDS was low (1976).

This data predates the evaluation period and the current management applied to this allotment. Therefore, it is not indicative of the present status of the water quality within the three streams.

Current Data:

Bartlett Creek

Water quality data collected by NDOW in 1989:

Water Temperature

The average water temperature was 56.0°F with a maximum recorded temperature of 67.0°F and a minimum recording of 47.0°F. The mean air temperature was 67.5°F.

Water Chemistry

Water chemistry data was collected from the following stations and is as follows:

Station Tributary	pH	Alkalinity (mg/l)	Conductivity (UMHOS)	Sulphate (mg/l)
497	7.7	68.4	125	< 50.0
639	6.8	68.4	125	< 50.0
670	6.9	68.4	113	< 50.0
715	7.4	68.4	110	< 50.0
784	7.4	68.4	100	< 50.0
806	7.3	51.3	98	< 50.0
838	6.8	51.3	90	< 50.0
900	7.2	51.3	85	< 50.0
928	6.5	51.3	85	< 50.0
978	7.1	68.4	95	<50.0

Battle Creek

The following water quality data was collected by NDOW during stream surveys conducted on Battle Creek in 1989:

Water Temperature

The average water temperature was 52.8°F with a maximum recorded temperature of 60.0°F and a minimum of 48.0°F. The mean air temperature was 67.0°F.

Water Chemistry

Water chemistry data was collected from Stations 816, 904, 940, and 975 of the main stem stream (ms). Data was also collected from Stations 001, 193, 390, 570, 766, and 902 on the north fork tributary and Stations 001, 418, and 680 of the south fork tributary.

Station Tributary	pH	Alkalinity (mg/l)	Conductivity (UMHOS)	Sulphate (mg/l)
816/ms	8.0	102.6	165	< 50.0
904/ms	7.8	102.6	175	< 50.0
940/ms	7.8	85.5	160	< 50.0
975/ms	7.5	102.6	160	< 50.0
001/NF	7.5	85.5	140	< 50.0
193/NF	7.5	85.5	130	< 50.0
390/NF	7.3	68.4	125	< 50.0
570/NF	7.0	85.5	120	< 50.0
766/NF	6.8	68.4	95	< 50.0
902/NF	7.5	68.4	85	< 50.0
001/SF	7.0	85.5	200	< 50.0
418/SF	8.0	85.5	175	< 50.0
680/SF	7.5	119.7	170	< 50.0

Turbidity

The water was found to be clear and clean throughout the drainage.

Paiute Creek

Water quality data collected by NDOW in 1990 is as follows:

Water Temperature

The average water temperature was 56.0°F with a maximum recorded temperature of 67.0°F and a minimum recording of 47.0°F. The mean air temperature was 67.5°F.

Water Chemistry

Water chemistry data was collected from the following stations and is as follows:

Station Tributary	pH	Alkalinity (mg/l)	Conductivity (UMHOS)	Sulphate (mg/l)
732	7.5	102.6	200	< 50.0
775	8.0	85.5	200	< 50.0
869	8.0	102.6	250	< 50.0
912	8.0	102.6	225	< 50.0
967	8.0	102.6	226	< 50.0

11. Other Information

Normal maintenance on most range improvements has not been conducted, leaving them in poor condition. The majority of the developed water sources are in need of reconstruction. There are no boundary fences on the allotment with the exception of the northern boundary between Paiute Meadows and the Pine Forest allotment along Bartlett Creek.

The Paiute Seeding fence is in need of total reconstruction or complete abandonment with removal of materials. Several drift fences constructed over the years are of limited effectiveness due to maintenance and traffic.

The Rough Canyon Wildlife Exclosure located between Rough Canyon and the North Fork of Battle Creek has suffered from several factors. Evaluation of the effectiveness of this exclosure should be completed. A developed reservoir exists at the southwest end of the exclosure, just outside the fence which provides water to wild horses, wildlife and livestock. A great deal of pressure from grazing animals is exerted upon the fence as the result of the location of the reservoir. Modifications should be made in the design of this exclosure in order to accomplish to purpose and objectives. Elimination of the reservoir should be considered, to allow the moisture that is currently trapped outside the exclosure to filter through the meadows complex and enhance it's recovery. Currently this reservoir only holds water into late June. In addition, cattleguards should be placed at both ends of the exclosure on the main road to eliminate the need to open gates for vehicular traffic. Fence maintenance has been completed annually by the BLM. However, the gates are continually left open, allowing livestock and wild horses access to the meadow.

V. CONCLUSIONS

A. Short Term Objectives

Refer to Section III C.3 for Short and Long Term Objectives.

1. Use pattern mapping and utilization studies completed during 1990-1992 indicate this objective is not being met on Paiute Creek, Battle and Bartlett Creeks.

2. Use pattern mapping and utilization studies completed during 1990-1992 indicate this objective is not being met.

3. Use pattern mapping collected from 1987-1990, and utilization studies conducted from 1990-1992 indicate this objective is not being met. During 1987-1989, the highest levels of utilization have been south of Paiute Creek, which has been made by wild horses; however, use greater than 50% has occurred north of Paiute Creek in varying areas since 1989 due to wild horses and livestock.

4. Use pattern mapping indicates this objective is not being met for all years 1987, 1988, 1989 and 1990. Utilization studies in 1991 and 1992 confirm that this objective was not met in those years.

B. Long Term Objectives

1. ESI information has been collected but not quantified in order to evaluate attainment of this objective. The 1986 demand for mule deer was 2,552 AUMs, 615 AUMs for antelope and 0 AUMs for bighorn. Existing populations are estimated to be above reasonable numbers for mule deer and pronghorn antelope.

2. Baseline data has been collected during the initial year of establishment during 1990; however, additional data is needed to evaluate the progress towards achievement of this objective. Analysis of the short-term upland habitat objectives, primarily south of Paiute Creek, is an indication that progress towards achievement of this objective is not being made in this area of the allotment.

3. ESI data has been collected but not quantified in order to evaluate achievement of this objective. This objective will be redefined/quantified with ecological status condition as information becomes available.

4. a. Baseline data has been collected during the initial year of establishment during 1990, however additional data is needed to evaluate

the progress towards achievement of this objective, analysis of the short-term upland habitat objectives primarily south of Paiute Creek indicates utilization in the uplands is not being met. Use Pattern Mapping data indicates that the country south of Paiute Creek has received the highest levels of utilization.

b. This objective is being met.

5. ESI information has been collected but not quantified to evaluate the achievement of good condition in ceanothus vegetation types.

6. ESI information has been collected but not quantified to evaluate the achievement of good condition in mahogany vegetation types.

7. ESI information has been collected but not quantified to evaluate the achievement of good condition in aspen vegetation types.

8. ESI information has been collected but not quantified to evaluate the achievement of this objective. Analysis of short term objectives is an indication that progress is not occurring on 52 acres of riparian and meadow habitat but may be occurring on the other 477 acres of riparian and meadow habitats.

9. ESI information has been collected but not quantified to evaluate the achievement of good condition in serviceberry, bitterbrush, ephedra and winterfat vegetation types. Monitoring of age and form class structure in 1990 was satisfactory.

10. Comparison of stream survey data from 1976 with that from 1988, 1989, 1990, and 1992 shows the following:

Bartlett Creek

Data collected on stream conditions for Bartlett Creek reflect that habitat conditions have remained nearly unchanged through 1989. Although no stream surveys have been conducted on Bartlett Creek since 1989, visual observations and key forage plant monitoring by the Area Fishery Biologist indicate that stream habitat conditions have remained about the same or have declined.

Moderate to heavy livestock use along Bartlett Creek in 1991 and 1992 has increased mechanical damage to streambanks and has significantly increased the amount of fine sediment added to the stream.

Quality pools essential for fish survival in both summer and winter months were virtually absent. A majority of the existing pools have been filled with fine sediment and thus offer little, if any, protective cover for fish. This has been caused by not only livestock impacts but the lack of "flushing flows" as a result of six years of drought.

Battle Creek

Stream survey data indicates that stream conditions for Battle Creek improved from a fair rating of 59% in 1976 to a good rating of 66%in 1989. This improvement was most likely a result of the voluntary non-use and subsequent rest of the riparian areas along the stream. The 1992 stream survey data by NDOW indicated that stream conditions have since declined to a poor rating of 45%.

Moderate to heavy livestock use in the riparian areas as indicated by key forage plant monitoring data collected in 1991 and 1992 combined with wild horse use and the sixth consecutive year of drought are the major factors contributing to the decline in the stream habitat conditions.

Paiute Creek

Data reflects that habitat conditions improved on Paiute Creek from 51% in 1976 to 67% in 1990. However, although a stream survey was not conducted after 1990, visual observations and key forage plant monitoring by the Paradise-Denio Fishery Biologist in 1991 and 1992 indicate that riparian/stream conditions in the middle to upper reaches of Paiute Creek have declined to less than 60%.

Utilization from both livestock and wild horses has reached heavy to severe levels according to 1992 monitoring data. Woody species along the mid to upper reaches have been severely impacted decreasing the amount of cover and raising the water temperatures.

Pools are nearly absent from the upper reaches with a majority of the creek comprised of long, shallow, and wide riffles. Mechanical damage to streambanks was documented in several locations.

Monitoring data collected near the midpoint of the 1992 grazing season indicated that utilization levels in riparian/stream locations had already been exceeded. Late season use by livestock in

this allotment has resulted in the following problems:

a) increased stream temperature, due to loss of overhanging vegetation, that is less suitable for trout;

b) increased sedimentation from bank and upland erosion;

c) increased channel width due to hoof-induced bank sloughing and consequent erosion that reduces cover, decreases winter stream temperatures, and increases susceptibility to formation of anchor ice;

d) stream channel trenching or braiding that degrades instream habitats and increases the streams susceptibility to catastrophic floods;

e) and plant community alteration and/or vegetation loss that reduce bank cohesiveness, cover attributes, and terrestrial food inputs.

These findings indicate that better cattle and wild horse management in many, if not all, riparian zones in the Paiute Meadows Allotment is necessary if the full stream (fishery) productive potential is to be realized.

11. Baseline information and habitat condition has not been collected to evaluate the progress towards achievement of this objective. No vegetation treatments to reduce sagebrush have occurred during the evaluation period.

12. Baseline data has not been collected to evaluate the progress towards achievement of this objective.

13. Baseline and trend information has not been collected to evaluate the achievement of this objective. However, analysis of short term objectives indicates that progress is not being made towards achievement of this objective due to heavy and severe utilization by wild horses.

VI. TECHNICAL RECOMMENDATIONS

Background:

On November 22, 1991 a Final Full Force and Effect Multiple-Use Decision (MUD) for the Paiute Meadows Allotment was issued along with the Black Rock Range East Herd Management Area Gather Plan and a Livestock Use Agreement with Dan Russell, permittee. An Environmental Assessment was prepared for the

gather analyzing the alternatives to gathering and the impacts to the vegetative resources in the Paiute Meadows Allotment. The grazing decision was subsequently appealed by the Nevada Department of Wildlife, the Sierra Club and the Natural Resources Defense Council to an Administrative Law Judge (ALJ). The grazing decision and the wild horse gather plan were appealed by the Nevada Commission for the Preservation of Wild Horses, Wild Horse Organized Assistance, the American Horse Protection Association and the Humane Society of the United States of America to the Interior Board of Land Appeals. Additional consultation with these groups and the permittee took place from December 10, 1991 through January 1992 discussing the appeals and the potential for an agreement to withdraw said appeals. This consultation resulted in an agreement to proceed with the gather provided that the November 22, 1991 decision be vacated following the removal and that the interim number of horses to be left on the range would be 200 head. This agreement was signed on February 6, 1992 by the State Director.

Provisions of the agreement have been met as they relate to the wild horse issue. The wild horse gather commenced on February 12, 1992 and concluded February 22, 1992. Two hundred wild horses were released back to or remained in the HMA. On March 10, 1992 a distribution flight of the HMA was conducted. The number of wild horses observed within the Black Rock Range East HMA was 255, an increase of at least 55 animals in less than three weeks following the conclusion of the gather. The increase is most likely due to migration from the Black Rock Range West HMA which did not have any wild horses removed. Another distribution flight was conducted on May 23, 1992 which indicated 442 adult wild horses were within the East HMA, an increase of 187 animals. A third distribution flight was conducted on July 22, 1992 which indicated that 267 adult wild horses are within the HMA and adjacent areas. The October 1992 census indicated 351 horses on the Black Rock Range East HMA.

Upon appeal of the November 22, 1991 Full Force and Effect Multiple Use Decision, the decision and the appeals were transmitted to IBLA and the Office of Hearings and Appeals (OHA). Following the conclusion of the gather, the Bureau submitted a request to IBLA and OHA on March 6, 1992 to remand the decision and the appeals that were not withdrawn back to the Area Manager for reconsideration. Authority to supersede or vacate the decision could not be exercised until this action was completed. The resource area received an order from the ALJ remanding the decision and setting aside the appeals of the livestock portion of the MUD on March 27, 1992. The resource area received an order from IBLA remanding the decision and dismissing the appeals in part and setting aside the appeals in part on April 28, 1992. According to 43 CFR 4160.3(c), "Except where grazing use the preceding year was authorized on a temporary basis under §4110.3-1(a) of this title, an applicant who was granted use in the preceding year may continue at that level of authorized active use pending final action on the appeal." The appeals of the wild horse gather were withdrawn, however the livestock portion and the

remainder of the wild horse decision appeals remained in effect until the decision and the appeals were remanded back to the Area Manager for reconsideration as referenced above.

Another provision contained within the agreement pertained to consultation and process requirements prior to the issuance of a new decision. On February 19, 1992 a consultation meeting was held in Reno, Nevada for interested parties in the allotment evaluation process within the Paradise-Denio Resource Area. This meeting was attended by NDOW, WHOA, the Commission for the Preservation of Wild Horses, the Sierra Club, permittees and their representatives. Discussed at this meeting were several topics of concern to all parties including setting carrying capacities for livestock and wild horses, allotment specific multiple-use objectives and utilization levels. On March 10, 1992 a second consultation meeting was held in Winnemucca, Nevada specifically for the affected interests of the Paiute Meadows Allotment. This meeting was attended by the Nevada Department of Wildlife and the BLM. Several of the interest groups refused to attend on the basis that their appeals were still pending, a new decision had not been issued to vacate the previous Final Full Force and Effect Multiple-Use Decision, and upon advice of legal counsel. At this particular meeting, attendees (NDOW) were advised of the status of the decision and the effect on the 1992 grazing license.

On May 11, 1992 a proposed decision to vacate the November 22, 1991 Final Full Force and Effect MUD was issued to interested parties. This proposed decision became final on May 27, 1992 in absence of any protests. This decision was appealed by the permittee on June 11, 1992 and is pending.

In addition, the agreement stated that the Bureau would issue a new, proposed multiple-use decision for the Paiute Meadows allotment following consultation requirements. A new decision could not be issued until IBLA remanded the case back to the district for reconsideration. This precluded the Bureau's ability to issue a decision to the permittee affecting only his license. The agreement specified a proposed "multiple-use decision" would be issued. All of these factors resulted in the authorization of active preference to the permittee in the 1992 grazing season, in spite of numbers of wild horses in excess of the AML and the carrying capacity. For 1992, this will result in an approximate use by wild horses and livestock of 7,923 AUMs, and will exceed the carrying capacity by over 3,257 AUMs, or 70%.

The agreement also stipulated that a new decision action cannot take place without further consultation and coordination with the Sonoma-Gerlach Resource Area's planning efforts for the Soldier Meadows Allotment and the Black Rock Range West HMA. The Paradise-Denio Resource Area is working closely with the Sonoma-Gerlach Resource Area to identify the interrelationships between the two HMAs in the Black Rock Range and the two allotments. Recommendations have been developed in the form of several alternatives to manage the Paiute Meadows allotment and the Black Rock Range East HMA and

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are presented in the revised Technical Recommendations section below. The body of the Draft Evaluation has not been revised with the exception of the appendices where reference to 1991-1992 data is made. This second draft allotment evaluation is the next step in the consultation process following the withdrawal of the appeals and the subsequent remanding of the decision to the district for reconsideration. No changes have been made through Section VI. The allotment evaluation has been revised from Section VI - Technical Recommendations. As this is considered a second draft allotment evaluation, the contents through Section IX - Summary of Comments and Responses will be revised following the comment period for this draft, and presented in the Final Evaluation. The Selected Management Action may be determined from these recommendations and any other alternative designed to meet management objectives that are presented to the Bureau in the consultation process. Additional drafts and/or public meetings may be held to discuss additional alternatives if it is warranted.

1. Recommended Alternatives

The following three alternatives have been developed following consultation with affected interests for the Paiute Meadows Allotment. These alternatives are presented for the carrying capacity, the wild horse AML, and the livestock grazing management of the allotment.

Horses were allocated 43% of the AUMs in the North Paiute use area and 57% of the AUMs in the South Paiute use area based on the distribution of horses during the October 22, 1992 census.

Reasonable numbers for wildlife were identified in the LUP and are not apportioned AUMs in the following alternatives.

Alternative 1.

a. Carrying Capacity

The combined carrying capacity for livestock and wild horses shall be 4666 AUMs as determined through analysis of the monitoring data collected from 1987 through 1990. Monitoring data collected in 1991 and 1992 indicate that utilization levels and distribution are similar to previous patterns. Wild horse numbers increased in 1991 and decreased in 1992, while livestock numbers in the North Paiute use area remained the same throughout the monitoring period.

Analysis was completed in accordance with BLM Technical Reference 4400-7, "Analysis, Interpretation and Evaluation", utilizing the Desired Stocking Level Formula and a weighted average of utilization using the heavy and severe use zones (see Appendix No. 2 for details). At the

present time, key areas have only been designated in upland sites.

b. Wild Horses

Combine the AML of the Black Rock Range East HMA with that of the Black Rock Range West HMA due to the documented migration of wild horses between the two HMAs. The combined AML would be based on the carrying capacities and thriving natural ecological balances within each allotment. The HMAs would be combined to assist in orderly administration of the Paiute Meadows and Soldier Meadows allotments. This would be accomplished by allowing both HMAs a percentage of the total AML based on historical distribution, and by making adjustments in other resource uses.

This action is necessary due to the historical migration and distribution patterns of the wild horses within both HMAs. Distribution flights and census conducted from 1969 to the present, indicate a tendency for the wild horses to regularly migrate between the two HMAs. The numbers of animals and the patterns of use are not consistent within the HMAs.

Livestock use has been one of the multiple-uses of this allotment since prior to the signing of the Taylor Grazing Act in 1935. The livestock grazing active preference was adjusted by 44 percent in 1990 from 7827 AUMs to 4350 AUMs in a transfer to prevent licensing above the carrying capacity of the allotment. The livestock grazing preference may be adjusted again to achieve the carrying capacity of the allotment during the interim and the long term management of the allotment.

There were several years in the mid 1980s when the livestock operator did not activate the grazing preference for use. This was voluntary, and did not eliminate the preference from availability for use at any time. During this period the Total Preference for the Paiute Meadows Allotment remained at 7827 AUMs, with 4350 AUMs of Active Preference and 3477 AUMs of Non-Use.

It is recommended that the combined AML for the Black Rock Range East/Black Rock Range West HMAs be 247 animals under this alternative. The recommended AML has been derived by using the monitoring data from the Paiute Meadows and Soldier Meadows allotments. Analysis of the monitoring data for Paiute Meadows indicates that the carrying capacity for livestock and wild horses is 4,666 AUMs. In the Paiute Meadows allotment, the Land Use Plan proportion of wild horses and livestock was 92% livestock and 8% wild horses. Allocation

of the carrying capacity following that proportion will result in 373 AUMs for wild horses in the Black Rock Range East HMA. In the Black Rock West HMA, based on a 20 percent use level in rested pastures, the forage available for wild horses is 2,592 AUMs (see Soldier Meadows Evaluation for rationale). In combining the East and West Black Rock Range HMAs, there would be 2,965 AUMs of forage available for an AML of 247 adult wild horses. We propose to call the combined HMA the Black Rock Mountain HMA.

Natural tendencies for the animals to distribute through both HMAs/allotments should result in approximately 124 animals utilizing the Black Rock Range East HMA year round. This estimate is based on historical distribution and census data that indicates that the proportional distribution of wild horses between the two HMAs is approximately 50% in the West HMA and 50% in the East HMA. This would result in a total of 1,488 AUMs used by wild horses in the Paiute Meadows Allotment (approximately 636 AUMs in the north and 852 AUMs south of Paiute Creek).

All current Bureau policies related to wild horse management will be followed in the achievement of the AML. All wild horses 6 years of age and older will be allowed to remain in the HMA. Gather of excess wild horses will be planned for FY94 (Fall 1993) and FY99 (Fall 1998) until the AML is reached, and then only on an as needed basis for maintenance when the wild horse population exceeds the AML of 124.

The results of the model indicate that the AML will not be reached until after a partial gather in 1999. During the interim period the wild horses alone would require the entire carrying capacity in 1993, and between 30-68% of the carrying capacity between 1994 and 1999.

c. Livestock

1. 3178 AUMs would be available to livestock for use within the Paiute Meadows Allotment. 1998 AUMs available north of Paiute Creek and 1180 AUMs held in non-use, until range conditions improve, south of Paiute Creek. Grazing management must be compatible with other uses within the allotment, including wild horses and wildlife. Current monitoring data indicates utilization by livestock in excess of management objectives in riparian habitats in the North Paiute Use Area on Bartlett, Battle and Paiute Creeks at the previous authorized level of 4350 AUMS during a season long use period from May through October. A

reduction in preference to 3178 AUMs and a change in the season of use would provide for the achievement of management objectives for the vegetative and aquatic resources. The grazing management of the Paiute Meadows Allotment would be changed as follows:

From:

Total	Preference Suspended	Active	Not Scheduled	Active Use
9932	2105	7827	3477	4350

To:

Total	Preference Suspended	Active	Not Scheduled	Active Use
9932	6754	3178	1180	1998

Current BLM regulations state that reductions shall be implemented by decision or agreement, with adjustments exceeding 10% of the Active Use implemented over a five year period unless an agreement can be reached with the permittee to implement it sooner.

2. Implement a grazing system in the North Paiute Use Area only. Livestock grazing will not be scheduled for the South Paiute Use Area until such time as monitoring data indicates that livestock grazing may resume in a thriving natural ecological balance with the other multiple-uses.

The grazing system for the Paiute Meadows Allotment would be as follows:

North Paiute

Low Elevation
509 cattle 03/15 to 05/15 1006 AUMs
High Elevation
509 cattle 05/16 to 07/15 992 AUMs

Use will begin in the lower elevations east of the Leonard Creek Road. Livestock use of the higher elevations will be deferred until after May 01 by salting and herding practices.

All livestock will be removed from the allotment prior to July 15 of each year. Livestock use will not be authorized in the South Paiute Use Area until the AML for wild horses has been attained and the vegetative resource has recovered. Winter use by livestock will not be authorized due to direct conflicts with wildlife and wild horse use of the area during winter months.

Designated Areas of Use:

The areas of use are unfenced. Intensive herding practices will be required to ensure that livestock remain in the designated use areas. This may entail a full time range rider to be working livestock during the authorized use period.

Use Areas:

1) North Paiute Use Area:

This area would include all the lower foothills and alluvial fans along the eastern portion of the allotment north of Paiute Creek that fall below 1550 meters in elevation. The high elevation use area would include Paiute Creek above the drift fence and higher country above 1550 meters in elevation.

2) South Paiute Use Area:

This use area would not be authorized for livestock use. This area is the southern portion of the allotment specifically from Paiute Creek south including the higher country above 1550 meters in elevation and the low elevation country below 1550 meters, and would be designated for wild horse and wildlife use only.

Terms and Conditions:

Salt and/or mineral blocks shall not be placed within one quarter (¼) mile of springs, streams, meadows, riparian habitats or aspen stands.

The permittee is required to perform normal maintenance on the range improvements to which he has been assigned maintenance responsibility.

The permittee will be required to do the necessary riding to keep livestock in the proper use area during the proper time periods.

Range Improvements

Field survey of feasibility for development of alternate water sources within the allotment will also be conducted within that time frame. Project planning will incorporate development of previously undeveloped water sources to improve water availability for wildlife, wild horses and livestock.

Paiute Seeding

The Paiute Seeding Fence will not be reconstructed. The seeding area is in poor to fair condition following over 10 years of use without adequate fencing. Existing fence materials will be removed, and the area will be managed along with the adjacent uplands. Wild horse and wildlife populations rely upon the existing reservoir in the seeding for water during the summer months. This water is critical to wild horses and wildlife in drought years.

Other Fences

Several areas along the western boundary of the Paiute Meadows allotment above Battle Creek and Bartlett Creek have been identified as providing opportunities for drift to occur into neighboring allotments and their riparian habitats. Construction design and implementation of "gap" or "drift" fences will be initiated to restrict drift of livestock. These fences will not be continuous, and may require modification as livestock and wild horses adjust to their presence.

Rationale:

The Paiute Meadows Allotment has experienced inconsistent management of livestock for the past 13 years. The livestock operation has changed hands, non-use has been taken in amounts varying from 20% to 100% due to changes in the livestock operators, range improvements have not been maintained, and forage production and water availability are minimal in some areas due to drought.

The wild horse population has likewise experienced great variation in numbers and management. The initial numbers established by the Land Use Plan have not been achieved except for short periods immediately following a gather. Numbers of wild horses have increased in both the West HMA and the East HMA due reproduction, and migration from adjacent HMAs. Regular gathers to achieve the Land Use Plan number of 59 have not been performed. Gathers have occasionally been conducted on the East HMA and not the West HMA, creating a niche in the habitat, which is filled in by migrating horses, making retention of the population at or close to the initial number impossible.

It is the objective of the Bureau to manage for a thriving natural ecological balance and multiple-use relationship in the Paiute Meadows Allotment. The livestock operation has taken 44% non-use of the active preference since 1990 as a result of a transfer to the current permittee. The livestock active grazing preference will again receive a reduction as a result of this option, for a reduction in total preference of 76%. The wild horse AML would be combined with the West HMA

for a combined AML of 247 wild horses, to ensure that management objectives are achieved for the vegetation resource within both HMAs and allotments. This combination of adjustments is necessary to achieve the carrying capacity of the Paiute Meadows allotment of 4,666 AUMs.

This carrying capacity was derived from monitoring data collected on the allotment from 1987 through 1990. (See calculations, Appendix 1) Monitoring data has indicated that vegetative objectives are not being achieved in both the North Paiute and the South Paiute use areas of the allotment. Therefore, an adjustment is needed in the authorized use by livestock and the wild horse population size to achieve the thriving natural ecological balance of the allotment.

In addition, long term stream habitat objectives have not been met in the North Paiute Use area. Wild horse populations use the stream habitats year round, but not in the same manner that livestock utilize them. Prior to transfer of the grazing preference to the current permittee, and authorization of 56% of the grazing permit, improvement in stream habitats was noted. A reduction in the season of use for livestock is necessary to ensure continued growth of riparian vegetation and improvement towards long term streambank riparian habitat conditions in the absence of riparian habitat protection fences. The additional reduction in active preference combined with the change in the season of use will ensure that progress.

Alternative 2.

a. Carrying Capacity

The combined carrying capacity for livestock and wild horses shall be 4,666 AUMs as determined through analysis of the monitoring data collected from 1987 through 1990. Monitoring data collected in 1991 and 1992 indicate that utilization levels and distribution are similar to previous patterns. Wild horse numbers increased in 1991 and decreased in 1992, while livestock numbers in the North Paiute use area remained the same through the monitoring period.

Analysis was completed in accordance with BLM Technical Reference 4400-7, "Analysis, Interpretation and Evaluation", utilizing the Desired Stocking Level Formula and a weighted average of utilization using the heavy and severe use zones (see Appendix No. 2 for details).

b. Wild Horses

Maintain the current wild horse numbers established in the Land Use Plan of 59 adult wild horses within the Black Rock Range East HMA as the Appropriate Management Level (AML). This AML is based upon monitoring data collected from 1987-1990 that indicates the combined carrying capacity for the allotment is 4,666 AUMs. Adjustments to achieve the carrying capacity have been derived using the Land Use Plan proportion of wild horses and livestock within the Paiute Meadows Allotment of 92% livestock to 8% wild horses. If allocation of the carrying capacity follows that proportion it would result in an allocation of 373 AUMs for wild horses, and 4,293 AUMs for livestock. This equates to an AML of 31 animals, which is too low to maintain a viable population in the absence of migration. Therefore, the LUP horse numbers would be maintained as the AML, with an allocation of forage of 708 AUMS for wild horses and 3,958 AUMs for livestock.

All current Bureau policies related to wild horse management will be followed in the achievement of the AML. All wild horses 6 years of age and older will be allowed to remain in the HMA. Gather of excess wild horses will be planned for FY94 (Fall 1993) and FY99 (Fall 1998) until the AML is reached, and then only on an as needed basis for maintenance when the wild horse population exceeds the AML of 59.

The results of the model indicate that the AML will not be reached until after a partial gather in 1999. During the interim period the wild horses alone would require the entire carrying capacity in 1993, and between 30-68% of the carrying capacity between 1994 and 1999.

c. Livestock

1. Adjust livestock authorized active grazing preference to 3,958 AUMs.

From:

Total	Preference Suspended	Active	Not Scheduled	Active Use
9932	2105	7827	3477	4350

To:

Total	Preference Suspended	Active	Not Scheduled	Active Use
9932	5974	3958	0	3958

2. Implement a deferred rotation grazing system as follows:

North Paiute

Low Elevation			
	961 Cattle	05/01 to 05/31	950 AUMs
High Elevation			
	961 Cattle	06/01 to 07/15	1379 AUMs

South Paiute

High Elevation			
	473 Cattle	07/16 to 09/30	1161 AUMs
Low Elevation			
	473 Cattle	10/01 to 10/31	468 AUMs

All livestock will be removed from north of Paiute Creek prior to July 15 of each year.

The Paiute Seeding fence would be reconstructed to restrict wild horse use. Use of the Paiute Seeding by livestock will be deferred until after seedripe. Grazing use by livestock will be authorized in the seeding from July 16 through September 30 along with the use period in the high elevation area of the South Paiute use area. The utilization objective for the Paiute Seeding will be 50% of the standing crop.

All livestock would be removed from the allotment by November 01 of each year. Future adjustments to livestock preference would be based upon monitoring data analyzed in a re-evaluation process following three years of implementation of the grazing system. If objectives have not been met for two years in a row, re-evaluation will be initiated immediately, and adjustments may be made prior to the third year of implementation. Achievement of the AML may take as long as seven years to reach given population dynamics and current policies on the removal of wild horses from public rangelands.

Designated Areas of Use:

The areas of use are unfenced.

Use Areas

1) North Paiute Low Elevation Use Area:

This area would include all the lower foothills and alluvial fans along the eastern portion of the allotment north of Paiute Creek that are below 1550 meters in elevation.

2) North Paiute High Elevation Use Area:

This use area would be the northern portion of the allotment specifically from Paiute Creek north including the higher country above 1550 meters in elevation.

3) South Paiute High Elevation Use Area:

This use area would be the southern portion of the allotment specifically from Paiute Creek south including the higher country above 1550 meters in elevation.

4) South Paiute Low Elevation Use Area:

This use area includes the southern portion of the allotment south of Paiute Creek in the lower country below 1550 meters in elevation.

Terms and Conditions:

Salt and/or mineral blocks shall not be placed within one quarter (¼) mile of springs, streams, meadows, riparian habitats or aspen stands.

The permittee is required to perform normal maintenance on the range improvements to which he has been assigned maintenance responsibility.

The permittee will be required to do the necessary riding to keep livestock in the proper use area during the proper time periods.

This may require a range rider to be present with the livestock at all times.

d. Range Improvements

1. Reconstruct the Paiute Seeding Fence to standards designed to restrict wild horse use of the seeding, but permit wildlife access. Defer use in the seeding until after seedripe for two (2) years. Conduct vegetation production studies following fence construction and two years of rest to determine a stocking rate for the seeding. Maintenance responsibility for the seeding fence will remain with the permittee.

2. Construct an allotment boundary fence on the western boundary of the allotment/HMA to restrict wild horse migration into the HMA from the Black Rock Range West HMA. Fence should be continuous except where natural

barriers to wild horses are present. Fence should be designed to restrict wild horses but allow for wildlife migration. This fence is necessary to maintain the AML of 59.

3. Construct a riparian exclosure on Bartlett Creek. An existing northern boundary fence can be combined with a fence along the southern watershed of the Bartlett Creek drainage to create a riparian exclosure. Livestock use would not be authorized within the exclosure. Wild horse distribution is limited in this area as opposed to the Battle Creek drainages which have regular wild horse use, and therefore the exclosure would be less likely to impinge upon the wild and free roaming nature of the wild horses. Wild horse and livestock use of the Bartlett Creek drainage would be eliminated.

Rationale:

Achievement and maintenance of the AML is contingent upon the control of migration of other populations of wild horses into the HMA. Without horse-proof fences to prevent this migration, horses from neighboring HMAs will move into the area and immediately exceed the AML and then contribute to overutilization of the allotment. With the boundary of the allotment/HMA fenced, greater control of the movement of livestock could be exercised, eliminating drift into neighboring allotments. Use areas could be maintained with range riding on a regular basis. Control of horse movements within the HMA/allotment is not possible, therefore the year round wild horse population should be balanced to provide for a multiple-use relationship in the allotment.

This alternative confirms the AML as providing for the thriving natural ecological balance and multiple-use relationship.

Problems with this alternative would be restricted movement of wild horses due to fencing.

Alternative 3.

a. Carrying Capacity

The combined carrying capacity for livestock and wild horses shall be 4,666 AUMs as determined through analysis of the monitoring data collected from 1987 through 1990. Monitoring data collected in 1991 and 1992 indicate that utilization levels and distribution are similar to previous patterns. Wild horse numbers increased in 1991 and decreased in 1992, while livestock numbers in the North

Paiute use area remained the same through the monitoring period.

Analysis was completed in accordance with BLM Technical Reference 4400-7, "Analysis, Interpretation and Evaluation", utilizing the Desired Stocking Level Formula and a weighted average of utilization using the heavy and severe use zones (see Appendix No. 2 for details).

b. Wild Horses

The AML for the Black Rock Range East HMA shall be 59 animals. Monitoring data indicates that this AML will result in the achievement of management objectives if it can be maintained. An AML of 59 animals would provide 708 AUMs for wild horses. The remainder of the AUMS (3,958) would be allocated to livestock.

This AML is consistent with achieving a thriving natural ecological balance and maintaining the multiple-use relationship in the HMA. Monitoring data indicates that a reduction in the carrying capacity from the current 10000 AUMs of actual use to 4,666 AUMs is necessary to stop resource deterioration within the HMA and the allotment.

All current Bureau policies related to wild horse management will be followed in the achievement of the AML. All wild horses 6 years of age and older will be allowed to remain in the HMA. Gather of excess wild horses will be planned for FY94 (Fall 1993) and FY99 (Fall 1998) until the AML is reached, and then only on an as needed basis for maintenance when the wild horse population exceeds the AML of 59.

The results of the model indicate that the AML will not be reached until after a second partial gather in 1999. During the interim period the wild horses alone would require the entire carrying capacity in 1993, and from 30-68% of the carrying capacity from 1994 to 1999.

c. Livestock

1. Adjust livestock authorized active grazing preference to 3,958 AUMs.

From:

	Preference			
Total	Suspended	Active	Not Scheduled	Active Use
9932	2105	7827	3477	4350

Due to differences in carrying capacities in the North Paiute and South Paiute Use Areas the following schedule was derived.

To: **Year 1**

Total	Preference Suspended	Active	Not Scheduled	Active Use
9932	5974	3958	1628	2330

Year 2

Total	Preference Suspended	Active	Not Scheduled	Active Use
9932	5974	3958	2330	1628

2. Implement a rest rotation grazing system as follows:

Year 1

North Paiute
- Low Elevation
  - 594 Cattle 03/15 to 05/15 1174 AUMs
- High Elevation
  - 594 Cattle 05/16 to 07/15 1156 AUMs

South Paiute
- High Elevation REST
- Low Elevation REST

All livestock would be removed from north of Paiute Creek prior to July 15 in this year. Livestock use will not be authorized south of Paiute Creek during Year 1.

Year 2

South Paiute
- Low Elevation
  - 415 Cattle 03/15 to 05/15 821 AUMs
- High Elevation
  - 415 Cattle 05/16 to 07/15 807 AUMs

North Paiute
- High Elevation REST
- Low Elevation REST

Livestock would not be authorized any use north of Paiute Creek in Year 2. Livestock would not be authorized south of Paiute creek after July 15 in Year 2.

The Paiute Seeding fence would be reconstructed to restrict wild horse use. Use of the Paiute Seeding by livestock will be scheduled for concurrent use with the South Paiute use area, receiving complete rest every other year.
The utilization objective for the Paiute Seeding will be 50% of the standing crop.

Approximately one half of the allotment would be rested from livestock use each year, providing

forage and range for the wild horses on at least one half of the allotment every year. Future adjustments to livestock preference would be based upon monitoring data analyzed in a re-evaluation process following three years of implementation of the grazing system. If objectives have not been met for two years in a row, re-evaluation will be initiated immediately, and adjustments may be made prior to the third year of implementation. Achievement of the AML may take as long as seven years to reach given population dynamics and current policies on the removal of wild horses from public rangelands.

Designated Areas of Use:

The areas of use are unfenced.

Use Areas

1) North Paiute Low Elevation Use Area:

   This area would include all the lower foothills and alluvial fans along the eastern portion of the allotment north of Paiute Creek that are below 1550 meters in elevation.

2) North Paiute High Elevation Use Area:

   This use area would be the northern portion of the allotment specifically from Paiute Creek north including the higher country above 1550 meters in elevation.

3) South Paiute High Elevation Use Area:

   This use area would be the southern portion of the allotment specifically from Paiute Creek south including the higher country above 1550 meters in elevation.

4) South Paiute Low Elevation Use Area:

   This use area includes the southern portion of the allotment south of Paiute Creek in the lower country below 1550 meters in elevation.

Terms and Conditions:

Salt and/or mineral blocks shall not be placed within one quarter (¼) mile of springs, streams, meadows, riparian habitats or aspen stands.

The permittee is required to perform normal maintenance on the range improvements to which he has been assigned maintenance responsibility prior to the scheduled use each year.

The permittee will be required to do the necessary riding to keep livestock in the proper use area during the proper time periods. This may require a range rider to be present with the livestock at all times.

Non-Use

Non-Use shall be taken for the equivalent AUMs utilized by wild horses in excess of the AML of 59 to meet the carrying capacity of the allotment. Non-use will be held in the Not Scheduled category on an annual basis with the amount determined annually based on a census of wild horses within the allotment by March 31 of each year.

d. Range Improvements

1. Reconstruct the Paiute Seeding Fence to standards designed to restrict wild horse use of the seeding, but permit wildlife access. Conduct vegetation production studies following fence construction and two years of rest to determine a stocking rate for the seeding. Maintenance responsibility for the seeding fence will remain with the permittee.

2. Construct an allotment boundary fence on the western boundary of the allotment/HMA to restrict wild horse migration into the HMA from neighboring HMAs. Fence should be continuous except where natural barriers to wild horses are present. Fence should be designed to restrict wild horses but allow for wildlife migration.

3. Construct a riparian exclosure on Bartlett Creek. An existing northern boundary fence can be combined with a fence along the southern watershed of the Bartlett Creek drainage to create a riparian exclosure. Livestock use would not be authorized within the exclosure. Wild horse distribution is limited in this area as opposed to the Battle Creek drainages which have regular wild horse use, and would be less likely to impinge upon the wild and free roaming nature of the wild horses. Wild horse and livestock use of the Bartlett Creek drainage would be eliminated.

Rationale:

Achievement and maintenance of the AML is contingent upon the control of migration of other populations of wild horses into the HMA. Without horse-proof fences to prevent this migration, horses from neighboring HMAs will move into the area and immediately exceed the AML and then

contribute to overutilization of the allotment. With the boundary of the allotment/HMA fenced, greater control of the movement of livestock could be exercised, eliminating drift into neighboring allotments. Use areas could be maintained with range riding on a regular basis. Control of horse movements within the HMA/allotment is not possible, therefore the year round wild horse population should be balanced to provide for a multiple-use relationship in the allotment.

This alternative confirms the Land Use Plan wild horse numbers as providing for the thriving natural ecological balance and multiple-use relationship.

Complete rest of half the allotment from livestock use each year will insure progress towards meeting long term management objectives, as well as provide at least half the allotment to the wild horses for use year round while still achieving short term objectives for the whole allotment. With an adjustment to both wild horses and livestock, the streams in the north half of the allotment will not be utilized during the hot season in any year by livestock, and will be utilized minimally in the rested year by wild horses. This will ensure long term progress towards management objectives.

2. Objectives:

Revise the allotment specific short term objectives to the following:

The objective for utilization of key streambank riparian plant species (CAREX, JUNCUS, SALIX, POTR5, ROWO, POA spp.) on Paiute, Battle and Bartlett Creeks is 30%. Utilization data will be collected at the end of the grazing period.

The objective for utilization of key plant species (CAREX, JUNCUS and POA spp.) in wetland riparian habitats is 50%. Utilization data will be collected at the end of the grazing period.

The objective for utilization of key plant species (STTH, AGSP, FEID, ELCI, POA, ORHY, AMAL, PUTR, SYMPH, EPHEDRA, EULA) in upland habitats is 50%. Utilization data will be collected at the end of the grazing period.

Revise the allotment specific long term objective to the following:

Maintain and improve the free-roaming behavior of wild horses by protecting and enhancing their home ranges.

1) Manage, maintain, or improve public rangeland conditions to provide forage on a sustained yield basis for the selected AML for wild horses to maintain a thriving natural ecological balance.

2) Maintain and improve wild horse habitat by assuring free access to water.

VII. CONSULTATION

A. Consultation of this evaluation is listed chronologically as follows:

07/03/91 Initial draft evaluation sent to permittee and affected interests for review and comment.

07/15/91 Meeting with permittees consultant and attorney to discuss allotment evaluation.

07/26/91 Written comments on draft evaluation received from permittee.

08/13/91 Written comments on draft evaluation received from Nevada Department of Wildlife.

10/02/91 Written comments received from NRDC/Sierra Club.

11/01/91 Meeting with permittee to discuss management alternatives and potential agreement.

11/12/91 Meeting with permittee's consultant discussing carrying capacity and potential agreement.

11/14/91 Meeting with permittee's attorney and consultant to discuss carrying capacity and proposed agreement.

11/22/91 Livestock Use Agreement signed by permittee and BLM for the grazing management in the Paiute Meadows Allotment.

11/22/91 Full Force and Effect Multiple-Use Decision (MUD) was issued for the Paiute Meadows Allotment.

11/22/91 Notice of Intent to Gather and a Gather Plan for the Black Rock Range East HMA were issued to affected interests.

12/17/91 Appeal of the Full Force and Effect MUD received from the Nevada Commission for the Preservation of Wild Horses.

12/19/91 Appeal of the Full Force and Effect MUD received from Wild Horse Organized Assistance.

12/20/91 Appeal of the Full Force and Effect MUD received from the Nevada Department of Wildlife.

12/23/91 Appeal of the Full Force and Effect MUD received from the Natural Resources Defense Council and the Sierra Club (joint appeal).

12/24/91 Appeal of the Full Force and Effect MUD received the American Horse Protection Association, Inc. and The Humane Society of the United States.

01-02/92 Consultation meetings and telephone conversations held with appellant and affected interests that appealed the MUD to discuss appeal points and possible resolution.

01/20/92 Consultation confirmation letter sent from appellant to State Director.

02/06/92 Agreement reached between appellants of the wild horse portion of the Full Force and Effect MUD and the State Director to withdraw appeal to IBLA based on particular stipulated points. Note: NRDC/Sierra Club and NDOW did not withdraw their appeals to the ALJ as a result of this agreement.

02/92 The wild horse gather was conducted in the Black Rock Range East HMA.

02/24/92 Notice was sent to affected interests of a public meeting to be held on March 10, 1992 to discuss the Paiute Meadows Allotment re-evaluation.

03/06/92 The BLM requested to IBLA and the Office of Hearings and Appeals that the Final Full Force and Effect MUD be remanded back to the Resource Area for further consideration.

03/10/92 Consultation meeting was held for affected interests in Winnemucca.

03/27/92 Notice was received by the Paradise-Denio Resource Area that the Full Force and Effect MUD was remanded to the Resource Area by the Office of Hearings and Appeals, and the appeals filed by NRDC/Sierra Club and NDOW were set aside.

04/28/92 Notice was received by the Paradise-Denio Resource Area that the Full Force and Effect MUD was remanded to the Resource Area by IBLA and the appeals by the AHPA/HSUS, WHOA, and NCPWH were dismissed in part and set aside in part.

05/07/92 An appeal was received by the State Director, Nevada from NRDC/Sierra Club appealing the January 20, 1992 consultation confirmation letter.

05/11/92 Notice of Proposed Decision to Vacate the Full Force and Effect MUD of November 22, 1991 and to render the Livestock Use Agreement of the same date null and void was issued to all affected interests.

06/11/92 Appeal of the Notice of Proposed Decision was received from the permittee, Daniel H. Russell.

11/05/92 Second draft Paiute Meadows Allotment Evaluation sent out to permittee and affected interests for review and comment.

11/23/92 Written comments received from Johas and Associates concerning permittee's rights.

12/01/92 Written comments received from permittee concerning permittee's rights.

12/02/92 Written comments received from Nevada Department of Wildlife.

12/03/92 Written comments received from the Animal Protection Institute of America.

12/04/92 Written comments received from the Commission for the Preservation of Wild Horses.

12/04/92 Written comments received from Wild Horse Organized Assistance.

12/11/92 Written comments received from land owner, William Cummings.

12/14/92 Written comments received from the Sierra Club.

12/17/92 Meeting with affected interest to discuss comments on Paiute Meadows Allotment Evaluation.

01/13/93 Written comments received from Western Range Service.

01/25/93 Written comments from Johas and Associates, representing William Cummings.

B. Summary of Comments and Responses

First Draft

Comment: Key areas for the allotment do not appear to correspond with the long term wildlife objectives of the allotment.

Response: Only a partial establishment of key areas has been completed to date for the Paiute Meadows allotment. It is recognized that additional key areas must be established to completely represent the various multiple uses of the allotment.

Comment: Observations indicate severe and heavy use in the Sheep Creek and Deer Creek drainage are directly affecting the production of deer, antelope and sage grouse. Department [NDOW] mule deer data suggest that the poor conditions summer and winter ranges are causing excessive fawn mortalities during the winter months.

Response: Specific data pertaining to wildlife populations and fawn mortality has not been received by the Bureau to be analyzed or considered in this allotment evaluation. The Bureau's objective is to manage for good to excellent wildlife habitat throughout the allotment.

Comment: Data indicates the current and past wild horse use is a major factor in the condition of riparian habitat on this allotment. Serious overuse of riparian zones was occurring prior to 1988 when the District re-authorized livestock use. It is alarming that despite this knowledge, the District authorized 4,350 AUMs of livestock use on this allotment in 1990.

Response: Livestock use was not "re-authorized" in 1988. The active grazing preference for the Paiute Meadows allotment is 7,827 AUM's and was available for use in 1988 upon approval of grazing applications from qualified applicants. In 1990 an application for transfer of grazing preference and an application for the grazing permit was received. In responding to these applications and in consideration of the monitoring data available at that time it was determined that 4,350 AUMs of grazing

use was available for livestock in the North Paiute Use Area only.

Comment: Appendix 1 determines a stocking rate under the assumption of meeting 50% utilization on upland grass species. Analysis cannot support these stocking rates and seasons of use to meet 30% utilization on streambank riparian, 50% utilization of wetland meadows or 50% utilization of key mountain browse.

Response: Appendix 1 does not determine a stocking rate based on meeting 50% utilization on upland grass species alone. The methodology used represents a weighted average of the heavy and severe use zones as determined through use pattern mapping. These areas are the problem areas that do not allow for the achievement of multiple use objectives. The weighted average utilization figure was then applied to the desired stocking rate formula to achieve a 50% utilization objective. This applies to upland grass species, wetland riparian and/or browse. The utilization figure of 30% was not used as the majority of the data collected to date does not indicate a problem with achieving this objective. Only one year of data out of four indicates that this objective has not been achieved.

Comment: Since monitoring studies are not conducted to address the specific long term objectives for big game and sage grouse, data does not exist to allow for remedial actions to eliminate or reduce conflicts between livestock and wildlife.

Response: Multiple use objectives are developed to guide the management of the public lands and have been written in the form of short and long term objectives. Short term objectives are written to provide for the analysis of monitoring data such as forage utilization (including use pattern mapping) and actual grazing use made (livestock, wild horses and/or wildlife). The analysis of short term data provides an indication of whether or not progress is being made towards attainment long term objectives and is correlated and applicable to all resource uses including wildlife and livestock and allows for the determination of any necessary changes to those levels of use. It is not BLM policy to postpone the evaluation of multiple use objectives in lieu of collecting sufficient long term monitoring data to make conclusions as to current management of the public lands.

Comment: Develop an interim management decision to reduce cattle until horses are removed to appropriate management levels.

Response: A multiple use decision will be issued identifying any interim management needed until AMLs are achieved.

Comment: Delineate key areas for utilization and trend studies that address the specific long term objectives of this allotment for sage grouse, antelope and mule deer. Schedule the monitoring activities.

Response: The future establishment of key areas will be completed as workloads and funding permit. The scheduling of monitoring workloads is done on a yearly basis in line with available funding for that fiscal year. These studies will address wildlife objectives.

Comment: The permittee has not agreed to voluntary non-use after completion of the allotment evaluation.

Response: Voluntary Non-use is one option that may be utilized to assist in achieving allotment specific management objectives. If an adjustment in management is necessary to achieve objectives, the Bureau has other options available to implement the changes in management.

Comment: The document containing the land use plan objectives should be referenced/identified in the final allotment evaluation.

Response: The land use plan objectives are found in the Management Framework Plan. The MFP decisions are derived from these objectives.

Comment: The allotment [specific] objectives should be stricken from the AE as they do not conform to any regulatory process for development of allotment specific objectives that provides public input.

Response: The Bureau is required by FLPMA to establish goals and objectives to guide land use planning. The grazing regulations require that livestock grazing permits contain the terms and conditions necessary to achieve multiple use objectives for the public lands (4130.6).

The purpose of monitoring as defined in BLM manual 4400.21 & .22a is the periodic observation and systematic collection of resource data to determine the effects of management actions toward achieving resource management plan objectives, on allotments, and to enter into agreements or issue decisions for allotments requiring management changes. (4400-1A3)

The allotment specific objectives were derived from the LUP objectives which were general in nature. Quantification of the LUP objectives was necessary to evaluate the grazing management on the individual allotments. The allotment specific objectives are Bureau objectives for the management of the resources. The Bureau is mandated the responsibility for the management of the public lands under it's jurisdiction. It does not require a regulatory authority to develop resource management objectives by which to measure management.

The Bureau's Range Manual does state "...management objectives should be written so data from short term studies, such as actual use, utilization, and climate can be used to determine if objectives are being met." The short term objectives were developed to determine progress towards long term objectives and thereby towards LUP objectives.

Comment: The permittee and the public have not had opportunity to participate in the development of the allotment specific objectives.

Response: Consultation in the allotment evaluation process has been ongoing in the Paradise-Denio Resource Area since early 1988. This is the permittee and the public's opportunity to participate in the development of the objectives. Participation was provided to the general public and affected interests in the evaluation process through the following:

April 1988 public meetings were held in Denio, Orovada, Paradise Valley and Winnemucca to discuss the upcoming allotment evaluation process. A copy of the format for the evaluations was presented which included a provision for short and long term objectives.

August 1988 a draft Paiute Meadows allotment evaluation was provided to the permittee. The short and long term objectives used to evaluate the current grazing management were presented and analyzed in this document.

September 1989 a letter was sent to all permittees and affected interests from the general RPS mailing list to notify them of an upcoming public meeting to discuss the evaluation process.

September 1989 a public meeting was held and discussion of the evaluation process occurred.

January-April 1990 the grazing permit was transferred to the current permittee. Several meetings and correspondence regarding the allotment evaluation process occurred between the permittee and his representative and the BLM during this period.

Comment: Long term monitoring should be the primary criteria for evaluating range management success. Frequency objectives should be established.

Response: The Nevada Rangeland Monitoring Handbook and BLM Manual both give guidance for use of short term monitoring data in evaluating progress towards meeting long term objectives. Frequency objectives are generally established for specific key areas. The key area objectives for trend (long term monitoring) will be

established as the process continues.

Comment: Since there are no active fisheries within the allotment the stream condition and water quality objectives should be revised to reflect the current use in the allotment (ie; irrigation and livestock).

Response: Stream Survey data for Bartlett, Battle and Paiute Creeks indicate that currently there are rainbow trout in Bartlett Creek, and that as recent as 1967 there were fish found in Paiute Creek. All three streams are within the historic geographic distribution area of the Lahontan cutthroat trout and have been identified by NDOW, USFWS and the BLM as potential recovery streams for the threatened fish. The NDOW Draft Lahontan Cutthroat Trout Fishery Management Plan for the Quinn River Drainage Basin identifies all three streams as having high potential for rapid recovery. It further identifies the North Fork of Battle Creek as having the highest potential on the east side of the Black Rock Range.

Water quality standards must be met by Federal Law. The Clean Water Act of 1972 dictates that the state in which the water is located will establish the water quality standards. Compliance with these water quality standards has been the policy of the Winnemucca District as established in the 1982 Management Framework Plan/Land Use Plan. The standards are set for both point and non-point source pollution, not for beneficial use.

Comment: Actual use calculations should reflect the higher forage intake of wild horses.

Response: The Bureau does not employ conversion ratios for AUMs utilized on public lands. Current procedures employ a strict 1:1 ratio for cows:horses, cow:cow/calf, cow:steer. This applies to both wild and domestic horses.

Comment: An AMP should be completed for this allotment.

Response: An AMP will be developed as time and funding permit.

Comment: There are no proposals for direct protection of riparian areas.

Response: The selected management action is designed to assure achievement of the allotment specific objectives for the riparian areas. The carrying capacity of the allotment has been adjusted to a level that has been determined will assure achievement of both the short and long term objectives over time. Changes in the season-of-use and the grazing management of the allotment will also assist in achieving these objectives. Prior to the removal of the excess horses, livestock grazing may only be authorized in the North Paiute Use Area. This will reduce the current over obligation of the forage resource

in the interim.

Comment: New projects are entirely unwarranted.

Response: New projects include a drift fence on the west side of the Paiute Meadows allotment from the Pine Forest allotment boundary to north of Burnt Springs to prevent livestock drift. A riparian corridor fence is planned for the north fork of Battle Creek for the introduction of Lahontan cutthroat trout.

Comment: What criteria is used for selection of an alternative for the proposed decision.

Response: The selected management action is chosen after review of all the alternatives presented in the draft evaluation and any other alternatives submitted during the consultation phase. The rationale describes the changes that will be made in grazing management and what these changes are expected to achieve. Achievement of the allotment specific objectives is the primary goal of the Bureau, therefore the selected management is that which will achieve a thriving ecological balance for the vegetative resource on the public lands within the Paiute Meadows Allotment.

Comment: How did the Bureau determine the minimum number of horses (50) for a "viable" population.

Response: Research has been done on feral horse populations in regards to inbreeding and effective populations. Some of this research indicates that with a population of less than 50 individuals, the herd runs a risk of significantly losing it's genetic diversity after as few as five generations. In the case of feral horses, this can be as soon as five years. ('Effective population size estimates and inbreeding in feral horses: a preliminary assessment': Berg, W.J.. Equine Veterinary Science Vol.6, No. 5).

Comment: How did you determine 'thriving' ecological balance'?

Response: W.O. Instruction Memorandum No. 90-491 defines 'thriving natural ecological balance' as: The condition of the public range that exists when management objectives in approved land use and activity plans have been achieved that will: (1) sustain healthy populations of wild horses and burros, wildlife, and livestock on public land and (2) protect the desired plant community from deterioration.

The Paradise-Denio Resource Area, through evaluation of the monitoring data collected through 1990 on the Paiute Meadows allotment, determined that the short and long term objectives were not being met. Adjusting the stocking rate to the carrying capacity as determined through the evaluation of the monitoring data was

necessary.

Second Draft

Comments Received from Nevada Department of Wildlife

Comment: The allotment evaluation is incomplete. Livestock actual use by pasture is not presented.

Response: This allotment is not fenced into pastures. Though there are use areas designated (e.g. "north of Paiute Creek", "east of the county road", etc.) and there are guidelines as to which part of the allotment turnout will occur on and where riders are to move cattle into and out of as the grazing season progresses, it should be recognized that livestock movements cannot be tracked as precisely on unfenced range as they can in fenced pastures.

Comment: The allotment evaluation is incomplete. Licensed livestock use in 1991 and 1992 is not shown. Grazing permits and mid-season authorizations were appealed by the Department based upon known practices (sic) that are harmful to fish and wildlife habitats. These data were collected by the District and must be included in this evaluation.

...The Soldier Meadows allotment evaluation has not been completed. The Soldier Meadows allotment evaluation must be available prior to making final comments on the Paiute Meadows allotment evaluation.

...In 1992, General Aquatic Wildlife Surveys were again conducted on streams within the allotment. These data were not included in the Draft Paiute Meadows allotment evaluation.

Response: The Department of Wildlife appealed our decision to make reductions in licensed use. This action resulted in licensing at the higher pre-decision level as per our regulations. The current draft is a revision of the 1990 evaluation. That evaluation found resource conflicts. Review of the 1991 and 1992 data shows the same conflicts. It was our judgement in 1991 that it was more important to address the conflicts by going ahead with the evaluation using the data which was available at that time rather than to wait for the 1991 data, which we expected to reflect a similar picture.

The Resource Area has coordinated closely with the Sonoma-Gerlach range staff. The results of the Soldier Meadows allotment evaluation were closely considered.

The Department of Wildlife further criticizes BLM for not including the 1992 GAWS stream survey data which we had not yet received from them at the time the evaluation went out for review.

Comment: The allotment evaluation has contrary (sic) data.

...the Department of Wildlife visited the District on November 17, 1992 to retrieve data and consult with the range conservationist. From this meeting, the Department was advised that there may be serious errors in the data presented. District stream survey data are contrary to data collected by the range conservationist.

...The range conservationist monitored the site (Site 14) in the Spring of 1992 and recorded "moderate" use (41 to 60 percent). ...However, on July 7, 1992 the same range conservationist recorded "slight" (21 to 40 percent) (sic) at Site 14 ...the utilization of key species decreased.

Response: The Department was advised on November 17 that site 14 had moderate use in the spring on the previous year's growth, reflecting winter grazing use. Site 14 had light use on July 7, reflecting spring and summer use on current year's growth.

Regarding the Department's observations of "significant" use, 36% utilization can easily be seen, particularly in the five foot circle around the cage enclosing ungrazed plants. The Key Forage Plant Method samples utilization along a paced transect in order to find the average utilization of several plants, rather than the maximum level observed on individuals at one spot. This accounts for grazing behavior where animals graze some plants while others remain untouched.

Comment: The allotment did not consider the Department's concerns.

The Department of Wildlife has repetitively pointed out the District's errors in estimating the livestock carrying capacity for the Paiute Meadows Allotment (See appeals). Methodology used in the draft allotment evaluation did not properly weight critical riparian habitats. Rangeland monitoring data collected since 1987 can show that the alternatives' stocking rates and seasons of use will cause damage to critical riparian habitats on this allotment.

Response: One of the prime considerations on which livestock reductions were based in the decision, which NDOW appealed, was the heavy and severe use on riparian habitats, particularly along the creeks. Currently, there are no key areas set up in the riparian areas so carrying capacity was calculated at the 50% utilization level using heavy and severe use found along the creeks and on the uplands. Potential key areas were set up in a meeting in January 1993 and will be finalized in 1993.

Comments Received from the Animal Protection Institute of America

Comment: We do not know when the 10 year permit expires and a new one is to be issued.

Response: The grazing permit was issued for the terms of the base property lease, from September 21, 1989 to September 24, 1994 however, once the evaluation process is finalized a new permit will be issued reflecting the decision.

Comment: On page 2, you refer to "adjudication" and the adjustment of usage in 1990 from 7827 AUMs to 4350 AUMs when the permit changed hands. Since that adjustment was expressed as "active/inactive AUMs" we assume it was a mid-term adjustment in accordance with FLPMA.

Response: When adjusting from total preference to 4350 AUMs the difference was put into non-use for conservation purposes.

Comment: Combining horse and cow usage in order to arrive at a total usage (eg. create a forage pie) which is then the basis for apportioning forage at a pre-determined ratio (after the ratio has been adjusted by horse reductions), doesn't correct damage or take into consideration the different grazing patterns of horses and cows.

Response: Monitoring data collected does consider the different grazing patterns of horses and cattle. The allocation of forage is proportioned to wild horses and cattle based upon the number of wild horses that will use the allotment within the Black Rock Range East and Black Rock Range West HMA's are combined and an AML of 250 horses established. The proportion will be 32% horses to 68% livestock.

Comment: The table (p. 12) shows that 1,025 horses were initially removed based on the 1978 range survey; but no corresponding reduction in livestock occurred. This one-side grazing adjustment left the "multiple use" ratio for this area at 92:8; cows to horses.

Response: The 1025 horses were removed from both the Black Rock East and West HMAs. Of this total, 81 were removed from the East.

Comment: Horse numbers don't add up on the tables. The table on page 58 also shows an increase of one horse in the north, between February 15 and February 28, 1990 who consumes 112 AUMs in those 13 days--a big eater.

Response: The horse numbers for the Black Rock East HMA were reviewed and corrected as appropriate. In the tables of horse numbers, nowhere is a figure of 445 horses for the entire allotment given. In 1988, 445 horses were removed from the Black Rock East HMA.

The 651 horses in 1989 represents the number observed 18 months after the gather of January 1988. Likewise the 408 horses in south Paiute. The 18 and 203 reflect the number of horses remaining in North and South Paiute, respectively, after the gather in January 1988. The increased number of horses in the table on p. 58 reflect changes in the aerial count made at those times. The 112 AUMs from February 15-28 were consumed by 244 horses, not one.

Comment: We do not have a copy of your use pattern maps which shows the conditions resulting from these grazing levels. Our copy of your 1991 census/distribution map shows 85 horses between Rough Canyon and Bartlett Creek and 107 horses between Rough Canyon and Paiute Creek. For us to know how many of each species are in the area where over-utilization is occurring we need to know how the cows are distributed in relation to the use pattern map.

Response: Use pattern maps were sent out prior to the 1991 evaluation, they are also available for viewing in the Winnemucca District Office.

Comment: You refer to a signed agreement between parties that "approved" the removal of horses--despite all statutory constraints and requirements of federal law governing removal of these protected wild horses. Since BLM represents the nation and wild, free-roaming horses are of national interest, we believe putting aside a federal law by private agreement violates the public trust.

Response: Regulation 4110.3-3(b) allows for changes in available forage to be implemented by decision or agreement. The Bureau did not set aside federal law.

Comment: Alternative 1, as stated, is not acceptable because it is not a coordinated, integrated, multiple use grazing decision that corrects over-utilization.

Response: Alternative 1 is an alternative that is designed to correct the over-utilization that has occurred on the allotment. It is multiple use oriented and is technically feasible.

Comment: Maintain the current AMLs set in the "Land Use Plan" violates the law. This makes Alternative 2 unacceptable.

Response: The Winnemucca District Land Use Plan did not set AMLs. It identified the number of horses present on the allotment as starting point for monitoring. The AML's to be established as a result of this evaluation will be based on the results of monitoring.

Comments Received from the Commission for the Preservation of Wild Horses and Wild Horse Organized Assistance

Comment: We protest the issuance of this entire draft AE, because it violates the agreement of February 7, 1992.

Response: The agreement required consultation with the Sonoma-Gerlach area concerning the management of the Black Rock Range East and Black Rock Range West HMAs. The areas worked very closely together to determine an AML for the combination of these HMAs.

Comment: There are obvious flaws in the monitoring data which shows heavy use after the growing period but shows slight use to justify livestock use (p. 20).

Response: The data in the first columns of the monitoring tables indicate the use on the previous years growth whereas the data in the second columns represents the utilization on the current years growth (pp. 18 & 19).

Comment: How can you determine an overall number of an AML for the two combined areas when the allotment evaluation which analyzes that monitoring data for the Black Rock West has not been issued or even considered in this document.

Response: The two resource areas worked very closely in determining an AML for the combined HMA. The Soldier Meadows allotment re-evaluation has been sent out for public comment.

Comments from William Cummings, prepared by Western Range Service

Comment: Adjustments in wild horse numbers must be based on the "thriving natural ecological balance" within the 1971 wild horse use area within the allotment. Such wild horse use area is located in the southern portion of the allotment, south of the line running east and west from Elephant Mountain and Little Big Mountain.

Response: The boundaries of the HMAs were set up in the Land Use Plan based on the areas where horses were found in 1971. The Paiute Meadows allotment is 100% within the Black Rock East HMA boundary.

Comment: Wild horse use is currently outside this area and is in excess of the "thriving natural ecological balance" of that area. Wild horse population levels are also greater than what the land use plan has determined to be the Appropriate Management Level (AML) of 59 head.

Response: The Land Use Plan did not set AML. The Land Use Plan identified the number of wild horses existing on

the allotment at the time the LUP was completed as a starting point for monitoring. The AML is being set by the evaluation process and will be based on monitoring.

Comment: These are not the land use plan objectives, but summaries of such land use plan objectives. The land use plan objectives as stated within the land use plan control, not the summaries of such objectives.

Response: The objectives stated in the evaluation are quantifications of the Land Use Plan objectives or objectives that came directly from the LUP.

Comment: The Rangeland Program Summary (RPS) , by definition, is not a land use plan. See 43 CFR 4100.0-5. The objectives stated within the RPS are not the objectives of the allotment.

Response: The RPS is one of the documents used in the LUP process to track the implementation of the Land Use Plan. The objectives stated in the RPS are the LUP objectives by allotment.

Comment: The land use plan (MFP) specifically provides that objectives for wild horses and burros, watershed, wildlife, and other resources will be established in the development or revision of an allotment management plan. See MFP RM 1.4. In addition the land use plan specifically provided that such objectives established in the development or revision of an allotment management plan will be reviewed or revised through the CRMP process or reviewed by the CRMP group following revision.

None of these prescriptions were followed.

Response: The MFP RM1.4 does not state that resource objectives for wild horses and burros, wildlife, and other resources be established in allotment management plans but rather that AMPs will include and give consideration to objectives for these resources. The CRMP process is a philosophy or an approach to resource management planning that strives to involve all the users of the Public Lands. We feel that the process we are using gives all interested parties an opportunity to become involved and meets the intent of the Land Use Plan for the Paradise-Denio Resource Area. Permittees and /or other interested parties have the freedom to organize a group or committee and submit recommendations for out consideration as we develop the selected management action.

Comment: The utilization objective of 50% for crested wheatgrass must be revised to 65%. Research data indicated that 65% is the proper use level for crested wheatgrass. However, the crested wheatgrass seeding in the Paiute Meadows Allotment has consistently received heavy to severe use from wild horses. Temporarily reducing utilization levels in the seeding should help

the vigor of the plants.

Response: There is no real consensus on the proper use level for crested wheatgrass.

Comment: The Nevada Rangeland Monitoring Handbook (1984) highly recommends the frequency sampling procedure to measure trend in long term monitoring. Although frequency studies have been established in Paiute Meadows allotment, this draft evaluation fails to include frequency objectives.

Response: The BLM has conducted Ecological Site Inventory (ESI) on the Paiute Meadows allotment. At present the data has not been interpreted, but should be done in a timely manner. When this is complete, BLM will be managing for Desired Plant Communities and objectives for desired plant communities will be established at this time.

Comment: Big game objectives must be specifically identified in the Paiute Meadows allotment. The Nevada Division of Wildlife may include habitat areas for several wildlife species. Often the desired habitat conditions for one wildlife species may be incompatible with other wildlife species. For example, good pronghorn antelope habitat may not be good mule deer habitat. If there is the potential for incompatibilities between the desired habitat conditions, the objectives for a given area must be completed.

Response: The state of Nevada manages the wildlife populations, when desired plant community objectives are established big game needs will be considered.

Comment: BLM must ensure that progress is being made to provide 7827 AUMs of livestock forage as stated in the Rangeland Program Summary and allotment evaluation. Any BLM program or process must include the as an objective to provide 7827 AUMs of livestock forage. Reasonable and timely progress toward that goal and objective must be completed.

Response: The evaluation will identify the carrying capacity of the allotment and then BLM will manage the resources to maintain and/or improve the condition and carrying capacity of the range.

Comment: Even under the best conditions and management, a change from poor to fair range condition will take many years. BLM should not expect to improve the entire Paiute Meadows allotment a full range condition class (eg. poor to fair condition) within a normal planning period, 20 or more years. There may be areas within the allotment that will never improve without some mechanical, chemical, or other treatment.

Response: BLM will be interpreting the collected ESI data to determine the present condition of the allotment and establish reasonable and attainable objectives.

Comment: Wild horses in the Paiute Meadows allotment must be maintained at a level of 59 or fewer horses in order to obtain a thriving natural ecological balance and meet land use plan requirements.

Response: The AML for the Black Rock HMA has been determined to be 247 wild horses. This number is based on monitoring the Black Rock Range East and Black Rock Range West HMAs and the fact that 50% of the use by wild horses will be made in the Paiute Meadows allotment. Livestock use will be balanced with this use to achieve the thriving natural ecological balance.

Comment: Objectives 5 to 9 must be deleted until they are positively located and identified in the allotment and until the criteria for determining good condition for the various habitat types are clearly identified.

Response: ESI data has been collected for this allotment. This inventory identifies the areas where these vegetation types occur and their condition.

Comment: The stream condition objectives (10) must be revised since there are no active fisheries in the Paiute Meadows allotment at this time. The stream condition objectives (10) are primarily designed for obtaining optimum fish habitat conditions.

Response: According to the 1989 NDOW stream survey report, Bartlett Creek supports an active trout fishery as well as a non-game fishery. All three streams within the allotment (Battle, Bartlett, and Paiute) have been designated by the Winnemucca BLM District as "Potential" Lahontan cutthroat trout habitat.

While Battle Creek does not currently support a fishery, stream habitat condition objectives were developed to also satisfy state water quality standards.

Comment: If BLM determines through the appropriate land use planning process that an active fishery should be developed in the Paiute Meadows allotment, we recommend that a riparian exclosure on public lands be developed on the upper reaches of Bartlett Creek to provide habitat for such a fishery.

Response: The Paradise-Denio Fishery Biologist supports development of a riparian exclosure along Bartlett Creek. The North Fork of Battle Creek is currently being considered as fishery habitat for Lahontan cutthroat trout. A major factor for this consideration is that this system (N. Fork Battle Creek) currently does not support a fishery.

Comment: Actual use calculations should reflect the higher forage intake of wild horses. Forage intake of wild horses is greater than for cattle. Therefore, the animal unit equivalent used for calculating AUMs of wild horse use is greater than the 1.0 value used for cow/calf pairs. Using a conservative animal unit equivalent value of 1.25 for wild horses, 59 horses will consume 885 AUMs in one year.
Response: BLM uses a 1:1 ratio for calculating AUMs, there is no conversion factor.

Comment: Average utilization of the locations examined by BLM during Spring 1992 was 48% using utilization category midpoints. The average utilization of locations examined by BLM during July 1992 was 26%.

Response: This has already been addressed in previous responses under comments from the Commission for the Preservation of Wild Horses and Wild Horse Organized Assistance.

Comment: The priority of wildlife species in the Paiute Meadows allotment must be determined by public input such as the development of an AMP. BLM must solicit public input for determining the priority of various wildlife species.

Response: The prioritization of wildlife species is the responsibility of the state of Nevada Department of Wildlife. They have a public participation process.

Comment: Since currently there is no fishery in Paiute Meadows allotment, fishery habitat characteristics such as quality pools, pool to riffle ratio and bottom materials must not be considered as important criteria for management.

Response: This comment has been addressed on the previous page.

Comment: Bank cover and stability have remained at approximately the same level or have improved since 1976 in all three streams in the Paiute Meadows allotment.

Response: Recent NDOW 1992 stream survey data indicates that percent of habitat optimum and bank stability have declined for Paiute and Battle Creek. Although bank cover and stability estimates have remained nearly the same for Bartlett Creek, these estimates are near poor none-the-less.

Comment: Other management practices are available for improving riparian conditions in other areas of the allotment. The BLM Fishery Biologist in his memorandum dated December 3, 1991 indicated that earlier livestock removal (prior to November) from the northern portion of the allotment and reduced wild horse population levels would improve riparian habitat condition significantly.

Response: The removal date for livestock from Paiute Meadows allotment is July 15. This removal date would allow for adequate recovery of stream/riparian systems.

Comment: The primary use of water originating in the Paiute Meadows allotment is irrigation. Waters not used for irrigation flow into the Black Rock desert and evaporate. Currently there is no fishery in the allotment. Water quality standards must reflect the primary use, ie. irrigation.

Response: Water quality standards for the Paiute Meadows allotment were designated according to the State criteria set for the following beneficial uses: livestock drinking water, cold water aquatic life, wading (water contact recreation), and wildlife propagation. The primary use for water in the Paiute Meadows allotment is not only for irrigation.

Comment: BLM has apparently evaluated the objectives such that if the utilization was classified as heavy (61-80%) or severe (81-100%) any where in the allotment at any time, at least one of the short term objectives have not been met. This is not an appropriate technique for evaluating grazing management.

For example, the adjustment in stocking would be identical if only a small area (a few acres) was classified as heavy or if the entire allotment was classified as heavy use. This type of analysis will not reflect changes in management. Excluding slight, light, and moderate use data from the evaluation biases the analysis.

Response: The methodology used represents a weighted average of the heavy and severe zones as determined through use pattern mapping. These areas are the problem areas that do not allow for the achievement of multiple use objectives. The weighted average utilization figure was then applied to the desired stocking rate formula to achieve a 50% utilization objective (BLM Manual 4400-7).

Comment: Use pattern mapping is not appropriate for evaluating riparian forage utilization. Studies specific to the riparian zone must be conducted to estimate riparian forage utilization.

Response: Key forage plant monitoring conducted by the Area Fishery Biologist were conducted exclusively along streamside/riparian areas.

Comment: Short term monitoring data such as utilization must not be used to evaluate long term objectives such as habitat condition or trend. Long term objectives must be evaluated with long term monitoring techniques.

Response: Multiple use objectives are developed to guide the management of the public lands and have been written in the form of short and long term objectives. Short term objectives are written to provide for the analysis of monitoring data such as forage utilization (including use pattern mapping) and actual grazing use made (livestock, wild horses and/or wildlife). The analysis of short term data provides an indication of whether or not progress is being made towards attainment long term objectives and is correlated and applicable to all resource uses including wildlife and livestock and allows for the determination of any necessary changes to those levels of use. It is not BLM policy to postpone the evaluation of multiple use objectives in lieu of collecting sufficient long term monitoring data to make conclusions as to current management of the public lands.

Comment: Analyses upon which BLM Alternatives 1, 2, and 3 were based are flawed. BLM alternatives 1,2, and 3 must be revised or abandoned because of the errors in the Allotment Evaluation described below:

> BLM carrying capacity determination of 3942 AUMs for the allotment is in error.
>
> The technique used by BLM to determine the carrying capacity is not appropriate.

Response: Based on these comments BLM has re-evaluated the monitoring data for north Paiute and recalculated the carry capacity. The technique used was the same calculation, but livestock non-use in the north was taken into consideration.

Comment: The upper reaches of Bartlett Creek (the area within the planned exclosure) will contain the fisheries habitat and/or potential fisheries habitat for the Paiute Meadows allotment. Other streams in the Paiute Meadows allotment will not be considered as fisheries habitat.

Response: The proposed recovery stream for Lahontan cutthroat trout is the north fork of Battle Creek. There is no existing fishery on Battle Creek, which lowers the eradication costs and data has shown that Battle Creek has a higher recovery potential.

Comment: The population model for wild horses described in the Paiute Meadows Draft Allotment Evaluation is not valid....(It) underestimates the population growth rate of wild horses. Observed increases in wild horse populations in the East and West Black Rock Range HMAs are significantly greater than those predicted by the model....The model predictions of wild horse population changes are unrealistic....

Response: The model presupposes a totally different situation than previously existed, i.e. the 0-9 age classes have been removed. One would logically expect that, with the most reproductive age classes gone, the population growth rate would be slower.

The model was developed using data from the population existing at the time of the 1992 gather. As further information becomes available over time, the parameters used may change.

Comment: "There are mathematical errors in the population model example provided in Appendix 4 on pages 66 and 67 of the allotment evaluation. The sum of the columns for adult male and female numbers for each year do not match the total number of adults listed for each year under those columns.

Response: The wrong scenario was put into the AE. It shows the effects of two gathers of 0-3 year old animals. The correct information will be presented in the final AE.

Comments from the Sierra Club

Comment: Please supply the actual use data for livestock (Pg. 10) for 1991 and 1992.

Response: The actual use data for 1991 is shown in the final document, the 1992 data is not yet completed as the grazing year ends February 28, 1993.

Comment: Why is the 1992 NDOW stream survey data not available (Pg. 25)? All data should be incorporated in the AE.

Response: The Nevada Department of Wildlife conducted several stream surveys throughout the Winnemucca District during 1992. One of these surveys was on the Battle Creek system which concluded on October 6, 1992. Normally, these reports are made available the following spring by NDOW. However, on December 10, our office did receive a preliminary stream survey report for the Battle Creek system. This data has since been added to the draft allotment evaluation. No additional stream surveys were conducted in 1992 by NDOW or the BLM on Paiute or Bartlett Creek.

Additional stream survey data collected in 1990 has since been added to the evaluation report.

Comment: What is meant by the statement on p. 24 "In 1989, water quality was measured by NDOW, but was taken at one point in time and will not be interpreted for this report?"

Response: Stream temperatures taken at one point in time are not representative of minimum and maximum water temperatures that are occurring during a 24 hour period. Ideally, temperatures from a recording thermograph provide a series of temperatures taken over a period of time (two to three months). A thermograph was installed in Battle Creek system by NDOW in 1992, however, this data has yet to be shared with the BLM.

Comment: Are there any other stream survey or other riparian monitoring data available since 1976 and 1988 not incorporated in this AE? All data should be used in the AE.

Response: Some stream data was inadvertently omitted from the AE which has since been updated to include all stream survey data in addition to monitoring data collected for Bartlett, Battle, and Paiute Creeks by the Paradise-Denio Fishery Biologist.

Comment: ...Why is this AE proceeding without the Soldier Meadows allotment evaluation? Is there some time constraint under which we are operating? If not, the two AE's should be considered together.

Response: The two allotment evaluations are separate entities. The only issue that they have in common is that of the wild horses and this has been coordinated by both resource areas and addressed in both the allotment evaluations. We would like to have a finalized decision by spring 1993.

Comment: ...What is the growing season for the plants monitored? How can heavy (over 60% use) change into slight (less than 20% use) in a short time?

Response: New growth begins in most areas in mid-March to April through August. The data in the first columns indicates the use on the previous years growth whereas the data in the second column represent the utilization on the current years growth.

Comment: How did BLM compute ecological status (p. 22) for four key areas in 1990? Was ecological status recomputed in 1992?

Response: Ecological Site Inventory was determined utilizing the procedure identified in the National Range Handbook. ESI was not recomputed in 1992.

Comment: Why were no riparians (p. 22) selected as key areas?

Response: Riparian/stream areas along Bartlett, Battle, and Paiute Creeks had utilization cages established in 1991 in several locations. Beginning in 1992, these sites were monitored at least three times (Pre-livestock, Mid-Point, and Post-livestock) utilizing the Key Forage

Plant Methodology technique. Photo trend sites were also established throughout the monitored area. These locations will continue to be monitored on an annual basis.

Comment: Doesn't UPM data (pp. 15-17) show wild horse impacts were minimal north of Paiute Creek through 1989 and significant heavy and severe use did not occur until cattle were permitted into the area in 1990 and 1991? Why does BLM permit livestock use to cause environmental damage in the north Paiute area?

Response: This is correct. Utilization levels increased when livestock commenced using the area north of Paiute Creek in 1990. Monitoring data was not available to carrying capacity, therefore the active preference was authorized.

Comment: What grazing animals used the Paiute Seeding from 1987-1989? What was the utilization in 1990-1992 and which animals are responsible?

Response: Wild horses used the Paiute Seeding from 1987-1989. In 1990-1992 there was combined use from wild horses and livestock in the seeding, which showed heavy use.

Comment: Why hasn't normal maintenance been conducted on most range improvements? Isn't this a violation of permit conditions? What are the penalties for non-compliance with permit conditions? Why hasn't BLM enforced these permit conditions?

Response: Maintenance is a part of the conditions and terms of the grazing permit. The permit is subject to cancellation in part or in whole for failure to maintain projects.

Comment: Why didn't BLM use its authority to prevent resource damage and cancel all or part of the grazing permit in 1992 instead of authorizing (p. 34) livestock use which along with wild horse use exceeded the carrying capacity by over 6,000 AUMs?

Response: Regulation 4160.3(c) states "Decisions that are appealed shall be suspended pending the final action. An applicant who was granted grazing use in the preceding year may continue at that level of authorized use pending final action on the appeal." The appeal took away BLM's discretion.

Comment: If "intensive herding" does not occur and livestock use occurs outside designated use areas, what actions will the BLM take? Will the permit be canceled, in part or in whole? Will livestock be officially trespassed by BLM? Or will BLM take no action until the next evaluation period, 3 to 5 years from now?

Response: If livestock are found in unauthorized areas the formal procedure for trespass will be followed.

Comment: If maintenance and/or reconstruction of range improvements (p. 40) doesn't occur prior to 03/15/93, the turn-out date for livestock, what actions will the BLM take? Will the permit not be issued for 1993?

Response: Normal compliance inspection will be done on the range improvements in the allotment by BLM. We will then work with the permittee to get them reconstructed to Bureau standards. Non-performance of maintenance may delay, or cause, use to be suspended.

Comment: When (p. 40) will "all spring sources will be fenced?"

Response: There is no obligation to fence all spring sources. This will depend on the need, time, funding, manpower, and prioritization of projects.

Comment: How much livestock "drift" is occurring (p. 40) into neighboring allotments? Whose livestock are "drifting" into which allotments? Why wasn't it mentioned in the AE? Will "gap" or "drift" fences interfere with the free roaming wild horse movements?

Response: Approximately 87 head from Paiute Meadows drifted over into Summer Camp, Coleman, and Snow Creek areas of the Soldier Meadows allotment. Unauthorized use procedures were initiated and followed through. Most of the migration of horses between the two HMAs occurs south of Paiute Creek the small amount of migration occurring in the north would be affected during the period of livestock use from March 15 to July 15. Drift fencing will have offset gates that will be open when livestock are not using the allotment.

Comment: Riparian fencing to protect Bartlett Creek in north Paiute is the most positive action yet from the BLM to protect riparians from livestock devastation. Still questionable - will the riparian fence be built before livestock use is permitted in north Paiute? Also questionable - whether any grazing should be permitted in south Paiute until the area has recovered in a measurable way from the double problems of severe overgrazing and six years of drought, whether the allotment is suitable for a deferred rotation grazing system, and what the impacts of additional fencing will be on wild horse movements.

Response: At this time no determination has been made to fence Bartlett Creek. If it is determined to be necessary the fence will be constructed under the constraints of time, funding, manpower, and prioritization.

There will be no livestock grazing in the southern end of the Paiute Meadows allotment until monitoring studies show that there is available forage. Allocation of these AUMs will then go to livestock first.

Comment: How does calculating the carrying capacity on the 50% utilization objective comply with the 30% riparian utilization objective?

Response: The change in the season of use should prevent the riparian areas from receiving more than 30% utilization.

Comment: No actual use figures by livestock were provided in the draft AE for 1991 and 1992. What numbers were used in the formula? What does "Average/ Weighted Average Utilization" mean? Using this formula, will BLM be authorizing livestock use in excess of the 1708 AUMs and 2234 AUMs in North and South Paiute areas, respectively, while phasing in reductions of livestock numbers?

Response: Actual use for the 1991 grazing year has been provided in the document. The 1992 grazing year is not yet complete, therefore the actual use cannot be calculated. If a reduction occurs it will be phased in accordance with 43 CFR 4110.3-3. Average/Weighted Average Utilization is the average or weighted average utilization for a pasture (BLM Manual 4400-7).

Comments from Western Range Service

Comment: "Statements in the BLM letter... are not reflective of the Model predictions which are attached.... Unmanipulated populations triple in 12-13 years on the attached Model predictions rather than in 11-12 years stated in the January 7, BLM letter."
Response: The statement in the letter is in fact correct. Year 1 represents the start of the analysis, at which time the population is X number of animals. By Year 12, 11 years after Year 1, the population had not quite tripled. By Year 13, 12 years after Year 1, the population had slightly more than tripled. Therefore the population triples in 11-12 years according to the model.

Comment: "The description of the Model in the Draft Paiute Meadows Allotment Evaluation, dated November 5, 1992 (Allotment Evaluation), is not accurate. The Allotment Evaluation states on page 63 that 0 or 1 is subtracted from the total number of head in 4 to 9 age classes on a random basis."

Response: It has that effect. We wanted a mechanism whereby a small amount of mortality in those age classes would be caught by the model when it would not otherwise due to rounding up at high survival rates. The description of said mechanism given by Dr. Bailey is accurate. Most of the time there is no change, i.e. zero

is subtracted. A small portion of the time one is subtracted, to simulate mortality which occurs. As the amount of mortality in these age classes is very small, We felt this mechanism would accurately simulate what occurs. Perhaps the wording could be changed, without going into a lot of technical detail.

Comment: "The average annual increase in unmanipulated wild horse populations predicted by the BLM's Model is 10%....However, wild horse populations in the East and West Black Rock HMAs...increased at a rate of at least 16% from 1980 to 1991. Average annual increase was 23% from 1980 to 1986. The Model grossly underestimates observed wild horse population growth in the Black Rock Range."

Response: We attempted to duplicate the stated increases by manipulating model parameters. An increase of 23%, i.e. a 337% increase in six years (1980, 390 head to 1986, 1313 head) could be achieved only by increasing fecundity rates to 100% for all age classes 2 years and older (i.e. every mare has a colt). This is decidedly unrealistic. If the survival rates are increased by 2 percentage points across the board, which may be realistic, this results in a 12% average annual increase, i.e. tripling in 9-10 years instead of 11-12. If survival is increased by 2 percentage points AND fecundity increased to 75% for all mares 4 and older (which is probably not realistic), the annual increase is 15%, tripling in 7-8 years.

This suggests one of two things is happening: either the census results are not accurate, even with the helicopter, or there is immigration occurring into one or both of the HMAs from outside the Black Rock Range. One or both of these things may in fact be happening. More recent censuses have included lands outside the HMA as far south as Black Rock Point, whereas earlier censuses did not. In addition, the observer on the 1986 count said that horses were tightly packed around Pahute Peak (Big Mountain). Double counting may have occurred here. As for immigration, there is no fence between the Warm Springs Canyon HMA and Black Rock West HMA to prevent horse migration.

Comment: Varying conditions, such as amount of precipitation, forage growth, and livestock use, may account for observed variation in wild horse population growth rates.

Response: Dr. Bailey cites two large growth rate increases, 23% from 1980-86 and 22% from 1987-89. He suggests that the relatively wetter climate and lack of livestock use may account for the 1980-86 figure. However, from 1987 to 1989 the drought was on, and livestock used the area beginning in 1988, yet the population increased (according to the figures) by 22%.

Comment: Black Rock HMAs wild horse population changes from 1980 to 1991 as reflected by BLM censuses and gathers are given below." (table follows)

Response: Previous gathers removed the first X number of animals that came into the trap, which may or may not have been a representative sample of the population. In fact it probably wasn't, but rather was biased toward those animals that were easiest to catch. Therefore, we don't know what was left out there, and no-one knows how the remaining population would rebound. This may explain some of the variation in growth rates. In contrast, after the 1992 and future gathers the age structure will be known precisely.

There is a lot of uncertainty involved with what has happened on the Black Rock Range, and the census figures may not be an accurate representation of what is going on. Given all this, BLM is inclined to stay with the model as it is, although we are certainly prepared to make some modifications if necessary. The model was based on data from the most recent gather, it is the most current information we have and new data will be incorporated when it becomes available.

VIII. Selected Management Actions

A. Livestock

1. Grazing Preference Status (AUMs)

a.	Total preference	9,932
b.	Suspended preference	6,766
c.	Active preference	3,178
	1) Authorized Use	1,998
	2) Not Scheduled	1,180

2. Season of Use

Spring and Early Summer Use
03/15 to 07/15

3. Kind and Class of Livestock - Cattle, Cow/Calf

4. Percent Federal Range - 97%

5. Grazing System

The grazing system listed below is for the next evaluation period.

North Paiute Use Area

Low Elevation			
509 cattle	03/15 to 05/15	1006 AUMs
High Elevation			
509 cattle	05/16 to 07/15	992 AUMs

Use will begin in the lower elevations east of the Leonard Creek Road. This area would include all the lower foothills and alluvial fans along the eastern portion of the allotment north of Paiute Creek that fall below 1550 meters in elevation.

Livestock use of the higher elevations will be deferred until after May 01 by salting and herding practices. The high elevation use area would include Paiute Creek above the drift fence and higher country above 1550 meters in elevation.

All livestock will be removed from the allotment prior to July 15 of each year. Winter use by livestock will not be authorized due to direct conflicts with wildlife and wild horse use of the area during winter months.

South Paiute Use Area

Monitoring data indicates that the use area south of Paiute Creek is lacking in grass species due to excessive use by wild horses and livestock and the past six years of drought conditions. Livestock use will not be authorized in this area until specific criteria are met as determined by the District Soil Scientist and the range staff in the Paradise-Denio Resource Area.

Criteria

Utilizing the 1992 Ecological Site Inventory data collected in this allotment, three key range sites were selected from the soil mapping units that represented the majority of the use area. The range sites selected were ones that would respond to changes in management and represent various elevations. The following is a description of the range sites:

South Slope 12-16 P.Z. 023XY016NV ARVA2/AGSP
Soil Map Unit 177 write-up number DJ 60

Clay Slopes 8-12 P.Z. 023XY037NV ARTEM/AGSP
Soil Map Unit 965 write-up number DJ 62 correlated with DJ 80

Sandy 5-8 P.Z. 027XY009NV ORHY/STCO4
Soil Map Unit 378 write-up number DJ 27 correlated with DJ 10

Criteria for Resuming Livestock Grazing

023XY016NV	Increase AGSP from 15% present by weight to 35% by weight.
023XY037NV	Increase AGSP from 0% present by weight to 15% by weight.
	Increase STTH2 from 0% present by weight to 5% by weight.
027XY009NV	Increase ORHY from 6% present by weight to 15% by weight.
	Increase STCO4 from 0% present by weight to 5% by weight.

The control sites (clipped plots) will be compared in the future with the ocular sites to determine progress. The first monitoring is scheduled for 1995.

The active use will be phased in using the following schedule:

Year	Total Preference	Suspended Preference	Active Preference	Active Use	Non-use
1993	9932	6754	3178	2588	590
1995	9932	6754	3178	2293	885
1997	9932	6754	3178	1998	1180

5. Reconstruct the existing Soldier Meadows/Paiute Meadows drift fence from the Pine Forest Allotment south and extend the fence to Burnt Springs with offset gates at major horse trails.

6. Removal of the fence from the Paiute Seeding.

B. Wild Horses

Combine the Black Rock Range East and Black Rock Range West Herd Management Areas (HMAs) with a combined appropriate management level (AML) of 250 adult horses. The AML will be managed within the range of 187 to 313 adult wild horses. The combined HMA will be called the Black Rock Mountain HMA.

Schedule a gather for the fall of 1993 to reduce the population of horses to the Appropriate Management Level if funding is available for such a gather.

C. Wildlife

Adjustment to the wildlife population is not warranted. Wildlife populations will remain at the reasonable numbers as outlined in the Land Use Plan (LUP).

Recommend to the Nevada Department of Wildlife and the U.S. Fish and Wildlife Service that the North Fork of Battle Creek be designated as a stream for the recovery of Lahontan cutthroat trout.

Construct corridor fencing on the North Fork of Battle Creek within the Paiute Meadows Allotment, due to riparian/aquatic conditions which did not meet management objectives.

D. Monitoring

1. Continue to implement the rangeland monitoring program on the Paiute Meadows Allotment.

2. Continue Wildlife Habitat Inventory and Riparian/Fisheries Habitat Studies.

3. Continue with intensive wild horse habitat and monitoring studies. Collect data to determine population estimates, population trend, population characteristics, population dynamics, and population analysis.

E. Objectives

The allotment objectives under which the grazing use will be monitored and evaluated in FY 1997 should have the phrasing modified to accurately reflect how these objectives will be used in the future. These objectives are not to be "allowable use levels" dictating livestock removal on a seasonal basis. Utilization levels are intended as target levels, in accordance with Bureau manual guidance, to be used for monitoring and analysis of achievement of long term objectives. The short term objectives can be examined on an annual basis after the end of the grazing season when monitoring data is collected and analyzed. All data will be evaluated to determine if short term objectives are being met and to determine if changes in management will be required to meet objectives.

1. Short Term

a) The objective for utilization of key streambank riparian plant species (CAREX, JUNCUS, SALIX, POTR5, ROWO, POA spp.) on Paiute, Battle and Bartlett Creeks is 30%. Utilization data will be collected at the end of the grazing period.

b) The objective for utilization of key plant species (CAREX, JUNCUS and POA spp.) in wetland riparian habitats is 50%. Utilization data will be collected at the end of the grazing period.

c) The objective for utilization of key plant species (STTH, AGSP, FEID, ELCI, POA, ORHY, AMAL, PUTR, SYMPH, EPHEDRA, EULA) in upland habitats is 50%. Utilization data will be collected at the end of the grazing period.

2. Long Term

a) Manage, maintain, or improve public rangeland conditions to provide forage on a sustained yield basis for big game, with an initial forage demand of 1,838 AUMs for mule deer, 307 AUMs for pronghorn, and 180 AUMs for bighorn sheep.

1) Improve to or maintain 2,134 acres in Black Rock DY-13, 41,678 acres in Black Rock DW-10, and 45,856 acres in Black Rock DS-6 in good or excellent mule deer habitat condition.

2) Improve to or maintain 45,965 acres in Black Rock PS-15 in good pronghorn habitat condition. Improve to or maintain 35,274 acres in Black Rock PY-14, 2,623 acres in Leonard Creek PW-17, and 31,466 acres in Paiute Creek PW-16 in fair or good pronghorn habitat condition.

3) Improve to or maintain 69,939 acres in Black Rock BY-15 in good to excellent bighorn sheep habitat condition.

b) Improve public rangeland conditions to provide forage on a sustained yield basis for livestock, with a stocking level of 7,827 AUMs.

c) Improve range condition from poor to fair on 161,158 acres and from fair to good on 15,938 acres.

d) Maintain and improve the free-roaming behavior of wild horses by protecting and enhancing their home ranges.

1) Manage, maintain, or improve public rangeland conditions to provide an initial level of 1488 AUMs of forage on a sustained yield basis for wild horses.

2) Maintain and improve wild horse habitat by assuring free access to water.

Ecological status will be used to redefine/quantify the following five objectives where applicable.

e) Improve to or maintain 86 acres of ceanothus habitat types in good condition.

f) Improve to or maintain 345 acres of mahogany habitat types in good condition.

g) Improve to or maintain 188 acres of aspen habitat types in good condition.

h) Improve to or maintain 529 acres of riparian and meadow habitat types in good condition.

i) Improve to or maintain 15 acres of serviceberry, 82 acres of bitterbrush, 55 acres of ephedra, and 112 acres of winterfat vegetation types in good condition.

j) Improve to and maintain stream habitat conditions from the 1988 levels of 43% on Paiute Creek, 58% on Battle Creek, and 50% on Bartlett Creek to an overall optimum of 60% or above.

1) Streambank cover 60% or above.

2) Streambank stability 60% or above.

3) Maximum summer water temperatures below 70° F.

4) Sedimentation below 10%.

k) Protect sage grouse strutting grounds and brooding areas. Maintain the big sagebrush sites within two miles of active strutting grounds in mid to late seral stage with a minimum of 30% shrub composition by weight or 30% canopy cover.

l) Improve to and maintain the water quality of Paiute, Battle and Bartlett Creeks to the State criteria set for the following beneficial uses: livestock drinking water, cold water aquatic life, wading (water contact recreation), and wildlife propagation.

IX. Rationale

The carrying capacity of 4,666 AUMs, for livestock and wild horses, on the Paiute Meadows Allotment was derived from monitoring data collected on the allotment from 1987 through 1990. The carrying capacity in the North Paiute Use Area is 2634 AUMs and 2032 AUMs in the South Paiute Use Area.

Monitoring data indicated that the vegetative objectives were not being achieved in both the North Paiute and South Paiute use areas of the allotment at the previous use level. Therefore, an adjustment is needed in the authorized use by livestock and the wild horse population size to achieve a thriving natural ecological balance within the allotment. In addition, long term stream habitat objectives have not been met in the North Paiute use area. Previous to the transfer of the grazing preference to the current permittee, and authorization of 56% of the grazing permit, improvement in stream habitats was noted. A reduction in the season of use for livestock is necessary to ensure continued growth of riparian vegetation and improvement towards long term streambank riparian habitat conditions in the absence of riparian habitat fences. The reduction in active use combined with the season of use will ensure that progress.

Monitoring data also indicates that the use area south of Paiute Creek is lacking in grass species due to excessive use by wild horses and livestock and the past six years of drought conditions. Due to the size of the current horse population, combined wild horse and livestock use would exceed the carrying capacity of the South Paiute Use Area. Therefore, livestock use will not be authorized in this area.

When monitoring indicates the vegetation has recovered south of Paiute Creek the permittee will be authorized to activate those AUMs placed in non-use before adjustments will be made to the wild horse AML.

Data collected from the wild horse census and distribution flights indicate a heavy migration pattern between the Black Rock Range East and Black Rock Range West Herd Management Areas. Most of this migration occurs on the southern portion of the HMAs from Slumgullion and Paiute Creek south.

Therefore, the Black Rock Range East and Black Rock Range West Herd Management Areas will be combined for management purposes and called the Black Rock Mountain Herd Management Area. The combined AML of this HMA will be 247 adult wild horses.

The natural tendency for the animals to distribute through both HMAs/allotments should result in approximately 124 animals utilizing the Black Rock Range East HMA year round. This estimate is based on historical distribution and census data that indicates that the proportional distribution of wild horses between the two HMAs is approximately 50% in the West HMA and 50% in the East HMA. This would result in a total of 1,488 AUMs used by wild horses in the Paiute Meadows Allotment (approximately 636 AUMs in the north and 852 AUMs south of Paiute Creek).

Analysis of the existing management of wildlife indicates that wildlife populations in the Paiute Meadows Allotment are not contributing to the failure in meeting the multiple-use objectives. Therefore, a change in the existing wildlife populations or the existing wildlife management within the Paiute Meadows Allotment is not warranted. Reasonable numbers for wildlife shall remain as 1838 AUMS for mule deer, 307 AUMs for pronghorn, and 180 AUMs for bighorn sheep.

Battle Creek has been designated by the Bureau of Land Management, Winnemucca District, as "Proposed Lahontan cutthroat trout habitat". In the U.S. Fish and Wildlife Service's Draft Recovery Plan for LCT (1993), Battle and Bartlett Creeks have been identified as "Potential" recovery sites, with Battle Creek identified as a "Priority" site for recovery.

The North Fork of Battle Creek is a more desirable stream to recover for Lahontan cutthroat trout based on the following:

The entire Battle Creek watershed lies within the Paiute Meadows Allotment and nearly all of the North Fork of Battle Creek (about 6 miles) lies within public lands.

There is no existing fishery in the Battle Creek drainage. There would be no fish eradication costs associated with the introduction of cutthroat trout into the North Fork of Battle Creek.

The existing stream habitat condition for the North Fork of Battle Creek is highly recoverable. The 1992 stream habitat conditions indicate that the North Fork of Battle Creek could be recovered more rapidly than Bartlett Creek.

With good to excellent stream habitat potential, lack of an existing fishery, nearly 100 percent public land ownership, and absence of mining activities, the North Fork of Battle Creek lends itself for the recovery of

Lahontan cutthroat trout.

The reconstruction and extension of the Soldier Meadows/Paiute Meadows drift fence would stop livestock drift from Paiute Meadows into Coleman, Snow, Summer Camp and Mahogany Creek areas of the Soldier Meadows Allotment. The extension of the drift fence would run through the North Black Rock Wilderness Study Area (WSA NV-020-622).

A solid fence, as opposed to "gap" fencing, would ensure that the livestock drift would be stopped. Wild horses would create trails around the "gap" fencing which the cattle would then follow.

Distribution data shows that when horse populations are within an acceptable level, the highest concentration of horses are on the southern end of the Paiute Meadows allotment where most of the migration occurs, therefore, conflicts with wild horse migration and fencing north of Burnt Springs would be minimized.

The Paiute Seeding area is in poor to fair condition following over 10 years of use without adequate fencing. Wild horses and wildlife populations rely upon the existing reservoir in the seeding for water during the summer months and it becomes a critical water source for them during drought years.

Therefore, removal of the Paiute Seeding boundary fence would benefit both wildlife and wild horses.

X. Future Monitoring and Grazing Adjustments

The Paradise-Denio Resource Area will continue to monitor all existing studies and establish additional studies as identified above. This monitoring data will continue to be collected in the future to provide the necessary information for subsequent evaluation. These evaluations are necessary to determine if the allotment specific objectives are being met under the existing and/or new grazing management strategies. In addition, these subsequent evaluations will determine if adjustments are required to meet the established allotment specific objectives.

XI. NEPA Review

The selected management action for grazing in the Paiute Meadows Allotment conforms with the environmental analysis of grazing impacts described in the Final Paradise-Denio Environmental Impact Statement dated September 18, 1981.

The EIS and NEPA Compliance Record are on file in the Winnemucca District Office, located at 705 E. Fourth Street, Winnemucca, Nevada 89445.

Paiute Meadows February 25, 1993

APPENDIX 1

Stocking Level Calculations Paiute Meadows Allotment.

1. Stocking Level Calculation Procedures

Monitoring data indicates that wild horses have contributed to over utilization in the allotment. Target utilization levels were exceeded south of Paiute Creek where the use was by wild horses. Use levels north of Paiute Creek resulted from livestock and wild horses. The total amount of actual use made by livestock and wild horses was determined north and south of Paiute Creek for each year.

The stocking level for the allotment was determined using the following Actual Use/Utilization formula.

$$\frac{\text{Actual Use}}{\text{Average/Weighted Average Utilization}} = \frac{\text{Desired Actual Use}}{\text{Desired Average Utilization}}$$

The stocking level was determined for the area north of Paiute Creek and south of Paiute Creek for each year data was available and then computing the average mean for those figures.

Stocking rates were calculated as follows:

South of Paiute Creek - The average calculated stocking rate is 2,032 AUMs. This was based on the four years of use pattern mapping data and the desired yearlong utilization level of 50%.

North of Paiute Creek - The average calculated stocking rate is 2,634 AUMs. This was based on the three years of use pattern mapping data and the desired yearlong utilization level of 50%.

Wild horse census data and cattle licensed use were used to calculate stocking levels. Wildlife AUMs were not calculated. Utilization was determined from use pattern mapping using the Average/Weighted Average Utilization formula for those areas where forage was utilized heavy and/or severe. These figures were then used to determine the amount of reduction from the present demand necessary to achieve management objectives. The procedures for doing the calculations are outlined as follows:

1) Planimeter Use Pattern Map by utilization category for each year.

2) Figure acreage by utilization category for north of Paiute Creek and for south of Paiute Creek.

3) Using Weighted Average Utilization Formula, determine percent utilization level on acreage for heavy and severe use areas only. (As identified in the Nevada Rangeland Monitoring Handbook, 1984)

4) The Average/Weighted Average Utilization figure was entered into the Actual Use/Utilization Formula and a stocking level was determined.

5) Actual Use AUMs include cattle and wild horses only.

In the determination of a stocking rate both wild horse and livestock actual use were correlated to the dates of data collection. In some years data was collected in the fall of the year and then again at the end of winter. In these cases the data collected following the winter season (spring) was used to determine a stocking rate as it represents the entire grazing year. In 1987 data was collected in the fall only, in which case actual use was correlated to the dates of data collection and a stocking rate determined from the available data.

Use pattern maps used for these calculations were those completed in fall 1987 through spring 1991. Utilization studies using the Key Forage Plant Method were used for data collection from the fall 1991 through summer 1992. These studies cannot be entered into the weighted average calculation as they represent the utilization at the study sites only. The current key areas do not encompass the streambank riparian habitats of Bartlett and Paiute Creeks, and the majority of Battle Creek and are therefore not indicative of the more sensitive areas within the allotment. Additional key areas focusing primarily on the riparian habitats will be selected in the future in consultation and coordination with affected interests. Using the current Key Areas for calculation of the Desired Stocking Rate would not consider the streambank riparian habitats. Therefore, the weighted average and desired stocking level calculations were used for the calculating the carrying capacity by considering all heavy and severe use areas in the calculation as the actual utilization.

N2 93 10

February 25, 1993

Paiute Meadows

2. Actual Use Calculations for Use Pattern Map Data

A. 1987

Wild Horses

South Paiute

448 H - 03/01/87-08/08/87 - 2371 AUMs

North Paiute

218 H - 03/01/87-08/08/87 - 1154 AUMs

UPM completed August 8, 1987 and measures use 03/01-08/08
No cattle use

Census conducted Oct. 6-8, 1987, numbers are based on census.

Wild Horse gather conducted December 1987-January 1988.

B. 1988

Wild Horses

South Paiute

231 H - 03/01/88-02/28/89 - 2772 AUMs

North Paiute

21 H - 03/01/88-02/28/89 - 252 AUMs

Livestock

200 C - 10/17/88-10/17/88	-	7 AUMs
400 C - 10/18/88-10/18/88	-	13 AUMs
500 C - 10/19/88-10/20/88	-	33 AUMs
595 C - 10/21/88-12/30/88	-	1389 AUMs
395 C - 12/31/88-01/01/89	-	26 AUMs
195 C - 01/02/89-01/03/89	-	13 AUMs
95 C - 01/04/89-01/05/89	-	6 AUMs
		1487 AUMs

Total Actual Use **4511 AUMs**

UPM completed 04/06/89 and measures use for 03/01/88-02/28/89.

C. 1989

Wild Horses

South Paiute

231 H - 03/01/89-07/17/89 - 1056 AUMs
458 H - 07/18/89-02/14/90 - 3129 AUMs
264 H - 02/15/90-02/28/90 - 122 AUMs
4307 AUMs

North Paiute

21 H - 03/01/89-07/17/89 - 96 AUMs
193 H - 07/18/89-02/14/90 - 1345 AUMs
244 H - 02/15/90-02/28/90 - 112 AUMs
1553 AUMs

Livestock

187 C - 10/26/89-10/29/89 -	24	AUMs
392 C - 10/30/89-11/02/89 -	50	AUMs
600 C - 11/03/89-01/05/90 -	1225	AUMs
569 C - 01/06/90-01/10/90 -	91	AUMs
669 C - 01/11/90-01/31/90 -	448	AUMs
701 C - 02/01/90-02/14/90 -	313	AUMs
694 C - 02/15/90-02/17/90 -	66	AUMs
441 C - 02/18/90-02/21/90 -	56	AUMs
291 C - 02/22/90-02/25/90 -	37	AUMs
131 C - 02/26/90-02/28/90 -	13	AUMs
	2323	AUMs

Total Actual Use **7898 AUMs**

UPM completed 04/04/90 and measures use for 03/01/89-02/28/90. On 07/18/89 a census was done and on 02/14/90 a census was again conducted.

D. 1990

Wild Horses

South Paiute	North Paiute
264 H - 03/01/90-02/28/91 - 3168 AUMs	244 H - 03/01/90-02/28/91 - 2928 AUMs

Livestock

187 C - 10/26/90-10/29/90 -	25	AUMs
392 C - 10/30/90-11/02/90 -	52	AUMs
600 C - 11/03/90-01/06/91 -	1282	AUMs
569 C - 01/07/91-01/10/91 -	75	AUMs
669 C - 01/11/91-01/31/91 -	462	AUMs
701 C - 02/01/91-02/13/91 -	300	AUMs
694 C - 02/14/91-02/18/91 -	114	AUMs
441 C - 02/19/91-02/22/91 -	58	AUMs
291 C - 02/13/91-02/27/91 -	144	AUMs
131 C - 01/27/91-02/28/91 -	9	AUMs
	2521	AUMs

Total Actual Use **8617 AUMS**

UPM completed 04/17/91 and measures use from 03/01/90-02/28/91. Wild horse numbers are based on the 02/14/90 census date.

Paiute Meadows February 25, 1993

3. Weighted Average Utilization Calculations

Paiute Meadows Allotment (South Paiute) Heavy and Severe Use Zone Acreage

Grazing Year	Total Acres Mapped	Use Zone	Total Acres Per Zone
1987	25,949	Heavy	6,465
		Severe	6,820
1988	23,047	Heavy	4,910
		Severe	9,340
1989	46,437	Heavy	23,965
		Severe	10,763
1990	59,178	Heavy	25,359
		Severe	6,850

Paiute Meadows Allotment (North Paiute) Heavy and Severe Use Zone Acreage

Grazing Year	Total Acres Mapped	Use Zone	Total Acres Per Zone
1987	10,227	Heavy	2,298
		Severe	0
1988	42,754	Heavy	6,227
		Severe	74
1989	53,974	Heavy	21,175
		Severe	0
1990	81,956	Heavy	46,934
		Severe	72

Note- The above tables display data for full grazing year (beginning 03/01 and ending 02/28) as indicated by use pattern mapping conducted in the spring. The exception to this 1987 when use pattern mapping was conducted in the fall only, and not in the following spring.

1987

North Paiute

$$\frac{2{,}298 \text{ Ac.} \times 70\%}{2{,}298 \text{ Ac}} = 70\%$$

South Paiute

$$\frac{(6{,}820 \text{ Ac.} \times 90\%) + (6{,}465 \text{ Ac.} \times 70\%)}{13{,}285 \text{ Ac}} = 80\%$$

1988

North Paiute

$$\frac{(6{,}227 \text{ Ac.} \times 70\%) + (74 \text{ Ac} \times 90\%)}{6{,}301 \text{ Ac}} = 70\%$$

South Paiute

$$\frac{(9{,}340 \text{ Ac.} \times 90\%) + (4{,}910 \text{ Ac.} \times 70\%)}{14{,}250 \text{ Ac}} = 83\%$$

1989

North Paiute

$$\frac{(21{,}175 \text{ Ac.} \times 70\%) + (0 \text{ Ac} \times 90\%)}{21{,}175 \text{ Ac}} = 70\%$$

South Paiute

$$\frac{(23{,}965 \text{ Ac.} \times 70\%)\ (10{,}763 \text{ Ac.} \times 90\%)}{34{,}728 \text{ Ac}} = 76\%$$

1990

North Paiute

$$\frac{(36{,}934 \text{ Ac.} \times 70\%) + (72 \text{ Ac} \times 90\%)}{47{,}006 \text{ Ac}} = 70\%$$

South Paiute

$$\frac{(25{,}359 \text{ Ac.} \times 70\%) + (6{,}850 \text{ Ac.} \times 90\%}{32{,}209 \text{ Ac}} = 74\%$$

4. Stocking Level Calculations

	South Paiute	North Paiute
1987	$\frac{2{,}371 \text{ AUMs} \times 50\%}{80\%} = 1{,}482$ AUMs	$\frac{1{,}154 \text{ AUMs} \times 50\%}{70\%} = 824$ AUMs
1988	$\frac{2{,}772 \text{ AUMs} \times 50\%}{83\%} = 1{,}670$ AUMs	$\frac{1{,}739 \text{ AUMs} \times 50\%}{70\%} = 1{,}242$ AUMs
1989	$\frac{4{,}307 \text{ AUMs} \times 50\%}{76\%} = 2{,}834$ AUMs	$\frac{3{,}876 \text{ AUMs} \times 50\%}{70\%} = 2{,}769$ AUMs
1990	$\frac{3{,}168 \text{ AUMs} \times 50\%}{74\%} = 2{,}141$ AUMs	$\frac{5{,}449 \text{ AUMs} \times 50\%}{70\%} = 3{,}892$ AUMs
	8,127 AUMs	8,727 AUMs

8,127 ÷ 4 = 2,032 AUMs Avg. South Paiute
7,903 ÷ 3 = 2,634 AUMs Avg. North Paiute
4,666 AUMs Total

The calculations have been revised from those presented in the Appendix section of the Draft Allotment Evaluation of July 1991. Final review determined that the dates presented for the wild horse gather of December 1988-January 1989 were incorrect in that version. The referenced gather actually took place in December 1987-January 1988. This significantly affected the Actual Use figures used in the calculations which resulted in the lower figures.

N2 93 10

February 25, 1993

Paiute Meadows

APPENDIX 2

The following indicates the actual use by livestock and wild horses for grazing years 1987-1990. These actual use figures were used in the development of recommendations to adjust livestock and wild horse forage demand to available forage levels. The years 1987-1990 were used as these are the years of data collection and also the years of recent wild horse census.

Wild horse Actual Use - 1987-1990

	South Paiute			North Paiute		
Year	# of Wild Horses	Period	AUMs	# of Wild Horses	Period	AUMs
1987	448 H	03/01-12/31	4,507	218 H	03/01-12/31	2,193
	203 H	01/01-02/28	394	18 H	01/01-02/28	35
1988	231 H	03/01-02/28	2,772	21 H	03/01-02/28	252
1989	231 H	03/01-07/18	1,056	21 H	03/01-07/18	96
	458 H	07/19-02/14	3,129	243 H	07/19-02/14	1,345
	264 H	02/15-02/28	122	244 H	02/15-02/28	112
1990	264 H	03/01-02/28	3,168	244 H	03/01-02/28	2,928

South Paiute	North Paiute
1987 - 4,901 AUMs	1987 - 2,228 AUMs
1988 - 2,772 AUMs	1988 - 252 AUMs
1989 - 4,307 AUMs	1989 - 1,553 AUMs
1990 - 3,168 AUMs	1990 - 2,928 AUMs
15,148 AUMs	6,961 AUMs

The actual use (AUMs) were determined by utilizing the AUMs.BAS computer program calculation. This program calculates AUMs based on the grazing years.

15,148 AUMs Actual Use South Paiute
6,961 AUMs Actual Use North Paiute
22,109 AUMs Total

The total actual use figure of 22,109 AUMs was then divided by 4 years to determine an actual use average as follows;

22,109 AUMs ÷ 4 = 5,527 AUMs Avg. (4 years) wild horses.

A census was conducted during Oct. 6-8, 1987. This number was carried back to the beginning of the calendar year.

Paiute Meadows

February 25, 1993

During Dec. 1987 and Jan. 1988 horses were gathered which reduced numbers beginning 12/87.

A census was completed on 07/18/89 which increased numbers.

Livestock Authorized Actual Use

1987	No Use
1988	1,487 AUMs
1989	2,323 AUMs
1990	2,521 AUMs
1991	4,017 AUMs
Total	10,348 AUMs

10,348 AUMs ÷ 5 yrs = 2,070 AUMs Avg. Livestock Use
The authorized use in 1992 was 4350 AUMs.

Paiute Meadows February 25, 1993

APPENDIX 3

Historical Distribution of Wild Horses in the Black Rock Range West and East HMAs

This table is based upon actual wild horse counts made by air from 1969 through 1992. This table does not include estimates, ground observations or numbers of animals removed in a gather process.

Year	Date	No. in West HMA	% of Total	No. in East HMA	% of Total	Total
1969*	03/12	3	14	18	86	21
1970	11/10	170	70	73	30	243
1974	10/07	258	68	123	32	381
1975	02/10	160	63	92	37	252
1975	07/01	200	63	115	37	315
1977	04/04	333	54	282	46	615
1979	09/17	463	49	471	51	934
1980**	winter	310	88	40	12	350
1980**	07/24	344	88	46	12	390
1986***	06/12	238	18	1075	82	1313
1987***	10/06	537	45	666	55	1203
1989***	07/17	485	43	651	57	1136
1991	07/26	521	48	558	52	1079
1991	12/28	435	37	733	63	1168
1992**	03/10	338	57	255	43	593
1992**	05/23	316	37	525	63	841
1992	07/22	383	56	299	44	682
1992	10/22	745	68	351	32	1096
		6239	X=49%	6373	X=51%	12,612

* flight conducted to determine presence of wild horses only

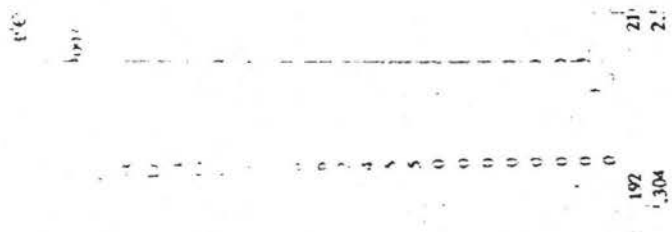
** post-gather flights--gather conducted in December/January 79/80 and February 1992

*** 1986 and 1987 total non-use was taken by permittees on both Paiute Meadows Allotment and Soldier Meadows Allotment; 1988 85% non-use in Paiute Meadows; 1989 70% non-use in Paiute Meadows; 1990-1991 44% non-use in Paiute Meadows.

Average distribution using all years of distribution flights equals 49% in the West HMA and 51% in the East HMA. However, average distribution of wild horses to the two HMAs by using all years except 1969 and 1980 is approximately 50% to each HMA. This figure is more accurate because the 1969 flight was solely to determine presence of wild horses and was not a complete census. The 1980 flights were immediately following a removal of wild horses to below 50 head on the East HMA only, leaving full numbers in the West HMA, which skews the distribution data. 1992 was included as approx. 200 animals were left in the East HMA following the gather,

establishing a significant presence of animals in relation to the West HMA and retaining a distribution pattern.

Expected distribution with a combined AML will be 50/50 with any number of animals is determined. Fluctuations in actual numbers can be expected from year to year, and season to season depending on environmental factors and livestock operation fluctuations.



Appendix 4

The Strategic Plan for the Management of Wild Horses on the Public Lands was signed June 6, 1992. In this plan, the BLM's wild horse program in the State of Nevada is given the direction for the management of wild horses. The policy states that unadoptable wild horses will remain on the public lands, and that other measures such as fertility control may be utilized for population management. At the present time it is the BLM's policy to return unadoptable wild horses to the public lands they were gathered from that are in excess of five years of age. At the time of the 1992 gather, this policy was wild horses in excess of nine years of age. Following the 1992 gather, 137 wild horses of the 632 total that were gathered were returned to the HMA. The 137 wild horses returned to the range along with the 63 adults that were not captured equal the 200 wild horses that we agreed to leave on the Black Rock East HMA until the re-evaluation of the allotment.

A model has been developed to estimate the population dynamics for the herd that currently resides in the Black Rock Range East HMA as a result of the 1992 gather. The population model uses age specific survival and fecundity rates derived from the results of the 1992 Black Rock East gather. To determine year-to-year survival, the number of animals in each age class is multiplied by the appropriate survival parameter, rounded to the nearest integer, and added to the next year's age class. The foals produced each year is calculated by multiplying the number of females in each age class by the appropriate fecundity parameter, summing the total, rounding to the nearest integer and dividing the foals equally between the male and female zero age class (i.e. a 50:50 sex ratio at birth is assumed). The model also incorporates a random mortality generator in the 4-9 age classes to simulate mortality which occurs, but is not caught by the model due to rounding. This involves randomly subtracting zero or one from the total number in each of these age classes.

POPULATION MODEL

The population model uses age specific survival and fecundity rates derived from the results of the 1992 Black Rock East gather. For details see Appendix 4. To determine year-to-year survival, the number of animals in each age class is multiplied by the appropriate survival parameter, rounded to the nearest integer, and added to the next year's age class. The foals produced each year is calculated by multiplying the number of females in each age class by the appropriate fecundity parameter, summing the total, rounding to the nearest integer and dividing the foals equally between the

male and female zero age class (i.e. a 50:50 sex ratio at birth is assumed). The model also incorporates a random mortality generator in the 4-9 age classes to simulate mortality which occurs, but is not caught by the model due to rounding. This involves randomly subtracting zero or one from the total number in each of these age classes.

Only one gather of the 0-5 age class is assumed. If a second gather of these same age classes is done, it will result in the virtual extinction of the population because the most fecund age classes have been removed. The following scenario illustrates this. Assume gathers of 0-5 year olds in fall 1993 and 1999.

The results of the model indicate that the AML will not be reached with one gather. A second gather that removes part of the 0-5 age class will be necessary in 1999. During the interim period the wild horses would require the entire carrying capacity in 1993, and from 66% to 75% of the carrying capacity between 1994 and 1999.

Year	# Adult Males	# Adult Females	# Adults
1992	161	184	345
1993	163	184	347
1994	86	92	178
1995	87	92	179
1996	84	87	171
1997	78	80	158
1998	73	74	147
1999	71	69	140
2000	23	17	40
2001	18	13	31
2002	14	10	24
2003	12	8	20
2004	10	7	17
2005	8	7	15
2006	7	6	13
2007	7	7	14
2008	8	7	15
2009	7	6	13
2010	8	6	14
2011	8	6	14
2012	7	6	13
2013	7	7	14
2014	8	8	16
2015	9	10	19
2016	8	10	18
2017	9	11	20
2018	11	12	23
2019	14	13	27
2020	16	16	32
2021	18	18	36

N2 93 10

February 25, 1993

Paiute Meadows

In this case the population is not totally wiped out. This is due to the abnormally large percentage of older animals in the initial population, which were returned to the range following the 1992 gather. These animals, despite their low fecundity, will produce enough foals to maintain the population, albeit at a very low level, for several years. Wild horse populations at these levels for such a long time are much more susceptible to catastrophic events such as accidents, disease, and droughts which can seriously decimate if not totally extinguish the population.

Age Specific Survival

Assumptions:

1. Essentially all horses within this population are dead after 20 years.

2. Mortality favors younger age classes i.e. 0-3. Mortality is higher in young males than it is in young females.

3. Mortality increases in older animals i.e. 8-20. Mortality is higher in older females than in older males.

4. Mortality increases dramatically in age classes 14-20.

	% SURVIVAL	
AGE CLASS	MALES	FEMALES
0-1	.84	.86
1-2	.86	.88
2-3	.87	.89
3-4	.92	.92
4-5	.95	.95
5-6	.96	.96
6-7	.96	.96
7-8	.96	.96
8-9	.96	.94
9-10	.95	.93
10-11	.94	.92
11-12	.91	.89
12-13	.90	.88
13-14	.89	.87
14-15	.87	.85
15-16	.84	.82
16-17	.78	.72
17-18	.70	.64
18-19	.55	.45
19-20	.55	.45
20+	0	0

It is recognized that some wild horses live past twenty; however both their numbers and contribution to the population are negligible.

February 25, 1993

Paiute Meadows

Age Specific Fecundity

AGE CLASS	% FECUNDITY
0-1	0
2	.30
3	.50
4-9	.75
10-13	.35
14-20	.15

Paiute Meadows

February 25, 1993

PAIUTE MEADOWS ALLOTMENT WILD HORSE POPULATION MODEL
INITIAL POPULATION 345 ADULTS, GATHER FALL 1993 0-5 YEAR OLDS

1992		1993		1994		1995		1996		1997		1998		1999		2000		2001	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
26	29	36	36	18	18	13	13	11	11	10	10	12	12	13	13	13	13	15	15
13	16	22	25	0	0	15	15	11	11	9	9	8	9	10	10	11	11	11	11
11	14	11	14	0	0	0	0	13	13	9	10	8	8	7	8	9	9	9	9
12	14	10	12	0	0	0	0	0	0	11	7	8	9	7	7	6	7	8	8
9	13	11	13	0	0	0	0	0	0	0	0	0	10	11	7	8	6	6	6
9	10	9	12	0	0	0	0	0	0	0	0	0	0	10	10	7	8	6	6
8	8	8	10	0	0	0	0	0	0	0	0	0	0	0	0	9	9	7	7
6	8	8	7	8	9	0	0	0	0	0	0	0	0	0	0	0	0	9	9
7	6	6	7	8	7	8	8	0	0	0	0	0	0	0	0	0	0	0	0
6	6	7	5	5	7	7	6	7	8	0	0	0	0	0	0	0	0	0	0
14	17	6	6	7	5	5	7	7	6	7	7	0	0	0	0	0	0	0	0
7	16	13	16	6	6	7	5	5	6	7	6	7	6	0	0	0	0	0	0
15	10	6	14	12	14	5	5	6	4	5	5	6	5	6	5	0	0	0	0
14	12	14	9	5	12	11	12	5	4	5	4	5	4	5	4	5	4	4	3
9	8	12	10	12	8	4	10	10	10	4	3	4	3	4	3	4	3	4	3
8	5	8	7	10	9	10	7	3	9	9	9	3	3	3	3	3	2	3	2
4	8	7	4	7	6	8	7	8	6	3	7	8	7	3	2	3	2	3	2
1	7	3	6	5	3	5	4	6	5	6	4	2	5	6	5	2	1	2	1
2	3	1	4	2	4	4	2	4	3	4	3	4	3	1	3	4	3	1	1
1	1	1	1	1	2	1	2	2	1	2	1	2	1	2	1	1	1	2	1
5	2	1	0	1	0	1	1	1	1	1	0	1	0	1	0	1	0	1	0
Adult	345		346		181		182		175		162		150		141		138		140
AUM's	4,140		4,152		2,172		2,184		2,100		1,944		1,800		1,692		1,680		1,752

Paiute Meadows

February 25, 1993

	2002		2003		2004		2005		2006		2007		2008		2009		2010		2011	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
	17	17	18	18	19	19	20	20	23	23	25	25	26	26	29	29	32	32	35	35
	13	13	14	15	15	15	16	16	17	17	19	20	21	22	22	22	24	25	27	28
	9	10	11	11	12	13	13	13	14	14	15	15	16	16	18	18	19	19	21	22
	8	9	8	9	10	10	10	12	11	11	12	12	13	13	14	16	16	17	17	17
	7	7	7	8	7	7	9	9	9	9	10	11	11	11	12	12	13	15	15	16
	5	5	6	7	6	8	6	6	5	5	9	10	10	10	10	10	11	11	12	14
	5	5	4	4	3	6	6	6	5	5	9	7	9	9	9	9	9	9	10	11
	7	7	5	6	4	4	2	3	2	3	4	6	8	6	8	6	10	8	8	8
	9	9	6	8	6	5	3	6	3	6	4	6	4	5	4	4	8	7	10	7
	0	0	9	0	9	7	6	8	5	7	5	5	3	6	3	6	7	4	7	8
	0	0	0	0	0	0	0	0	6	0	2	3	5	5	5	5	4	3	4	
	0	0	0	0	0	0	0	0	0	0	3	5	2	4	2	2	3	5	3	5
	0	0	0	0	0	0	0	0	0	0	5	6	3	4	3	3	3	2	3	4
	0	0	0	0	0	0	0	0	0	0	6	0	5	4	5	5	3	3	3	2
	3	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3	3	2	3
	3	2	3	2	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
	2	1	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
	1	0	1	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0
Adult		146		154		165		177		192		210		233		258		282		313
AUM's		1,752		1,848		1,980		2,124		2,304		2,520		2,796		3,096		3,384		3,756

N2 93 10

February 25, 1993

Paiute Meadows

Year	No. Ad. Male	No. Ad. Female	No. Adults	AUMs
1992	161	184	345	4,140
1993	164	182	346	4,152
1994	89	92	181	2,172
1995	91	91	182	2,184
1996	88	87	175	2,100
1997	82	80	162	1,944
1998	76	74	150	1,800
1999	72	69	141	1,692
2000	71	67	138	1,656
2001	72	68	140	1,680
2002	74	72	146	1,752
2003	78	76	154	1,848
2004	84	81	165	1,980
2005	88	89	177	2,124
2006	95	97	192	2,304
2007	104	106	210	2,520
2008	115	118	233	2,796
2009	128	130	258	3,096
2010	140	142	282	3,384
2011	156	157	313	3,756

N2 93 10

CONVERSATION RECORD

Time: 08:00 Date: 1/4/93

TYPE: [ ] VISIT [ ] CONFERENCE [X] TELEPHONE

Location of Visit/Conference:

[ ] INCOMING [X] OUTGOING

NAME OF PERSON(S) CONTACTED	ORGANIZATION	Telephone NO
Cathy Barcomb	Com.Pres Wld Hrs	687-5589

ROUTING

NAME	
Scott	
Mandy	
Stackelberg	

SUBJECT/FILE DESIGNATION

Paiute Meadows AE file

SUMMARY

Prior to 1/4/93 I contacted Dawn Lappin(WHOA) on 12/22/92 and left a message requesting that she make arrangements for a meeting in Reno to discuss Paiute Meadows AE. She called back on 12/23 /92 and indicated that she scheduled a meeting for 1/6/93. However, the area manager had a meeting scheduled for the same day so I recontacted Dawn(via answering machine) and requested that she contact the area manager the week of 12/28. She did not contact the office of 12/28. I contacted her again on 1/4/93 and left a message on the answering machine indicating that 1/20/93 was a good date for a meeting. No response has been received as of 1/6/93. I also contacted Cathy Barcomb about setting up a meeting, however she was on the phone and indicated she would call back. No response as of 1/5/93 therefore I called and left a message about setting up a meeting for 1/20/93; also requested that she inform the BLM if a meeting was scheduled so that the BLM could send out a letter informing interested parties about the meeting in meeting its coordination, consultation and cooperation requirements.

File in Paiute AE file

Bob Hopper 1/6/93

12/17/92 Paiute Meadows Eval. Meeting

Amanda McCutcheon	BLM-Winnemucca
Larry Host	BLM-Winnemucca 89445
Bob Hopper	BLM WMCA
Andy Johan	Land Owner Representative
Derek Bailey	Western Range Service
[illegible]	NDOW - Wmca.
Dan R Attebery	BLM WMCA
Rick Rieber	" "
Al Steninger	Western Range Service
Gail Phillips	Paiute
Bill Phillips	
Tom Van Horne	DAN Russell
Doug Busselman	Nevada Farm Bureau
Jim French	Nevada Dept of Wildlife
Paul Tencer	BLM WMCA Range Staff Specialist

BOB MILLER
Governor

STATE OF NEVADA

N2 93 10
CATHERINE BARCOMB
Executive Director

COMMISSION FOR THE PRESERVATION OF WILD HORSES
Stewart Facility
Capitol Complex
Carson City, Nevada 89710
(702) 687-5589

December 4, 1992

Scott Billing, Area Manager
Paradise-Denio Resource Area
BLM-Winnemucca District Office
705 East 4th Street
Winnemucca, Nevada 89445

RE: Draft Paiute Meadows Allotment Evaluation

Dear Mr. Billing,

Thank you for the opportunity to review and comment on the Draft Paiute Meadows Allotment Evaluation (AE). However, according to the agreement signed last February 7, 1992, by ourselves and Billy Templeton, Nevada State Director, "...planning for the two Black Rock HMA's will be coordinated, in recognition of the migration of horses between the two herd areas and other relationships." Therefore, we protest the issuance of this entire draft AE:

1) Because it violates the agreement of February 7, 1992;

2) There are obvious flaws in the monitoring data which shows heavy use after the growing period but shows slight use to justify livestock use (page 20).

3) How can you determine an overall number of an AML for the two combined areas when the allotment evaluation which analyzes that monitoring data for Black Rock West has not been issued or even considered in this document.

We have already protested, appealed, and discussed all of the above issues in great detail previously to no avail. We recommend that another draft AE be prepared or at the very least that consideration of this proposal be postponed until the AE is issued on Black Rock West.

If you have any questions, please feel free to call.

Sincerely,

Catherine Barcomb

CATHERINE BARCOMB
Executive Director

101-1074

N2 93 10

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Winnemucca District Office
705 East 4th Street
Winnemucca, Nevada 89445

TAKE PRIDE IN AMERICA

IN REPLY REFER TO:
4100
(NV-241.4)
November 5, 1992

Dear Interested Party:

Please find enclosed for your review the second draft allotment evaluation for the Paiute Meadows Allotment.

This draft takes into consideration the November 22, 1991 Final Allotment Evaluation, Final Full Force and Effect Decision, and Livestock Use Agreement. It also considers the appeals received, the negotiated agreement to withdraw the appeals, the appeal of the May 11, 1992 decision to vacate the November 22, 1991 decision, and appeals of the 1992 grazing authorizations.

This draft allotment evaluation is considered to be in compliance with the negotiated agreement to withdraw the appeals of the November 22, 1991 Full Force and Effect Decision approved by the Bureau of Land Management on February 6, 1992. The agreement stated that the consultation, coordination and cooperation process would be re-initiated. At this time I am requesting your input into the draft of this allotment evaluation. If you have any information or have any comments to be included in the draft, please provide them to me by December 4, 1992. If you have any data that should be included in the final presentation, analysis and interpretation for the conclusions reached regarding the effectiveness of livestock grazing management in the Paiute Meadows Allotment, I would prefer that the actual data be submitted along with a written report. If you have any other alternatives for the recommendations section that you would like me to consider and present to the other interested parties, please submit them along with your comments for inclusion in the final draft allotment evaluation.

Due to the number of interested parties for this allotment evaluation, a consultation meeting is scheduled for 10:00 a.m. on December 17, 1992 at the Humboldt County Library in Winnemucca, to openly discuss the comments received.

A Selected Management Action will be developed in consultation with the Sonoma-Gerlach Resource Area prior to issuance of final decision and/or agreement.

N2 93 10

The Soldier Meadows Draft [redacted]otment Re-Evaluation should be [redacted]ailable from the Sonoma-Gerlach Resource Area Manager shortly.

If you have any questions, please contact Bob Hopper of my staff.

Sincerely yours,

Area Manager
Paradise-Denio Resource Area

Enclosure

N2 93 10

PAIUTE MEADOWS DRAFT
ALLOTMENT EVALUATION SUMMARY

I. INTRODUCTION

A. Paiute Meadows Allotment (00057)

B. Permittee - Daniel H. Russell

C. Evaluation Period - 10/14/83 to present

D. Selective Management Category I

II. INITIAL STOCKING LEVEL

A. Livestock Use

1. Grazing Preference (AUMs)

a.	Total Preference	- 9,932
b.	Suspended Preference	- 2,105
c.	Active Preference	- 7,827
d.	Not Scheduled (Nonuse)	- 3,477
e.	Scheduled Use	- 4,350

The authorized grazing use for the Paiute Meadows Allotment during 1990 was adjusted to 4,350 AUMs in conjunction with the transfer of grazing preference to Dan Russell dated 01/05/90.

2. Season of Use - 05/01-11/05

During 1990 the season of use was also adjusted in conjunction with the transfer of grazing preference to Dan Russell dated 01/05/90.

3. Kind and Class of Livestock - Cattle, Cow/Calf

4. Percent Federal - 97%

5. Grazing System

The Active Preference for the allotment was 7,827 AUMs from until 1990. The previous livestock operations did not utilize the full Active Preference on a regular basis during the evaluation period of 1983-1990. In 1990, in conjunction with the transfer of grazing preference to Dan Russell dated

01/05/90, the active preference was adjusted to 4350 AUMs, with 3477 AUMs held in non-use. The active grazing use was authorized north of Paiute Creek with herding practices designed to control drift of livestock south of Paiute Creek. For the years 1988-1989 cattle were also turned out north of Paiute Creek, controlling drift south of Paiute Creek. Prior to 1990 there has not been a stable livestock operation on this allotment since 1981. The grazing system has generally been to turn out in the spring and gather in the fall. Occasionally winter use would also be scheduled as allowed under the adjudication for this allotment. During the period 1983-1992 licensed livestock cattle use has varied as follows:

1983	No use
1984	6,283 AUMs
1985	4,896 AUMs
1986	No use
1987	No use
1988	1,143 AUMs
1989	2,342 AUMs
1990	4,350 AUMs
1991	4,350 AUMs
1992	4,350 AUMs

B. Wild Horse and Burro Use

The Black Rock East Herd Management Area (HMA) encompasses a portion of the allotment. The AML established by the Paradise-Denio Land Use Plan is 59 wild horses and 0 burros. In accordance with the June 1989 Interior Board of Land Appeals (IBLA) ruling, adjustments in wild horses will be made based on monitoring data, similar to adjustments for livestock.

C. Wildlife Use

1. Reasonable Numbers by big game species

Mule Deer	Pronghorn Antelope	Bighorn Sheep
1,838 AUMs	307 AUMs	180 AUMs

2. Wildlife Use Areas within the allotment:

Black Rock DY-13	2,134 acres
Black Rock DW-10	41,678 acres
Black Rock DS-6	45,856 acres
Black Rock PS-15	45,965 acres
Black Rock PY-14	35,274 acres
Leonard Creek PW-17 (Concentration)	2,043 acres
Paiute Creek PW-16 (Concentration)	31,466 acres
Black Rock BY-15 (Potential)	69,939 acres

These measurements correspond to the wildlife use areas as of the URA update of 1986-1988. Since then, in consultation with NDOW, the boundaries have been redrawn to reconcile discrepancies at the S-G/P-D Resource Area Boundary along the crest of the Black Rock Range.

3. Sage Grouse

Two sage grouse strutting grounds have been identified in the Paiute Meadows allotment, one at the south end and one at the east end. One additional strutting ground is identified adjacent to the allotment in the Bartlett Creek drainage. However, several brooding areas are identified scattered throughout the allotment which would indicate that additional strutting grounds are present. Two winter use areas for sage grouse have also been identified, one each near the Paiute Creek and Bartlett Creek drainages.

4. Bighorn Sheep

Eleven bighorn sheep were released into the Black Rock Range in February of 1992.

III. ALLOTMENT PROFILE

A. Description

The Paiute Meadows Allotment is located in the western portion of Humboldt County. The allotment is approximately 40 air miles south, southwest of Denio, Nevada and encompasses the east side of the Black Rock Range. The allotment ranges in elevation from 4,000' to 8,631'. The lower elevations are dominated by shadscale and greasewood vegetation types. As elevation increases vegetation changes to sagebrush; mountain browse; aspen and mountain mahogany vegetation types.

B. Acreage

1. Allotment Acres

a.	Public acres	177,096 acres
b.	Private acres	5,170 acres
c.	Allotment Total	182,266 acres

C. Objectives

1. Land Use Plan Objectives

a. Objective RM-1

To provide forage on a sustained yield basis through natural regeneration. Reverse downward deterioration of public grazing lands by improving 1,000,000 acres in poor condition to fair condition, and 400,000 acres in fair condition to good condition within 30 years.

b. Objective RM-2

Increase existing allocatable livestock forage by artificial methods from the present 103,721 AUMs to approximately 193,472 AUMs (89,751 AUM increase) within 30 years.

c. Objective WLA-1

Improve and maintain the condition of all the aquatic habitat of each stream, lake, or reservoir having the potential to support a sport fishery at a level conducive to the establishment and maintenance of a healthy fish community.

d. Objective WL-1

Improvement and maintenance of a sufficient quantity, quality, and diversity of habitat for all species of wildlife in the planning area.

e. Objective W-1

Preservation and improvement of quality water necessary to support current and future uses.

f. Objective W-2

Provision of adequate water to support public land uses.

g. Objective W-3

Reduction of soil loss and associated flood and sediment damage from public lands caused by accelerated erosion (man-induced) from wind and water.

h. Objective WH/B-1

Maintain wild horses and burros on public lands, where there were wild horses or burro use as of December 15, 1971, and maintain a natural ecological balance on the public lands.

2. Rangeland Program Summary Objectives

a. Livestock Management Objectives

1) Increase available forage for livestock to sustain an active preference of 7,827 AUMs.

2) Improve range condition from poor to fair on 161,158 acres and fair to good on 15,938 acres.

3) Develop a livestock grazing plan that will alleviate the following problems:

a) Inadequate livestock distribution.
b) Excessive stocking rate.
c) Improper season of use.
d) Livestock Drift

b. Wildlife Management Objectives

1) Manage rangeland habitat and forage condition to support reasonable numbers of wildlife demand as follows:

Deer	1,838 AUMs
Antelope	307 AUMs
Bighorn Sheep (when introduced)	180 AUMs

2) Improve condition of deteriorating upland meadows.

3) Protect sage grouse breeding complexes.

4) Improve and maintain the condition of aquatic habitat and riparian zones having the potential to support a sport fishery on Battle, Bartlett, and Paiute Creeks.

c. Wild Horse Management Objective

1) Graze 59 (708 AUMs) wild horses in the Black Rock Range - East Herd Use Area.

3. Allotment Objectives

The allotment specific objectives tie the Land Use Plan and RPS Objectives together into quantified objectives for this allotment.

a. Short Term

1) Utilization of key streambank riparian plant species shall not exceed 30% on Paiute, Battle and Bartlett Creeks. [1]

2) Utilization of key plant species in wetland riparian habitats shall not exceed 50%. [1]

3) Utilization of key plant species in upland habitats shall not exceed 50%. [1]

4) Utilization of crested wheatgrass shall not exceed 50%. [1]

b. Long Term

1) Manage, maintain, or improve public rangeland conditions to provide forage on a sustained yield basis for big game, with an initial forage demand of 1,838 AUMs for mule deer, 307 AUMs for pronghorn, and 180 AUMs for bighorn sheep. (WL-1, W-3, RPS b)

a) Improve to or maintain 2,134 acres in Black Rock DY-13, 41,678 acres in Black Rock DW-10, and 45,856 acres in Black Rock DS-6 in good or excellent mule deer habitat condition.

b) Improve or maintain 45,965 acres in Black Rock PS-15 in good pronghorn habitat condition. Improve to or maintain 35,274 acres in Black Rock PY-14, 2,623 acres in Leonard Creek PW-17, and 31,466 acres in Paiute Creek PW-16 in fair or good pronghorn habitat condition.

c) Improve to or maintain 69,939 acres in Black Rock BY-15 in good to excellent bighorn sheep habitat condition.

2) Manage, maintain, or improve public rangeland conditions to provide forage on a sustained yield basis for livestock, with an initial stocking level of 7,827 AUMs. (RM-1 a, RPS a)

3) Improve range condition from poor to fair on 161,158 acres and from fair to good on 15,938 acres. [2] (RM-1, RM-2, RPS a.2)

4) Maintain and improve the free-roaming behavior of wild horses by protecting and enhancing their home ranges. (WH/B-1)

a) Manage, maintain, or improve public rangeland conditions to provide an initial level of 708 AUMs of forage on a sustained yield basis for 59 wild horses and maintain a thriving natural ecological balance. (WH/B-1, RPS c)

b) Maintain and improve wild horse habitat by assuring free access to water. (WH/B-1, RPS C.)

5) Improve to or maintain 86 acres of ceanothus habitat types in good condition. [2] (WL-1, RPS b.1)

6) Improve to or maintain 345 acres of mahogany habitat types in good condition. [2] (WL-1, RPS b.1)

7) Improve to or maintain 188 acres of aspen habitat types in good condition. [2] (WL-1, RPS b.1)

8) Improve to or maintain 529 acres of riparian and meadow habitat types in good condition. [2] (WL-1, W-3, RPS b 4.)

9) Improve to or maintain 15 acres of serviceberry, 82 acres of bitterbrush, 55 acres of ephedra, and 112 acres of winterfat vegetation types in good condition. [2]

10) Improve to and maintain stream habitat conditions from 43% on Paiute Creek, 58% on Battle Creek, and 50% on Bartlett Creek to an overall optimum of 60% or above. (WLA-1, RPS b.4)

   a) Streambank cover 60% or above.
   b) Streambank stability 60% or above.
   c) Maximum summer water temperatures below 70° F.
   d) Sedimentation below 10%.

11) Protect sage grouse strutting grounds and brooding areas. Maintain a minimum of 30% cover of sagebrush for nesting and winter use. (WL-1, RPS b.3)

12) Improve to and maintain the water quality of Paiute, Battle and Bartlett Creeks to the State criteria set for the following beneficial uses: livestock drinking water, cold water aquatic life, wading (water contact recreation), and wildlife propagation. (WL-1)

13) Improve to or maintain the 1000 acre Paiute seeding in good condition. (5-10 acres per AUM) (RM-2)

   [1] The utilization levels will be used to evaluate and adjust management practices over a period of time.

   [2] Ecological status will be used to redefine/quantify these objectives where applicable.

D. Key Species Monitored

1. Upland Habitat

Symbol	Scientific Name	Common Name
STTH2	Stipa thurberiana	Thurber's needlegrass
FEID	Festuca idahoensis	Idaho Fescue
STCO3	Stipa columbiana	Columbia needlegrass
POSE	Poa secunda	Sandberg's bluegrass
ORHY	Oryzopsis hymenoides	Indian ricegrass
ELCI2	Elymus cinereus	basin wildrye
AGSP	Agropyron spicatum	bluebunch wheatgrass

Symbol	Scientific Name	Common Name
ATCO	Atriplex confertifolia	shadscale
BASA3	Balsamorhiza sagittata	arrowleaf balsamroot
CRAC2	Crepis acuminata	tapertip hawksbeard
AMAL2	Amelanchier alnifolia	serviceberry
ARSP	Artemisia spinescens	bud sagebrush
PUTR2	Purshia tridentata	antelope bitterbrush
SYOR	Symphoricarpos oreophilus	snowberry
EULA5	Eurotia lanata	winterfat
LUPIN	Lupinus	lupine
SIHY	Sitanion hystrix	bottlebrush squirreltail
EPHED	Ephedra	ephedra

2. Riparian Habitat

Symbol	Scientific Name	Common Name
AGIN2	Agropyron intermedium	intermediate wheatgrass
CAREX	Carex spp.	sedge
POA++	Poa spp.	bluegrass
JUNCUS	Juncus spp.	rush
POTR5	Populus tremuloides	quaking aspen
ROWO	Rosa woodsii	woods rose
SALIX	Salix spp.	willow

IV. MANAGEMENT EVALUATION

A. Purpose

The purpose of this monitoring evaluation is to assess if current management practices are meeting the allotment specific and LUP objectives and to identify management changes needed to meet objectives.

B. Summary of Studies Data

1. Actual Use

a. Livestock

Year	AUMs Used
1983	0
1984	6,283
1985	4,896
1986	0
1987	0
1988	1,143
1989	2,342
1990	4,350

b. Wildlife (Existing Numbers)

The P-D EIS 1982 indicated the forage use was 1,869 AUMs for mule deer and 204 AUMs for pronghorn on this allotment for the period 1971-1975. The 1986 forage use was determined to be 2,552 AUMs for mule deer and 615 AUMs by pronghorn. Survey methods to determine forage use differed between the two time periods, so data is not comparable. In general population trends for big game animals has increased on the Black Rock Range in the last 10 years.

c. Wild Horses

1) Aerial Count Data

Records indicate that the Black Rock East HMA has had census or distribution flights conducted 17 times since 1969. These flights were either conducted by fixed wing or helicopter. Data collected for the period 1969-1992 for both the Black Rock Range East and West HMAs is also presented and summarized in Appendix 3. Total numbers for the East HMA are as follows:

Year	Date	# Horses	Aircraft*
1969	March 12	18	Unspecified
1970	Nov. 10	73	Unspecified
1974	Oct. 7	123	FW (Super Cub)
1975	Feb. 10	92	H (Bell B-2)
1975	July 1	115	Unspecified
1977	Apr. 4-5	282	H (Bell B-1)
1979	Feb. 6	261	Unspecified
1979	Sept. 17	471	Unspecified
1980	July 24-25	46	H (Bell B-1)
1986	June 12	1075	H (Bell B-1)
1987	Oct. 6,8	666	H (Bell B-1)
1989	March 2	141	FW (Cessna 206)
1989	July 17-18	651	H (Bell Soloy)
1990	Feb. 12-14	508	H (Bell Soloy)
1991	July 26	558	FW (Maule 5)
1991	Dec. 26-28	733	H (Hughes 500-D)
1992	March 10	255	FW (Cessna 210)
1992	May 23	525	FW (Maule 5)
1992	July 22	299	FW (Maule 5)

* FW = fixed wing; H = helicopter

The current population of wild horses within the Black Rock Range East HMA is 262+ animals. These horses are distributed from the north end above Rough Canyon to the south end below Emigrant Trail.

The 1987, 1989, 1990, 1991 and 1992 distribution/census indicated wild horses were found north and south of Paiute Creek as follows:

Census Date	Paiute South	Paiute North	Total
1987 (October 6, 7)	448	218	666
1989 (July 17, 18)	408	243	651
1990 (February 12-14)	264	244	508
1991 (December 28)	349	180	529 *
1992 (May 23)	279	163	442
1992 (July 22)	160	97	257**

* an additional 173 adults were counted outside the HMA boundary to the east

** includes 5 animals found just outside the HMA boundary but does not include foals

2) Wild Horse Gathers

Four wild horse gathers have been completed on the Black Rock East and West HMA's since the winter of 1979-1980. The number of wild horses removed during each gather is as follows:

Year	Black Rock East	Black Rock West	Total
1979/1980	81	944	1,025
1986	27	166	193
1988	445*	259	704
1992**	489	0	489

* 245 horses were removed from south of Paiute Creek
200 horses were removed from north of Paiute Creek

** 137 wild horses were released back into the HMA following the gather in accordance with Bureau policy on unadoptable animals. Approximately 60 wild horses identified within the HMA were never gathered, leaving the total in the HMA following the gather at approximately 200.

3) Actual Use

Forage (AUMs) consumed by wild horses in the Black Rock East (HMA) for the years 1987-1990 indicates more forage was consumed south of Paiute Creek.

Black Rock East (HMA)--Forage Consumption

	South of Paiute Creek		North of Paiute Creek			
Year	# of Wild Horses	Actual Use (AUMS)	# of Wild Horses	Actual Use (AUMs)	Total # in HMA	Annual Total
1987	448	4,928	218	2,398	7,326	
1987[1]	203	203	18	18	221	7,547
1988	203	2,436	18	216	2,652	2,652
1989	203	1,328	18	118	1,446	
1989[2]	408	2,227	243	1,326	3,553	4,999
1990	408	604	243	360	964	
1990[3]	264	2,778	244	2,567	5,345	6,309
1991	264	1,848	244	1,708	3,556	
1991[4]	369	1,845	20	100	1,945	5,501
1992[5]	349	698	180	360	1,058	
1992[6]	160	480	91	273	753	
1992[7]	279	558	163	326	884	
1992[8]	160	320	97	194	514	3,209

2. Climatological Data

Climatological Data (NOAA 1983-1991):

Two NOAA stations are presented due to their locations in relation to the allotment. The Leonard Creek Station is approximately 15 air miles NW of Paiute Meadows Ranch, and the Gerlach Station is approximately 36 air miles SW of Paiute Meadows Ranch. 1986 was the first year data was collected at Gerlach.

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[1] Horse numbers change 12/01/87 due to gather 12/87 to 01/88.

[2] Horse numbers increase to reflect census on 7/18/89.

[3] Horse numbers decrease to reflect census on 2/14/90.

[4] Horse numbers increase to reflect census on July 26, 1991. In addition, 213 horses were counted along the common boundary with the West HMA. These horses may have utilized portions of the south and north areas in the East HMA.

[5] Horse numbers adjust to reflect census on 12/28/91. In addition, 173 animals were counted outside the HMA boundary to the east which may have been utilizing portions of the lower elevations of the HMA.

[6] Horse numbers decrease following gather of February 1992, and to reflect census on March 10, 1992.

[7] Horse numbers increase to reflect census on May 23, 1992.

[8] Horse numbers adjust to reflect census on July 22, 1992. This represents the most current data on population distribution.

Leonard Creek Ranch Station
Precipitation (inches)

Year	Growing Season	Annual Total
1983	6.94 M	17.24 M
1984	3.00 M	8.50 M
1985	2.48	6.82 M
1986	4.85 M	9.60 M
1987	5.42	9.30
1988	2.94	8.11
1989	3.98	7.48
1990	4.67	7.19
1991	4.70	8.68

Nine year annual average = 9.21 M

Gerlach Station
Precipitation in Inches

Year	Growing Season	Annual Total
1986	3.71	7.20
1987	6.74	8.82
1988	2.72	6.68 M
1989	3.80	6.69
1990	6.28	8.38 M
1991	4.63	8.47

Six year annual average = 7.70 M

Growing season March - August
M = Partial or incomplete data

It takes approximately five months to receive the precipitation data from NOAA following the data collection, therefore 1992 data is not available at this time.

A Remote Automated Weather Systems (RAWS) meteorological station (Dry Canyon) was installed in June of 1986 approximately nine miles north of Soldier Meadows Ranch on the west side of the Black Rock Range at an elevation of 4,900'. This station is approximately ten air miles from the Paiute Meadows Allotment.

Dry Canyon RAWS Data
Precipitation (Inches)

Year	Annual Total
1986	1.2 M
1987	8.7
1988	5.8
1989	5.6
1990	3.9

M = partial data

3. Utilization Data

a. Use Pattern Mapping (UPM)

Use Pattern Mapping (UPM) has been conducted for four (4) years over the period 1987 through 1990. A partial UPM was completed in April of 1991. In 1991 and 1992 utilization data at the four key areas and additional utilization study sites was collected and is summarized in the next section.

In general, UPM data indicates that the largest area containing the highest levels of utilization was consistently occurred south of Paiute Creek.

The UPMs are on file at the Winnemucca Office for reference.

For the years 1988 through 1991, cattle were authorized north of Paiute Creek only with some drift south of Paiute Creek. In 1992 data has only been collected through mid-July, with the current use extending into November 1992. Monitoring data is generally collected following removal of the livestock from the allotment, prior to the winter use period by wild horses and wildlife.

In these summaries, percent of area is the percent of the area that was actually UPMd, not the percent of the whole allotment.

1) North of Paiute Creek

a) 1987
UPM completed in Fall 1987 to map Spring/Summer use. Wild horse use only.

Heavy grazing use covered approximately 2% of the north area and was associated with the lower end of Paiute Creek.

b) 1988
UPM completed in Fall 1988 to map Spring/Summer use. Wild horse use only.

Heavy grazing use covered approximately 1% of the north area and was indicated near Burnt Springs and Butte Creek.

A small area of moderate use was recorded along Bartlett Creek. Battle Creek was not mapped in 1988.

c) 1988/1989
UPM completed Spring 1989 to map year-round use by wild horses and winter use by cattle.

Heavy grazing use covered approximately 1% of the north area and was indicated near the upper end of Paiute Creek. Battle Creek and Bartlett Creeks were not mapped.

d) 1989
UPM completed Fall 1989 to map Spring/Summer use. Wild horse use only.

Severe grazing use covered less than 1% of the north area. No heavy use was recorded. Slight to light utilization of streambank riparian vegetation occurred along Paiute and Battle Creeks. Bartlett Creek was not mapped in 1989.

e) 1989/1990
UPM completed Spring 1990 to map year-round use by wild horses and winter use by cattle.

Heavy grazing use covered approximately 19% of the north area. Severe grazing use occurred on less than 1/100 of a percent of the allotment.

Slight to light utilization of streambank riparian vegetation occurred along Paiute Creek. Light use was recorded along Bartlett Creek and light to moderate use along Battle Creek.

f) 1990
UPM completed in Fall 1990 to map Spring/Summer use. Wild horse and cattle use.

Heavy grazing use covered approximately 49% of the north area. Severe grazing use covered less than 1% of the north area. Heavy use of streambank riparian vegetation occurred along the north and south forks of Battle Creek. Severe grazing use of streambank riparian vegetation occurred along Paiute Creek, Battle Creek and Bartlett Creek.

2) South of Paiute Creek

a) 1987
UPM completed in Fall 1987 to map Spring/Summer use. Wild horse use only.

Heavy grazing use covered approximately 10% of the south area and was indicated primarily near developed water sources to include Opal Spring and Sheep Spring.

Severe grazing use covered approximately 11% of the south area and was indicated primarily near Indian and Pidgeon Springs.

b) 1988
UPM completed in Fall 1988 to map Spring/Summer use. Wild horse use only.

Heavy grazing use covered approximately 2% of the south area.

Severe use covered approximately 1% of the south area primarily near the seeding.

c) 1989
UPM completed in Spring 1989 to map year-round use. Wild horse use only.

Heavy use covered approximately 12% of the south area.

Severe use covered approximately 16% of the south area and was indicated near Indian Cave and Pidgeon Springs.

d) 1989
UPM completed Fall 1989 to map Spring/Summer use. Wild horse use only.

Heavy grazing use occurred on approximately 2% of the south area and was primarily near Horse, Cherry and Pidgeon Springs.

Severe use was not recorded.

e) 1989/1990
UPM completed Spring 1990 to map year-round use. Wild horse use only.

Heavy grazing use covered approximately 39% of the south area. The heavy use was located in three different areas. The first area was around the paiute seeding, the second was west of Elephant Mountain, and the last area was south of Pidgeon Springs.

Severe grazing use covered approximately 18% of the south area. The severe use occurred between Cain Springs and Pidgeon Springs.

f) 1990
UPM completed Fall 1990 to map Spring/Summer use. Wild horse use only.

Heavy grazing use covered approximately 42% of the south area. Severe grazing use covered approximately 16% of the south area primarily on the Paiute Seeding. Severe grazing use was also recorded near some water sources to include Trough Spring, Cancer Spring, Indian Spring, White Rock Spring.

3) Paiute Seeding--South Paiute

The following information is a description of the grazing use patterns by year and use periods for the Paiute Seeding, which was generally UPMd concurrently with the South Paiute area.

a) 1987
Heavy grazing use covered approximately 100% of the seeded area.

b) 1988
Heavy grazing use covered approximately 62% of the seeded area.

Severe grazing use covered approximately 38% of the seeded area.

c) 1989
Severe grazing use covered approximately 100% of the seeded area.

b. Utilization Data

Four key areas were established during the spring of 1990.

Key Area	Location
Big Mountain (057-01)	T.39N., R.26E., Sec. 6, SE¼, South of Paiute Creek
Battle Ck. #1 (057-02)	T.41N., R.26E., Sec. 25, NW¼, North of Paiute Creek
Battle Ck. #2 (057-03)	T.41N., R.26E., Sec. 13, SE¼, North of Paiute Creek
Emigrant (057-04)	T.38N., R.27E., Sec. 30, NE¼, South of Paiute Creek

A total of 30 utilization cages were established, including those at the four key areas. Utilization data as per the Key Forage Plant Method has been collected at the study sites and/or the key areas since 1990. The following table summarizes the utilization data at the study sites. The summary is broken down into the general locations of the cages as well.

South of Paiute Creek--Low elevation:
nc = not checked

Utilization Level

	1990		1991		1992	
	Summer	Fall	Spring	Fall	Spring	Summer
Cage No.						
1	nc	nc	nc	slight	slight	nc
2	nc	nc	nc	heavy	heavy	no use
3 (057-04)	light	heavy	heavy	moderate	heavy	slight
4	nc	nc	nc	moderate	light	slight
5	nc	nc	nc	slight	light	no use
6	nc	nc	nc	light	slight	moderate
7	nc	nc	nc	no use	no use	nc
8	nc	nc	nc	light	light	nc
9	nc	nc	nc	nc	nc	nc

Paiute Meadows

November 4, 1992

South of Paiute Creek--High Elevation:
Utilization Level

Cage No.	1990 Summer	Fall	1991 Spring	Fall	1992 Spring	Summer
10	nc	nc	nc	light	moderate	light
11	nc	nc	nc	slight	light	no use
12	nc	nc	nc	light	light	light
13	nc	nc	nc	light	moderate	no use
14 (057-01)	slight	moderate	moderate	nc	moderate	light
15	nc	nc	nc	nc	moderate	moderate

North of Paiute Creek -- High Elevation:

Utilization Level

Cage No.	1990 Summer	Fall	1991 Spring	Fall	1992 Spring	Summer
16	nc	nc	nc	heavy	heavy	slight
17	nc	nc	nc	moderate	heavy	slight
18	nc	nc	nc	nc	nc	moderate
19	nc	nc	nc	severe	severe	heavy
20	nc	nc	nc	nc	heavy	moderate
21	nc	nc	nc	light	heavy	slight
22	nc	nc	nc	moderate	heavy	light
23	nc	nc	nc	slight	light	slight
24 (057-02)	light	light	moderate	light	heavy	moderate
25	nc	nc	nc	nc	nc	nc
26 (057-03)	slight	moderate	moderate	heavy	nc	slight
27	nc	nc	nc	nc	nc	light
28	nc	nc	nc	nc	moderate	heavy
29	nc	nc	nc	nc	moderate	heavy
30	nc	nc	nc	nc	nc	no use

nc = not checked due to access restrictions or time/manpower restraints

Utilization levels =		
	no use	
	slight	(1-20%)
	light	(21-40%)
	moderate	(41-60%)
	heavy	(61-80%)
	severe	(81-100%)

Utilization levels measured in the spring are based on the previous grazing year's entire growth and utilization. It does not reflect utilization on the current year's growth of vegetation. Spring monitoring was completed prior to or just after livestock turnout on May 01. Summer or fall utilization is based on the amount of forage utilized to date of the current year's growth. Monitoring in the fall is conducted following removal of the livestock from the allotment.

All four of the key areas are located in upland sites. These key areas were selected in coordination with affected interests in a field tour conducted in the spring of 1990. No key areas were selected in riparian habitats at that time. The existing key areas indicate that use levels change dramatically from year to year and season to season in the uplands.

c. The Quadrat Frequency Trend study method was initiated at the four key areas during the spring of 1990. Additional data is needed to quantify a change or trend at each key area.

Trend data was collected in 1979 at the Paiute Seeding Exclosure. No further data has been collected at this location. More data is needed to quantify a change or trend.

The Paradise-Denio EIS identifies observed trend as downward. (Refer to PD EIS Appendix G. Table 6-1 and Chapter II, 209 PD EIS)

5. Range Survey Data

a. A phase one watershed inventory was conducted in portions of the Paradise-Denio Resource Area from 1971-1974. Livestock forage condition was determined based upon data extrapolation and computations from this inventory. This data extrapolation resulted in the following condition classifications for the Paiute Meadows Allotment:

Good	Fair	Poor
0	15,938	161,158

Appendix G, Pg-28 of the P-D EIS provides more discussion on origin of livestock forage condition.

b. In 1978 a range survey was conducted using the Ocular Reconnaissance Method to provide baseline data for analysis purposes in the Paradise-Denio EIS. The survey, along with suitability criteria indicated that 1,403 AUMs were available in 1978 for livestock and wild horse use in the Paiute Meadows allotment.

6. Ecological Status Inventory

The order 3 soil survey field work has been completed on this allotment. The Ecological Status Inventory has not been completed.

Ecological status was collected at four key areas during the spring 1990. The ecological status is as follows:

Key Area	Ecological Status
Big Mountain (057-01)	Mid Seral (39%)
Battle Ck. #1 (057-02)	Mid Seral (42%)
Battle Ck. #2 (057-03)	Mid Seral (33%)
Emigrant (057-04)	Mid Seral (49%)

7. Wildlife Habitat Inventory

a. Priority Species: Mule deer, sage grouse, pronghorn, bighorn sheep and trout.

b. Paiute, Battle and Bartlett Creeks are designated as potential recovery habitat for the threatened Lahontan cutthroat trout.

c. Other species: chukar, Hungarian partridge and California quail.

d. Special habitat features

1) A special habitat features inventory was conducted in 1977 and 1978. This inventory identified the location and acres of special habitats, listed observed plant and wildlife species, and documented ocular observations of the condition and utilization of these habitats. This information was analyzed in the Paradise-Denio EIS.

2) Special Habitat acreage calculations are approximate figures that will be field checked as time permits.

Riparian habitat	529 acres
Aspen	108 acres
Curlleaf mountain mahogany	345 acres
Ceanothus	86 acres
Serviceberry	15 acres
Bitterbrush	82 acres
Winterfat	112 acres
Ephedra	55 acres

e. Habitat Evaluation

A habitat evaluation has not been conducted on this allotment.

8. Riparian/Fisheries Habitat

a. Stream Survey

Paiute Creek was surveyed in 1976 at 51% of optimum and in 1988 at 43%. Battle Creek was also surveyed in 1976 and was rated at 59% of optimum; Battle Creek rated 58% in 1988. Bartlett Creek was 54% of optimum when surveyed in 1976 and 50% of optimum in 1988.

Summaries of the stream survey findings follow:

1) Bartlett Creek

The pool-riffle ratio index was 78% of optimum in 1976, with riffles being dominant. Quality pools were seldom observed. In 1988, pools were even scarcer, with a pool-riffle ratio index of 12%, and no quality pools.

The stream bottom had an improved proportion of desirable materials: 64% in 1976 versus 76% in 1988. There was also a slight reduction in sedimentation: 22% sand and silt in 1976 versus 18% in 1988. However, there was also a shift in the proportions of the coarser rock substrate materials, resulting in a reduction of spawning gravel from 48% to 26%.

Bank cover and stability were 50% and 61% of optimum, respectively, in 1976. This had improved to 76% and 86% in 1988. The degree of ungulate damage, however, had increased from 50% in 1976 to 86% in 1988.

On the portions of Bartlett Creek which were surveyed in 1976, 56% was shaded. This percentage was not determined during the 1988 stream survey.

In 1976, the water was relatively clear at the upper stations, but became increasingly turbid downstream (30 Jackson Turbidity Units (JTUs) at S-1). Turbidity was not measured in 1988.

In 1989, water quality was measured by NDOW, but was taken at one point in time and will not be interpreted for this report.

The habitat was 54% of optimum in 1976, with the main limiting factors being the lack of quality pools and the lack of bank cover. In 1988, the habitat condition index was 50%. While bank cover had improved considerably, the continued occurrence of high levels of damage to the streambanks had prevented channel evolution processes from generating pool structure.

Although a BLM stream survey was not conducted in 1992, visual observations and monitoring of key streambank riparian plant species were conducted in 1991 and 1992 by the resource area fishery biologist. Results of this data indicated moderate to heavy livestock use on key riparian plants and woody species. Several locations along Bartlett Creek are showing heavy trailing which is contributing significant amounts of sediment to the stream. Streambanks are not recovering as they should be due to continuous livestock use in the stream/riparian zone. Heavy to severe use on young aspen trees has also been observed. These young aspen are critical in providing streambank stability and cover.

2) Battle Creek

The stream survey of Battle Creek in 1976 found that pools constituted 39% of the stream (pool/riffle ratio index equal to 78%), but also found that few of these were quality pools. This dropped pool quality index for the stream to 41% of optimum. In 1988, only 24% of the stream was in pools, and the pool quality index had dropped to 35%.

The stream bottom materials of Battle Creek in 1976 included 59% desirable materials and 28% sediments. Spawning gravel made up 37% of the bottom materials. In 1988 the bottom materials were 89% desirable materials and 15% sediments. Spawning gravel had decreased to 25% of the bottom materials.

Bank cover and stability of Battle Creek were 52% and 64% of optimum, respectively, in 1976. Ungulate damage ranged from 10% to 50%. In 1988, bank cover was 50% and bank stability was 71%. Bank damage was rated at 91%. The long periods of livestock use on this portion of the allotment have contributed to the increased bank damage that was observed between 1976 and 1988.

Only 34% of the stream was shaded in 1976. The peak water temperature recorded during the two day survey in July was 64°F. Neither the percentage shaded, nor water temperature were determined in 1988. During the summer of 1990, a recording thermograph placed in Battle Creek indicated a peak temperature of 67.8°F.

The habitat in Battle Creek was 59% of optimum in 1976. In 1988, the habitat condition index was 58%. The lack of pools and pool quality were the chief limiting factors. The bank damage has prevented channel evolution from generating and maintaining increased pool and quality pool structure. The time spent along the creek is a function of the high numbers of large herbivores present on the allotment. This is due mostly to cattle use season long (May 01 through November 01) and wild horse use year long. The wild horse population on the Black Rock Range has increased to levels where they have impacted the vegetation resources in their preferred use areas, including riparian communities.

Data collected in the 1992 NDOW stream survey conducted on the North Fork of Battle Creek is not available at this time. However, visual observations and key forage plant monitoring by the area fishery biologist indicate that stream and riparian conditions are declining. The sixth year of drought, combined with use by livestock and wild horses in excess of the carrying capacity, are impeding any progress towards recovery of the North Fork of Battle Creek. although adequate water flows are present year round, streambanks are being degraded faster than they can be recovered. Very few quality pools exist due to excessive sediment loads.

3) Paiute Creek

The pool-riffle ratio index of Paiute Creek was near the optimum at 92%, but the small extent of quality pools reduced the pool quality rating to 26% of optimum in 1976. By the time of the 1988 stream survey, the proportion of the stream in pools at the five stations surveyed that year had decreased to 0%.

The stream bottom of Paiute Creek in 1976 was 41% desirable materials and 30% sediments. Spawning gravel made up 36% of the stream bottom. In 1988, desirable materials comprised 98% of the bottom materials. Sedimentation was 9%. Spawning gravel were reduced to 31%.

Much of the banks were deeply eroded, reflected as ungulate damage ratings of 50% to 90% throughout the four stations surveyed in 1976. Bank cover and stability were 39% and 58%, respectively. In 1988, bank damage was rated at 100%; severe bank erosion and accelerated erosion and sloughing occurred over virtually all of the surveyed portions of the stream channel. Bank cover and stability were 53% and 63%.

Only 37% of the stream was shaded in 1976. The creek averaged 0.16 feet deep, with a flow of 1.03 cfs. These factors resulted in a maximum water temperature of 80°F, exceeding water quality standards. The percentage shading and water temperature were not determined in 1988, however the depth averaged 0.20 feet and, as stated above, bank cover still did not meet the objective.

In 1976, the habitat condition index for Paiute Creek was 50%. Warm water temperatures, a scarcity of quality pools, and poor benthic composition were the primary limiting factors. The habitat condition declined to 43% of optimum in 1988 without livestock use in 1986 and 1987. The lack of pools and the degree of damage to the streambanks, which counteracts channel development toward providing better pool structure, were still the most critical factors in the poor habitat conditions. This is due to the growth of the wild horse population of the Black Rock Range and their use of Paiute Creek in the absence of livestock at the time. Current impacts to the stream have been documented to be attributable primarily to the livestock use combined with the remaining wild horse use. The current riparian conflicts on Battle and Bartlett Creeks tend to be the result of the livestock management on those portions of the allotment. In addition, there has been a significant increase in

wild horse use of the Battle Creek and Bartlett Creek drainages in recent years. More wild horses were observed in the North Fork of Battle Creek in 1992 during collection of monitoring data than in 1991, even following a wild horse gather in 1992. Seasonal use of these drainages by wild horses which migrate between Black Rock Range West and East HMAs also contributes to excessive use during the hotter parts of the year.

Paiute Meadows Allotment Stream Survey Data

Paiute Creek Stream Survey Data

Date of Survey	Survey Agency	Percent of Optimum	Percent Sedimentation (% Opt.)	Bank Cover (% Opt.)	Bank Stability (% Opt.)	Water Temp. (°F)
(Objective Levels)		>60	<10	>60	>60	<70
Paiute Creek (all stations)						
8/3/76	BLM	51	30	58	58	80
7/13/88	BLM	43	9	63	63	--

Battle Creek Stream Survey Data

Date of Survey	Survey Agency	Percent of Optimum	Percent Sedimentation (% Opt.)	Bank Cover (% Opt.)	Bank Stability (% Opt.)	Water Temp. (°F)
(Objective Levels)		>60	<10	>60	>60	<70
Battle Creek (all stations						
8/4/76	BLM	59	28	52	64	64
7/18/88	BLM	58	15	50	71	--

Bartlett Creek Stream Survey Data

Date of Survey	Survey Agency	Percent of Optimum	Percent Sedimentation (% Opt.)	Bank Cover (% Opt.)	Bank Stability (% Opt.)	Water Temp. (°F)
(Objective Levels)		>60	<10	>60	>60	<70
Bartlett Creek (all stations)						
8/2/76	BLM	54	22	50	61	63
7/11/88	BLM	50	18	76	86	--

9. Wild Horse and Burro Habitat

Population Data

Utilization data for the Black Rock East HMA as indicated by census data shows that forage utilization and populations are consistently greater south of Paiute Creek compared to north of Paiute Creek. For the period 1987 through July 1992 forage consumed by horses south of Paiute Creek was 20,273 AUMs or 3,379 AUMs avg/year with only a portion of 1992 concluded, and north of Paiute Creek 9,964 or 1,661 AUMs avg/year for a total average of 5040 AUMs.

UPM data collected from 1987 to 1990 indicated that the highest levels of utilization occurred south of Paiute Creek. Use patterns indicate that the southeast portion of the HMA from Lone Spring and White Rock Spring south is the recognized winter use area. Horses are scattered over the allotment the remainder of the year.

Utilization data collected at utilization study sites and key areas throughout the allotment indicate seasonal use patterns by wild horses vary depending upon the climate conditions. In the winter of 1991 to 1992, conditions were dry and mild. Wild horses were gathered from the lower elevations in February, which did reduce somewhat the amount of use in AUMs made through the winter. However, concentrations of animals were still greatest in the lower elevations of the southern half of the allotment and HMA. The condition of the wild horses as they were removed varied from quite poor to healthy. The utilization levels and patterns exhibited in 1991-1992 closely resembled those patterns and levels documented in the UPMs of 1987-1990. Some areas did receive much lighter use due to more open conditions over the winter, allowing the wild horses to disperse to the higher elevations throughout the winter months, and earlier in the spring than was apparent in past years.

Census data for 1987 through 1992 indicates an irregular population as well as distribution pattern both in the Black Rock East HMA and south and north of Paiute Creek. General distribution in December 1991 placed 34% of the population north of Paiute Creek, and 66% south of Paiute Creek, demonstrating the key winter area of use is south of Paiute Creek. Distribution of wild horses following the 1992 gather has been erratic due to nearly immediate migration of animals from the West HMA into the East HMA following the conclusion of the gather. The July 1992 distribution flight indicates that at the present time there are 267 adult wild horses within the Black Rock Range East HMA. Of this population, 97 animals or 36% are north of Paiute Creek, and 170 or 64% are south of Paiute Creek.

Data indicates that in 1980 the wild horse population on the HMA as observed by census was 46 animals. This census was conducted immediately following a wild horse removal from the East HMA. The 1986 census indicated a population increase to 1,075 animals. The number indicates a high probability of wild horses moving within the Black Rock Range between the West and East HMAs as this total far exceeds what would be expected from an isolated population. It is also possible that horses are migrating into the HMA from other HMAs. In 1985 and 1986 no livestock were turned out on the allotment providing an opportunity for horses to migrate into unused areas.

Census data does indicate as numbers of horses increase, the population expands further out into the Black Rock West and East HMAs. Wild horses have moved east of the Black Rock East HMA and south out of both HMAs. The wild horses of both HMAs have expanded their range north beyond Rough Canyon and Summit Lake Mountain, and as far north as the Mahogany Creek Exclosure and Dry Lake. This expansion has occurred with the presence of livestock in the north half of the Paiute Meadows allotment.

10. Water Quality

Available data - Lab water quality analysis was done in 1976 and 1979 on Bartlett Creek and Paiute Creek. Stream survey water quality analysis with a Hach Kit was done in 1976 on Battle, Bartlett, and Paiute Creeks.

Battle Creek - Temperatures are consistently too high for cold water aquatic life and fecal coliform and turbidity may also be problems, but more data is needed. TDS was low (1976).

This data predates the evaluation period and the current management applied to this allotment. Therefore, it is not indicative of the present status of the water quality within the three streams.

11. Other Information

Normal maintenance on most range improvements has not been conducted, leaving them in poor condition. The majority of the developed water sources are in need of reconstruction. There are no boundary fences on the allotment with the exception of the northern boundary between Paiute Meadows and the Pine Forest allotment along Bartlett Creek. The Paiute Seeding fence is in need of total reconstruction or complete abandonment with removal of materials. Several drift fences constructed over the years are of limited effectiveness due to maintenance and traffic.

The Rough Canyon Wildlife Exclosure located between Rough Canyon and the North Fork of Battle Creek has suffered from several factors. Evaluation of the effectiveness of this exclosure should be completed. A developed reservoir exists at the southwest end of the exclosure, just outside the fence which provides water to wild horses, wildlife and livestock. Pressure from grazing animals upon the fence as the result of this proximity is great. Modifications should be made in the design of this exclosure in order to accomplish to purpose and objectives. Elimination of the reservoir should be considered, to allow the moisture that is currently trapped outside the exclosure to filter through the meadows complex and enhance it's recovery. Currently this reservoir only holds water into late June. In addition, cattleguards should be placed at both ends of the exclosure on the main road to eliminate the need to open gates for vehicular traffic. Fence maintenance has been completed annually by the BLM however, the gates are continually left open due to high traffic, allowing livestock and wild horses access to the meadow.

V. CONCLUSIONS

A. Short Term Objectives

Refer to Section III C.3 for Short and Long Term Objectives.

1. Use pattern mapping and utilization studies completed during 1990-1992 indicate this objective is not being met on Paiute Creek, Battle and Bartlett Creeks.

2. Use pattern mapping and utilization studies completed during 1990-1992 indicate this objective is not being met.

3. Use pattern mapping collected from 1987-1990, and utilization studies conducted from 1990-1992 indicate this objective is not being met. During 1987-1989, the highest levels of utilization have been south of Paiute Creek, which has been made by wild horses; however, use greater than 50% has occurred north of Paiute Creek in varying areas since 1989.

4. Use pattern mapping indicates this objective is not being met for all years 1987, 1988, 1989 and 1990. Utilization studies in 1991 and 1992 confirm that this objective was not met in those years.

B. Long Term Objectives

1. Baseline and ESI information has not been collected to evaluate progress in attaining this objective. Current demand for mule deer is 2,552 AUMs, 615 AUMs for antelope and 0 AUMs for bighorn. Existing populations are above reasonable numbers for mule deer and pronghorn antelope.

2. Baseline data has been collected during the initial year of establishment during 1990; however, additional data is needed to evaluate the progress towards achievement of this objective. Analysis of the short-term upland habitat objectives primarily south of Paiute Creek is an indication that progress towards achievement of this objective is not being made in this area of the allotment.

3. Baseline and ESI data has not been collected to evaluate the progress towards achievement of this objective. This objective will be redefined/quantified with ecological status condition as information becomes available.

4. a. Baseline data has been collected during the initial year of establishment during 1990, however additional data is needed to evaluate the progress towards achievement of this objective, analysis of the short-term upland habitat objectives primarily south of Paiute Creek indicates utilization in the uplands is not being met. Use Pattern Mapping data indicates that the country south of Paiute Creek has received the highest levels of utilization.

   b. This objective is being met.

5. Baseline and ESI information has not been collected to evaluate the progress towards achievement of good condition in ceanothus vegetation types.

6. Baseline and ESI information has not been collected to evaluate the progress towards achievement of good condition in mahogany vegetation types.

7. Baseline and ESI information has not been collected to evaluate the progress towards achievement of good condition in aspen vegetation types.

8. Baseline and ESI information has not been collected to evaluate the achievement of this objective. Analysis of short term objectives is an indication that progress is not occurring on 52 acres of riparian and meadow habitat but may be occurring on the other 477 acres of riparian and meadow habitats.

9. Baseline and ESI information has not been collected to evaluate the achievement of good condition in serviceberry, bitterbrush, ephedra and winterfat vegetation types. Monitoring of age and form class structure in 1990 was satisfactory.

10. Comparison of stream survey data from 1976 with that from 1988 indicates that habitat conditions during that period declined on Bartlett Creek and Paiute Creek, and that no significant progress was made on Battle Creek. Analysis of use pattern maps since 1988 in relation to the short term objectives for the riverine riparian vegetation indicates that progress is not being made on any of the three streams. Use levels in 1991 and 1992 continue to be in excess of the objectives for streambank riparian habitats. The use is attributable to livestock in Bartlett Creek, with little use by wild horses. In Battle and Paiute Creeks, the use is attributable to both wild horses and livestock.

11. Baseline information and habitat condition has not been collected to evaluate the progress towards achievement of this objective. No vegetation treatments to reduce sagebrush have occurred during the evaluation period.

12. Baseline data has not been collected to evaluate the progress towards achievement of this objective.

13. Baseline and trend information has not been collected to evaluate the achievement of this objective. However, analysis of short term objectives indicates that progress is not being made towards this objective due to heavy and severe utilization by wild horses.

VI. TECHNICAL RECOMMENDATIONS

Background:

On November 22, 1991 a Final Full Force and Effect Multiple-Use Decision for the Paiute Meadows Allotment was issued along with the Black Rock Range East Herd Management Area Gather Plan and a Livestock Use Agreement with Dan Russell, permittee. An Environmental Assessment was prepared for the gather analyzing the alternatives to gathering and the impacts to the vegetative resources in the Paiute Meadows Allotment. The grazing decision was subsequently appealed by the Nevada Department of Wildlife, the Sierra Club and the Natural Resources Defense Council to an Administrative Law Judge (ALJ). The grazing decision and the wild horse gather plan were appealed by the Nevada Commission for the Preservation of Wild Horses, Wild Horse Organized Assistance, the American Horse Protection Association and the Humane Society of the United States of America to the Interior Board of Land Appeals. Additional consultation with these groups and the permittee took place from December 10, 1991 through January 1992 discussing the appeals and the potential for an agreement to withdraw said appeals. This consultation resulted in an agreement to proceed with the gather provided that the November 22, 1991 decision be vacated following the removal and that the interim number of horses to be left on the range would be 200 head. This agreement was signed on February 6, 1992 by the State Director.

Provisions of the agreement have been met as they relate to the wild horse issue. The wild horse gather commenced on February 12, 1992 and concluded February 22, 1992. Two hundred wild horses were released back to or remained in the HMA. On March 10, 1992 a distribution flight of the HMA was conducted. The number of wild horses observed within the Black Rock Range East HMA was 255, an increase of at least 55 animals in less than three weeks following the conclusion of the gather. The increase is most likely due to migration from the Black Rock Range West HMA which did not have any wild horses removed. Another distribution flight was conducted on May 23, 1992 which indicated 442 adult wild horses within the East HMA, an increase of 187 animals. A third distribution flight was conducted on July 22, 1992 which indicated that 267 adult wild horses are within the HMA and adjacent areas.

Upon appeal of the November 22, 1991 Full Force and Effect Multiple Use Decision, the decision and the appeals were transmitted to IBLA and the Office of Hearings and Appeals (OHA). Following the conclusion of the gather, the Bureau submitted a request to IBLA and OHA on March 6, 1992 to remand the decision and the appeals that were not withdrawn back to the Area Manager for reconsideration. Authority to supercede or vacate the decision could not be exercised until this action was completed. The resource area received an order from the ALJ remanding the decision and setting aside the appeals of the livestock portion of the MUD on March 27, 1992. The resource area received an order from IBLA remanding the decision and dismissing the appeals in part and setting aside the appeals in part on April 28, 1992. According to 43 CFR 4160.3(c), "Except where grazing use the preceding year was authorized on a temporary basis under §4110.3-1(a) of this title, an applicant who was granted use in the preceding year may continue at that level of authorized active use pending final action on the appeal." The appeals of the wild horse gather were withdrawn, however the livestock portion and the remainder of the wild horse decision appeals remained in effect until the decision and the appeals were remanded back to the Area Manager for reconsideration as referenced above.

Another provision contained within the agreement pertained to consultation and process requirements prior to the issuance of a new decision. On February 19, 1992 a consultation meeting was held in Reno, Nevada for interested parties in the allotment evaluation process within the Paradise-Denio Resource Area. This meeting was attended by NDOW, WHOA, the Commission for the Preservation of Wild Horses, the Sierra Club, permittees and their representatives. Discussed at this meeting were several topics of concern to all parties including setting carrying capacities for livestock and wild horses, allotment specific multiple-use objectives and utilization levels. On March 10, 1992 a second consultation meeting was held in Winnemucca, Nevada specifically for the affected interests of the Paiute Meadows Allotment. This meeting was attended by the Nevada Department of Wildlife and the BLM. Several of the interest groups refused to attend on the basis that their appeals were still pending, a new decision had not been issued to vacate the previous Final Full Force and Effect Multiple-Use Decision, and upon advice of legal counsel. At this particular meeting, attendees (NDOW) were advised of the status of the decision and the effect on the 1992 grazing license.

On May 11, 1992 a proposed decision to vacate the November 22, 1991 Final Full Force and Effect MUD was issued to interested parties. This proposed decision became final on May 27, 1992 in absence of any protests. This decision was appealed by the permittee on June 11, 1992 and is pending.

In addition, the agreement stated that the Bureau would issue a new, proposed multiple-use decision for the Paiute Meadows allotment following consultation requirements. A new decision could not be issued until IBLA remanded the case back to the district for reconsideration. This precluded the Bureau's ability to issue a decision to the permittee affecting only his license. The agreement specified a proposed "multiple-use decision" would be issued. All of these factors resulted in the authorization of active preference to the permittee in the 1992 grazing season, in spite of numbers of wild horses in excess of the AML and the carrying capacity. For 1992, this will result in an approximate actual use by wild horses and livestock of 10,000 AUMs, and will exceed the carrying capacity by over 6000 AUMs, or 150%.

The agreement also stipulated that a new decision action cannot take place without further consultation and coordination with the Sonoma-Gerlach Resource Area's planning efforts for the Soldier Meadows Allotment and the Black Rock Range West HMA. The Paradise-Denio Resource Area is working closely with the Sonoma-Gerlach Resource Area to identify the interrelationships between the two HMAs in the Black Rock Range and the two allotments. Recommendations have been developed in the form of several alternatives to management of the Paiute Meadows allotment and the Black Rock Range East HMA and are presented in the revised Technical Recommendations section below. The body of the Draft Evaluation has not been revised with the exception of the appendices where reference to 1991-1992 is made. This second draft allotment evaluation is the next step in the consultation process following the withdrawal of the appeals and the subsequent remanding of the decision to the district for reconsideration. No changes have been made through Section VI. It has been revised from Section VII - Technical Recommendations. As this is considered a second draft allotment evaluation, the contents through Section IX - Summary of Comments and Responses will be revised following the comment period for this draft, and presented in the Final Evaluation. The Selected Management Action may be determined from these recommendations and any other alternative designed to meet management objectives that are presented to the Bureau in the consultation process. Additional drafts and/or public meetings may be held to discuss additional alternatives if it is warranted.

1. Recommended Alternatives

The following alternatives, in addition to the range of alternatives analyzed within the 1981 EIS, have been developed following consultation with affected interests for the Paiute Meadows Allotment. These alternatives are presented first for the carrying capacity and the wild horse and livestock grazing management of the allotment. Additional recommendations are presented for revision of the allotment specific multiple-use objectives.

Alternative 1.

a. Carrying Capacity

The combined carrying capacity for livestock and wild horses shall be 3942 AUMs as determined through analysis of the monitoring data collected from 1987 through 1990. Monitoring data collected in 1991 and 1992 indicate that utilization levels and distribution are similar to previous patterns. Wild horse numbers increased in 1991 and decreased in 1992, while livestock numbers in the North Paiute use area remained the same through the monitoring period.

Analysis was completed in accordance with BLM Technical Reference 4400-7, "Analysis, Interpretation and Evaluation", utilizing the Desired Stocking Level Formula and a weighted average of utilization using the heavy and severe use zones (see Appendix No. 2 for details). At the present time, key areas have only been designated in upland sites.

b. Wild Horses

Combine the AML of the Black Rock Range East HMA with that of the Black Rock Range West HMA due to the documented migration of wild horses between the two HMAs and/or determine that the two HMAs shall be managed as one, with one AML. The combined AML would be based on the carrying capacities and thriving natural ecological balances within each allotment. The HMAs would be combined to assist in orderly administration of the Paiute Meadows and Soldier Meadows allotments. This would be accomplished by allowing both HMAs a percentage of the total AML based on historical distribution, and by making adjustments in other resource uses.

This action is necessary due to the historical migration and distribution patterns of the wild horses within both HMAs. Distribution flights and census conducted from 1969 to the present, indicate a tendency for the wild horses to regularly migrate between the two HMAs. The numbers of animals and the patterns of use are not consistent within the HMAs.

A reduction in the AML for the Black Rock Range East HMA is necessary to "preserve and maintain a thriving natural ecological balance and multiple-use relationship" (Public Law 92-195 aka The Wild Horse and Burro Act of 1971). Livestock use has been one of the multiple-uses of this allotment since prior to the signing of the Taylor Grazing Act in 1935. The livestock grazing active preference was adjusted by 44 percent in 1990 from 7827 AUMs to 4350 AUMs in a transfer to the current permittee to provide forage for the existing population of wild horses and wildlife. The livestock grazing preference may be adjusted again to achieve the carrying capacity of the allotment during the interim and the long term management of the allotment.

There were several years in the mid 1980s when the livestock operator did not activate the grazing preference for use. This was voluntary, and did not eliminate the preference from availability for use at any

time. During this period the Total Preference for the Paiute Meadows Allotment remained at 7827 AUMs, with 4350 AUMs of Active Preference and 3477 AUMs of Non-Use.

It is recommended that the combined AML for the Black Rock East/Black Rock West HMAs be 242 animals under this alternative. The recommended AML has been derived by using the monitoring data from the Paiute Meadows and Soldier Meadows allotments. Analysis of the monitoring data for Paiute Meadows indicates that the carrying capacity for livestock and wild horses is 3,942 AUMs. Adjustments for use will be made using the Land Use Plan proporation of wild horses and livestock within the Paiute Meadows allotment: 92% livestock to 8% wild horses. Allocation of the carrying capacity following that proportion will result in 312 AUMs for wild horses in the Black Rock East HMA. In the Black Rock West HMA, based on a 20 percent use level in rested pastures, the forage available for wild horses is 2,592 AUMs (see Soldier Meadows Evaluation for rationale). In combining the East and West Black Rock HMAs, there would be 2,904 AUMs of forage available for an AML of 242 adult wild horses. We propose to call the combined HMA the Black Rock Mountain HMA.

Natural tendencies for the animals to distribute through both HMAs/allotments should result in approximately 121 animals utilizing the Black Rock Range East HMA year round. This estimate is based on historical distribution and census data that indicates that the proportional distribution of wild horses between the two HMAs is approximately 50% in the West HMA and 50% in the East HMA. This would result in a total of 1,453 AUMs used by wild horses in the Paiute Meadows Allotment. The remaining 2,490 AUMs could then be used by livestock.

The Strategic Plan for the Management of Wild Horses on the Public Lands was signed June 6, 1992. The policy states that unadoptable wild horses will remain on the public lands, and that other measures such as fertility control may be utilized for population management. At the present time it is the BLM's policy in Nevada to return unadoptable wild horses to the public lands they were gathered from that are six years of age or older. At the time of the 1992 gather, this policy was to return wild horses in excess of nine years of age. Following the 1992 gather, 137 wild horses of the 632 total that were gathered were returned to the HMA. The 137 wild horses returned to the range along with the 63 adults that were not captured equal the 200 wild horses that we agreed to leave on the Black Rock East HMA until the re-evaluation of the allotment. A model has been developed to estimate the population dynamics for the herd that currently resides in the Black Rock Range East HMA as a result of the 1992 gather. The population model uses age specific survival and fecundity rates derived from the results of the 1992 Black Rock East gather. For details see Appendix 4. To determine year-to-year survival, the number of animals in each age class is multiplied by the appropriate survival parameter, rounded to the nearest integer, and added to the next year's age class. The foals produced each year is calculated by multiplying the number of females in each age class by the appropriate fecundity parameter, summing the total, rounding to the nearest integer

and dividing the foals equally between the male and female zero age class (i.e. a 50:50 sex ratio at birth is assumed). The model also incorporates a random mortality generator in the 4-9 age classes to simulate mortality which occurs, but is not caught by the model due to rounding. This involves randomly subtracting zero or one from the total number in each of these age classes.

Only one gather of the 0-5 age class is assumed. If a second gather of these same age classes is done, it will result in the virtual extinction of the population because the most fecund age classes have been removed. The following scenario illustrates this. Assume gathers of 0-5 year olds in fall 1993 and 1999.

Year	# Adult Males	# Adult Females	# Adults
1992	161	184	345
1993	163	184	347
1994	86	92	178
1995	87	92	179
1996	84	87	171
1997	78	80	158
1998	73	74	147
1999	71	69	140
2000	23	17	40
2001	18	13	31
2002	14	10	24
2003	12	8	20
2004	10	7	17
2005	8	7	15
2006	7	6	13
2007	7	7	14
2008	8	7	15
2009	7	6	13
2010	8	6	14
2011	8	6	14
2012	7	6	13
2013	7	7	14
2014	8	8	16
2015	9	10	19
2016	8	10	18
2017	9	11	20
2018	11	12	23
2019	14	13	27
2020	16	16	32
2021	18	18	36

In this case the population is not totally wiped out. This is due to the abnormally large percentage of older animals in the initial population, which were returned to the range following the 1992 gather. These animals, despite their low fecundity, will produce enough foals to maintain the population, albeit at a very low level, for several years. Wild horse populations at these levels for such a long time are much more susceptible to catastrophic events such as accidents, disease, and droughts which can seriously decimate if not totally extinguish the

population. The results of the model indicate that the AML will not be reached with one gather. A second gather that removes part of the 0-5 age class will be necessary in 1999. During the interim period the wild horses would require the entire carrying capacity in 1993, and from 66% to 75% of the carrying capacity between 1994 and 1999. Therefore, active use by livestock will be adjusted to meet the carrying capacity.

c. Livestock

1. 2490 AUMs would be available to livestock for use within the Paiute Meadows Allotment. Grazing management must be compatible with other uses within the allotment, including wild horses and wildlife. Current monitoring data indicates utilization by livestock in excess of management objectives in riparian habitats in the North Paiute Use Area on Bartlett, Battle and Paiute Creeks at the previous authorized level of 4350 AUMS during a season long use period from May through October. A reduction in preference to 2490 AUMs and a change in the season of use would provide for the achievement of management objectives for the vegetative and aquatic resources. The grazing management of the Paiute Meadows Allotment would be changed as follows:

From:

	Preference			
Total	Suspended	Active	Not Scheduled	Active Use
9932	2105	7827	3477	4350

To:

	Preference			
Total	Suspended	Active	Not Scheduled	Active Use
9932	7442	2490	0	2490

Current BLM regulations state that reductions shall be implemented by decision or agreement, with adjustments exceeding 10% of the Active Use implemented over a five year period unless an agreement can be reached with the permittee to implement it sooner.

2. Implement a deferred grazing system in the North Paiute Use Area only. Livestock grazing will not be scheduled for the South Paiute Use Area until such time as monitoring data indicates that livestock grazing may resume in a thriving natural ecological balance with the other multiple-uses.

The grazing system for the Paiute Meadows Allotment would be as follows:

North Paiute
622 cattle 03/15 to 07/15 2490 AUMs

Use will begin in the lower elevations east of the Leonard Creek Road. Livestock use of the higher elevations will be deferred until after May 01.

No livestock use is authorized north of Paiute Creek after July 15 of each year. No livestock use will be authorized in the South Paiute Use Area. No winter use by livestock would be authorized due to direct conflicts with wildlife and wild horse use of the area during winter months.

Designated Areas of Use:

The areas of use are unfenced, with some natural barriers preventing livestock drift. Intensive herding practices will be required to ensure that livestock remain in the designated use area. This may entail a full time range rider to be working livestock during the authorized use period.

Use Areas:

1) North Paiute Use Area:

This area would include all the lower foothills and alluvial fans along the eastern portion of the allotment north of Paiute Creek that fall below 1550 meters in elevation. The high elevation use area would include Paiute Creek above the drift fence and higher country above 1550 meters in elevation.

3) South Paiute Use Area:

This use area would not be authorized for livestock use. This area is the southern portion of the allotment specifically from Paiute Creek south including the higher country above 1550 meters in elevation and the low elevation country below 1550 meters, and would be designated for wild horse and wildlife use only.

Terms and Conditions:

Flexibility in turnout, movement between use areas, and removal dates will be allowed if approved in advance by BLM and if consistent with management objectives.

Salt and/or mineral blocks shall not be placed within one quarter (¼) mile of springs, streams, meadows, riparian habitats or aspen stands.

The permittee is required to perform normal maintenance on the range improvements to which he has been assigned maintenance responsibility.

The permittee will be required to do the necessary riding to keep livestock in the proper use area during the proper time periods.

Range Improvements

Existing range improvements in need of normal maintenance and/or reconstruction will be identified and project maintenance will be conducted prior to authorization of livestock in the areas designated for livestock use. Field survey of feasibility for development of alternate water sources within the allotment will also be conducted within that time frame. Project planning will incorporate development of previously undeveloped water sources to improve water availability for wildlife, wild horses and livestock. All spring sources will be fenced to exclude wild horse or livestock use and damage, with access to water at a trough or reservoir outside the spring exclosure.

The permittee will be required to maintain any range improvements that benefit the livestock operation. Maintenance will be performed prior to scheduled use.

Paiute Seeding

The Paiute Seeding Fence will not be reconstructed. The seeding area is in poor to fair condition following over 10 years of use without adequate fencing. Existing fence materials will be removed, and the area will be managed along with the adjacent uplands. Wild horse and wildlife populations rely upon the existing reservoir in the seeding for water during the summer months. This water is critical to wild horses and wildlife in drought years.

Other Fences

Several areas along the western boundary of the Paiute Meadows allotment above Battle Creek and Bartlett Creek have been identified as providing opportunities for drift to occur into neighboring allotments and their riparian habitats. Construction design and implementation of "gap" or "drift" fences will be initiated to restrict drift of livestock. These fences will not be continuous, and may require modification as livestock and wild horses adjust to their presence. Project planning of these fences will be coordinated with interested parties.

Rationale:

The Paiute Meadows Allotment has experienced inconsistent management of livestock for the past 13 years. The livestock operation has changed hands, non-use has been taken in varying amounts, from 20% to 100% due to fluctuations in the livestock operators, use areas have changed due to a transfer of the preference to the current permittee, range improvements have not been maintained, water availability is minimal in some areas due to drought, etc..

The wild horse population has likewise experienced great variation in numbers and management. The AML established by the Land Use Plan has

not been achieved except for short periods immediately following a gather. Numbers of wild horses have increased in both the West HMA and the East HMA due to absence of livestock, and migration from adjacent HMAs. Regular gathers to achieve the Land Use Plan AML of 59 have not been performed. Gathers have occasionally been conducted on the East HMA and not the West HMA, creating a niche in the habitat for migration in the short term, and making retention of the population at or close to the AML impossible.

It is the objective of the Bureau to manage for a thriving natural ecological balance and multiple-use relationship in the Paiute Meadows Allotment. The livestock operation has voluntarily taken 44% non-use of the active preference since 1990 as a result of a transfer to the current permittee. The livestock active grazing preference will again receive a reduction as a result of this option, for a reduction in total preference of 72%. The wild horse AML would be combined with the West HMA for a combined AML of 242 wild horses, to ensure that management objectives are achieved for the vegetation resource within both HMAs and allotments. This combination of adjustments is necessary to achieve the carrying capacity of the Paiute Meadows allotment of 3942 AUMs.

This carrying capacity was derived from monitoring data collected on the allotment from 1987 through 1990, and confirmed with monitoring data from 1991-1992. The calculations are presented in Appendix 1. Monitoring data has indicated that vegetative objectives are not being achieved in the south half of the allotment with just wild horse use, or in the north half of the allotment with wild horse and livestock use. Therefore, an adjustment is needed in the authorized use by livestock and the wild horse population size to achieve the thriving natural ecological balance of the allotment.

In addition, long term stream habitat objectives have not been met in the North Paiute Use area. Wild horse populations use the stream habitats year round, but not in the same manner that livestock utilize them. Previous to transfer of the grazing preference to the current permittee, and authorization of 56% of the grazing permit, improvement in stream habitats was noted. A reduction in the season of use for livestock is necessary to ensure continued growth of riparian vegetation and improvement towards long term streambank riparian habitat conditions in the absence of riparian habitat protection fences. The additional reduction in active preference combined with the change in the season of use will ensure that progress.

Alternative 2.

a. Carrying Capacity

The combined carrying capacity for livestock and wild horses shall be 3942 AUMs as determined through analysis of the monitoring data collected from 1987 through 1992. Monitoring data collected in 1991 and 1992 indicate that utilization levels and distribution are similar to previous patterns. Wild horse numbers increased in 1991 and decreased in 1992, while livestock numbers in the North Paiute use area remained the same through the monitoring period.

Analysis was completed in accordance with BLM Technical Reference 4400-7, "Analysis, Interpretation and Evaluation", utilizing the Desired Stocking Level Formula and a weighted average of utilization using the heavy and severe use zones (see Appendix No. 2 for details).

b. Wild Horses

Maintain the current Appropriate Management Level (AML) established in the Land Use Plan of 59 adult wild horses within the Black Rock Range East HMA. This AML is based upon monitoring data collected form 1987-1990 that indicates the combined carrying capacity for the allotment is 3942 AUMs. Adjustments to achieve the carrying capacity have been derived using the Land Use Plan proportion of wild horses and livestock within the Paiute Meadows Allotment of 92% livestock to 8% wild horses. If allocation of the carrying capacity follows that proportion it would result in an allocation of 315 AUMs for wild horses, and 3627 AUMs for livestock. This equates to an AML of 26 animals, which is too low to maintain a viable population in the absence of migration. Therefore, the LUP AML would be maintained, with an allocation of forage of 708 AUMS for wild horses and 3234 AUMs for livestock.

All current Bureau policies related to wild horse management will be followed in the achievement of the AML in that wild horses 16 years of age and older or wild horses that are deemed unadoptable due to other factors will be allowed to remain in the HMA until such time as the BLM can find a suitable range for them. Gather of excess wild horses will occur in FY94 (Fall 1993) and FY99 (Fall 1998) until the AML is reached, and then only on an as needed basis for maintenance when the wild horse population exceeds the AML of 59.

The Strategic Plan for the Management of Wild Horses on the Public Lands was signed June 6, 1992. In this plan, the BLM's wild horse program in the State of Nevada is given the direction for the management of wild horses. The policy states that unadoptable wild horses will remain on the public lands, and that other measures such as fertility control may be utilized for population management. At the present time it is the BLM's policy to return unadoptable wild horses to the public lands they were gathered from that are in excess of five years of age. At the time of the 1992 gather, this policy was wild horses in excess of nine years of age. Following the 1992 gather, 137 wild horses of the 632 total that were gathered were returned to the HMA. The 137 wild horses

returned to the range along with the 63 adults that were not captured equal the 200 wild horses that we agreed to leave on the Black Rock East HMA until the re-evaluation of the allotment. A model has been developed to estimate the population dynamics for the herd that currently resides in the Black Rock Range East HMA as a result of the 1992 gather. The population model uses age specific survival and fecundity rates derived from the results of the 1992 Black Rock East gather. For details see Appendix 4. To determine year-to-year survival, the number of animals in each age class is multiplied by the appropriate survival parameter, rounded to the nearest integer, and added to the next year's age class. The foals produced each year is calculated by multiplying the number of females in each age class by the appropriate fecundity parameter, summing the total, rounding to the nearest integer and dividing the foals equally between the male and female zero age class (i.e. a 50:50 sex ratio at birth is assumed). The model also incorporates a random mortality generator in the 4-9 age classes to simulate mortality which occurs, but is not caught by the model due to rounding. This involves randomly subtracting zero or one from the total number in each of these age classes.

Only one gather of the 0-5 age class is assumed. If a second gather of these same age classes is done, it will result in the virtual extinction of the population because the most fecund age classes have been removed. The following scenario illustrates this. Assume gathers of 0-5 year olds in fall 1993 and 1999.

The following chart represents the expected population of wild horses within the Black Rock Range and the estimated amount of forage that will be utilized year round by this population (See Appendix 4 for complete model):

Year	# Adult Males	# Adult Females	# Adults
1992	161	184	345
1993	163	184	347
1994	86	92	178
1995	87	92	179
1996	84	87	171
1997	78	80	158
1998	73	74	147
1999	71	69	140
2000	23	17	40
2001	18	13	31
2002	14	10	24
2003	12	8	20
2004	10	7	17
2005	8	7	15
2006	7	6	13
2007	7	7	14
2008	8	7	15
2009	7	6	13
2010	8	6	14
2011	8	6	14
2012	7	6	13

2013	7	7	14
2014	8	8	16
2015	9	10	19
2016	8	10	18
2017	9	11	20
2018	11	12	23
2019	14	13	27
2020	16	16	32
2021	18	18	36

In this case the population is not totally wiped out. This is due to the abnormally large percentage of older animals in the initial population, which were returned to the range following the 1992 gather. These animals, despite their low fecundity, will produce enough foals to maintain the population, albeit at a very low level, for several years. Wild horse populations at these levels for such a long time are much more susceptible to catastrophic events such as accidents, disease, and droughts which can seriously decimate if not totally extinguish the population.

The results of the model indicate that the AML will not be reached until after a partial gather in 1999. During the interim period the wild horses alone would require the entire carrying capacity in 1993, and between 30-68% of the carrying capacity between 1994 and 1999. Therefore, active use by livestock will be adjusted to meet the carrying capacity.

c. Livestock

1. Adjust livestock authorized active grazing preference to 3,234 AUMs.

From:

	Preference			
Total	Suspended	Active	Not Scheduled	Active Use
9932	2105	7827	3477	4350

To:

	Preference			
Total	Suspended	Active	Not Scheduled	Active Use
9932	6698	3234	0	3234

2. Implement a deferred rotation grazing system as follows:

North Paiute			
	Low Elevation		
	535 Cattle	05/01 to 05/31	544 AUMs
	High Elevation		
	535 Cattle	06/01 to 07/15	792 AUMs
South Paiute			
	High Elevation		
	535 Cattle	07/16 to 09/30	1354 AUMs
	Low Elevation		
	535 Cattle	10/01 to 10/31	544 AUMs

No livestock use is authorized north of Paiute Creek after July 15 of each year.

The Paiute Seeding fence would be reconstructed to restrict wild horse use. Use of the Paiute Seeding by livestock will be deferred until after seedripe. Grazing use by livestock will be authorized in the seeding from July 16 through September 30 along with the use period in the high elevation area of the South Paiute use area. The utilization objective for the Paiute Seeding will be 50% of the standing crop.

All livestock would be removed from the allotment by November 01 of each year. Future adjustments to livestock preference would be based upon monitoring data analyzed in a re-evaluation process following three years of implementation of the grazing system. If objectives have not been met for two years in a row, re-evaluation will be initiated immediately, and adjustments may be made prior to the third year of implementation. Achievement of the AML may take as long as seven years to reach given population dynamics and current policies on the removal of wild horses from public rangelands.

Designated Areas of Use:

The areas of use are unfenced, with some natural barriers preventing livestock drift.

Use Areas

1) North Paiute Low Elevation Use Area:

   This area would include all the lower foothills and alluvial fans along the eastern portion of the allotment north of Paiute Creek that are below 1550 meters in elevation.

2) North Paiute High Elevation Use Area:

   This use area would be the northern portion of the allotment specifically from Paiute Creek north including the higher country above 1550 meters in elevation.

3) South Paiute High Elevation Use Area:

   This use area would be the southern portion of the allotment specifically from Paiute Creek south including the higher country above 1550 meters in elevation.

4) South Paiute Low Elevation Use Area:

   This use area includes the southern portion of the allotment south of Paiute Creek in the lower country below 1550 meters in elevation.

Terms and Conditions:

Flexibility in turnout, movement between use areas, and removal dates will be allowed if approved in advance by BLM and if consistent with management objectives.

Salt and/or mineral blocks shall not be placed within one quarter (¼) mile of springs, streams, meadows, riparian habitats or aspen stands.

The permittee is required to perform normal maintenance on the range improvements to which he has been assigned maintenance responsibility prior to the scheduled use each year.

The permittee will be required to do the necessary riding to keep livestock in the proper use area during the proper time periods. This may require a range rider to be present with the livestock at all times.

d. Range Improvements

1. Reconstruct the Paiute Seeding Fence to standards designed to restrict wild horse use of the seeding, but permit wildlife access. Defer use in the seeding until after seedripe for two (2) years. Conduct vegetation production studies following fence construction and two years of rest to determine a stocking rate for the seeding. Maintenance responsibility for the seeding fence will remain with the permittee.

2. Construct an allotment boundary fence on the western boundary of the allotment/HMA to restrict wild horse migration into the HMA from neighboring HMAs. Fence should be continuous except where natural barriers to wild horses are present. Fence should be designed to restrict wild horses but allow for wildlife migration. Design will be coordinated with affected interests. This fence is necessary to maintain the AML of 59.

3. Construct a riparian exclosure on Bartlett Creek. An existing northern boundary fence can be combined with a fence along the southern watershed of the Bartlett Creek drainage to create a riparian exclosure. Design and construction of this fence would be coordinated with affected interests. Livestock use would not be authorized within the exclosure. Wild horse distribution is limited in this area as opposed to the Battle Creek drainages which have regular wild horse use, and would be less likely to impinge upon the wild and free roaming nature of the wild horses. Wild horse and livestock use of the Bartlett Creek drainage would be eliminated.

Rationale:

Achievement and maintenance of the AML is contingent upon the control of migration of other populations of wild horses into the HMA. Without horse-proof fences to prevent this migration, horses from neighboring HMAs will move into the area and immediately exceed the AML and then contribute to overutilization of the allotment. With the boundary of the allotment/HMA fenced, greater control of the movement of livestock could be exercised, eliminating drift into neighboring allotments. Use areas could be maintained with range riding on a regular basis. Control of horse movements within the HMA/allotment is not possible, therefore the year round wild horse population should be balanced to provide for a multiple-use relationship in the allotment.

This alternative confirms the Land Use Plan AML as providing for the thriving natural ecological balance and multiple-use relationship. The carrying capacity would be allocated to wild horses in a greater proportion than was allocated in the Land Use Plan to maintain that balance.

Problems with this alternative would be restricted movement of wild horses due to fencing.

Alternative 3.

a. Carrying Capacity

The combined carrying capacity for livestock and wild horses shall be 3942 AUMs as determined through analysis of the monitoring data collected from 1987 through 1992. Monitoring data collected in 1991 and 1992 indicate that utilization levels and distribution are similar to previous patterns. Wild horse numbers increased in 1991 and decreased in 1992, while livestock numbers in the North Paiute use area remained the same through the monitoring period.

Analysis was completed in accordance with BLM Technical Reference 4400-7, "Analysis, Interpretation and Evaluation", utilizing the Desired Stocking Level Formula and a weighted average of utilization using the heavy and severe use zones (see Appendix No. 2 for details).

b. Wild Horses

The AML for the Black Rock Range East HMA shall remain 59 animals. Monitoring data indicates that this AML will result in the achievement of management objectives if it can be achieved and maintained. An AML of 59 animals would provide 708 AUMs for wild horses. The remainder of the AUMS (3234) would be allocated to livestock.

This AML is consistent with achieving a thriving natural ecological balance and maintaining the multiple-use relationship in the HMA. Monitoring data indicates that a reduction in the carrying capacity from the current 10000 AUMs of actual use to 3942 AUMs is necessary to stop continuing resource deterioration within the HMA and the allotment.

The Strategic Plan for the Management of Wild Horses on the Public Lands was signed June 6, 1992. In this plan, the BLM's wild horse program in the State of Nevada is given the direction for the management of wild horses. The policy states that unadoptable wild horses will remain on the public lands, and that other measures such as fertility control may be utilized for population management. At the present time it is the BLM's policy to return unadoptable wild horses to the public lands they were gathered from that are in excess of five years of age. At the time of the 1992 gather, this policy was wild horses in excess of nine years of age. Following the 1992 gather, 137 wild horses of the 632 total that were gathered were returned to the HMA. The 137 wild horses returned to the range along with the 63 adults that were not captured equal the 200 wild horses that we agreed to leave on the Black Rock East HMA until the re-evaluation of the allotment. A model has been developed to estimate the population dynamics for the herd that currently resides in the Black Rock Range East HMA as a result of the 1992 gather. The population model uses age specific survival and fecundity rates derived from the results of the 1992 Black Rock East gather. For details see Appendix 4. To determine year-to-year survival, the number of animals in each age class is multiplied by the appropriate survival parameter, rounded to the nearest integer, and added to the next year's age class. The foals produced each year is calculated by multiplying the number of females in each age class by the appropriate fecundity parameter, summing the total, rounding to the nearest integer and dividing the foals equally between the male and female zero age class (i.e. a 50:50 sex ratio at birth is assumed). The model also incorporates a random mortality generator in the 4-9 age classes to simulate mortality which occurs, but is not caught by the model due to rounding. This involves randomly subtracting zero or one from the total number in each of these age classes.

Only one gather of the 0-5 age class is assumed. If a second gather of these same age classes is done, it will result in the virtual extinction of the population because the most fecund age classes have been removed. The following scenario illustrates this. Assume gathers of 0-5 year olds in fall 1993 and 1999.

The following chart represents the expected population of wild horses within the Black Rock Range and the estimated amount of forage that will be utilized year round by this population (See Appendix 4 for complete model):

Year	# Adult Males	# Adult Females	# Adults
1992	161	184	345
1993	163	184	347
1994	86	92	178
1995	87	92	179
1996	84	87	171
1997	78	80	158
1998	73	74	147
1999	71	69	140
2000	23	17	40
2001	18	13	31

2002	14	10	24
2003	12	8	20
2004	10	7	17
2005	8	7	15
2006	7	6	13
2007	7	7	14
2008	8	7	15
2009	7	6	13
2010	8	6	14
2011	8	6	14
2012	7	6	13
2013	7	7	14
2014	8	8	16
2015	9	10	19
2016	8	10	18
2017	9	11	20
2018	11	12	23
2019	14	13	27
2020	16	16	32
2021	18	18	36

In this case the population is not totally wiped out. This is due to the abnormally large percentage of older animals in the initial population, which were returned to the range following the 1992 gather. These animals, despite their low fecundity, will produce enough foals to maintain the population, albeit at a very low level, for several years. Wild horse populations at these levels for such a long time are much more susceptible to catastrophic events such as accidents, disease, and droughts which can seriously decimate if not totally extinguish the population.

The results of the model indicate that the AML will not be reached until after a second partial gather in 1999. During the interim period the wild horses alone would require the entire carrying capacity in 1993, and from 30-68% of the carrying capacity from 1994 to 1999. Therefore, active use by livestock will be adjusted to meet the carrying capacity.

c. Livestock

1. Adjust livestock authorized active grazing preference to 3,234 AUMs.

From:

	Preference			
Total	Suspended	Active	Not Scheduled	Active Use
9932	2105	7827	3477	4350

To:

	Preference			
Total	Suspended	Active	Not Scheduled	Active Use
9932	6698	3234	0	3234

2. Implement a deferred rotation grazing system as follows:

Year 1

North Paiute			
	Low Elevation		
	808 Cattle	03/15 to 05/15	1617 AUMs
	High Elevation		
	808 Cattle	05/16 to 07/15	1617 AUMs
South Paiute			
	High Elevation		
		REST	
	Low Elevation		
		REST	

No livestock use is authorized north of Paiute Creek after July 15 in this year. No livestock use will be authorized south of Paiute Creek during Year 1.

Year 2

South Paiute			
	Low Elevation		
	808 Cattle	03/15 to 05/15	1617 AUMs
	High Elevation		
	808 Cattle	05/16 to 07/15	1617 AUMs
North Paiute			
	High Elevation		
		REST	
	Low Elevation		
		REST	

Livestock would not be authorized any use north of Paiute Creek in Year 2. Livestock would not be authorized south of Paiute creek after July 15 in Year 2.

The Paiute Seeding fence would be reconstructed to restrict wild horse use. Use of the Paiute Seeding by livestock will be scheduled for concurrent use with the South Paiute use area, receiving complete rest every other year.

The utilization objective for the Paiute Seeding will be 50% of the standing crop.

Approximately one half of the allotment would be rested from livestock use each year, providing forage and range for the wild horses on at least one half of the allotment every year. Future adjustments to livestock preference would be based upon monitoring data analyzed in a re-evaluation process following three years of

implementation of the grazing system. If objectives have not been met for two years in a row, re-evaluation will be initiated immediately, and adjustments may be made prior to the third year of implementation. Achievement of the AML may take as long as seven years to reach given population dynamics and current policies on the removal of wild horses from public rangelands.

Designated Areas of Use:

The areas of use are unfenced, with some natural barriers preventing livestock drift.

Use Areas

1) North Paiute Low Elevation Use Area:

   This area would include all the lower foothills and alluvial fans along the eastern portion of the allotment north of Paiute Creek that are below 1550 meters in elevation.

2) North Paiute High Elevation Use Area:

   This use area would be the northern portion of the allotment specifically from Paiute Creek north including the higher country above 1550 meters in elevation.

3) South Paiute High Elevation Use Area:

   This use area would be the southern portion of the allotment specifically from Paiute Creek south including the higher country above 1550 meters in elevation.

4) South Paiute Low Elevation Use Area:

   This use area includes the southern portion of the allotment south of Paiute Creek in the lower country below 1550 meters in elevation.

Terms and Conditions:

Flexibility in turnout, movement between use areas, and removal dates will be allowed if approved in advance by BLM and if consistent with management objectives.

Salt and/or mineral blocks shall not be placed within one quarter (¼) mile of springs, streams, meadows, riparian habitats or aspen stands.

The permittee is required to perform normal maintenance on the range improvements to which he has been assigned maintenance responsibility prior to the scheduled use each year.

The permittee will be required to do the necessary riding to keep livestock in the proper use area during the proper time periods. This may require a range rider to be present with the livestock at all times.

Non-Use

Non-Use shall be taken for the equivalent AUMs utilized by wild horses in excess of the AML of 59 to meet the carrying capacity of the allotment. Non-use will be held in the Not Scheduled category on an annual basis with the amount determined annually based on a census of wild horses within the allotment by March 31 of each year.

d. Range Improvements

1. Reconstruct the Paiute Seeding Fence to standards designed to restrict wild horse use of the seeding, but permit wildlife access. Conduct vegetation production studies following fence construction and two years of rest to determine a stocking rate for the seeding. Maintenance responsibility for the seeding fence will remain with the permittee.

2. Construct an allotment boundary fence on the western boundary of the allotment/HMA to restrict wild horse migration into the HMA from neighboring HMAs. Fence should be continuous except where natural barriers to wild horses are present. Fence should be designed to restrict wild horses but allow for wildlife migration. Design will be coordinated with affected interests.

3. Construct a riparian exclosure on Bartlett Creek. An existing northern boundary fence can be combined with a fence along the southern watershed of the Bartlett Creek drainage to create a riparian exclosure. Design and construction of this fence would be coordinated with affected interests. Livestock use would not be authorized within the exclosure. Wild horse distribution is limited in this area as opposed to the Battle Creek drainages which have regular wild horse use, and would be less likely to impinge upon the wild and free roaming nature of the wild horses. Wild horse and livestock use of the Bartlett Creek drainage would be eliminated.

Rationale:

Achievement and maintenance of the AML is contingent upon the control of migration of other populations of wild horses into the HMA. Without horse-proof fences to prevent this migration, horses from neighboring HMAs will move into the area and immediately exceed the AML and then contribute to overutilization of the allotment. With the boundary of the allotment/HMA fenced, greater control of the movement of livestock could be exercised, eliminating drift into neighboring allotments. Use areas could be maintained with range riding on a regular basis. Control of horse

movements within the HMA/allotment is not possible, therefore the year round wild horse population should be balanced to provide for a multiple-use relationship in the allotment.

This alternative confirms the Land Use Plan AML as providing for the thriving natural ecological balance and multiple-use relationship. The carrying capacity would be allocated to wild horses in a greater proportion than was allocated in the Land Use Plan to maintain that balance.

Complete rest of half the allotment from livestock use each year will provide progress towards meeting long term management objectives, as well as provide at least half the allotment to the wild horses for use year round while still achieving short term objectives for the whole allotment that year. With an adjustment to both wild horses and livestock, the streams in the north half of the allotment will not be utilized during the hot season in any year by livestock, and will be utilized minimally in the rested year by wild horses. This will ensure long term progress towards management objectives.

3. Objectives:

Revise the allotment specific objectives to the following:

Short Term

The objective for utilization of key streambank riparian plant species (Carex, Juncus, Salix and Poa spp.) on Paiute, Battle and Bartlett Creeks is 30%. Utilization data will be collected at the end of the grazing period. [1]

The objective for utilization of key plant species (Carex, Juncus and Poa spp.) in wetland riparian habitats is 50%. Utilization data will be collected at the end of the grazing period. [1]

The objective for utilization of key plant species (STTH, AGSP, FEID, ELCI, POA, ORHY, AMAL, PUTR, SYMPH, EPHEDRA, EULA) in upland habitats is 50%. Utilization data will be collected at the end of the grazing period. [1]

The objective for utilization of crested wheatgrass is 50%. Utilization data will be collected at the end of the grazing period. [1]

Long Term

Manage, maintain, or improve public rangeland conditions to provide forage on a sustained yield basis for big game, with an initial forage demand of 1,838 AUMs for mule deer, 307 AUMs for pronghorn, and 180 AUMs for bighorn sheep.

1) Improve to or maintain 2,134 acres in Black Rock DY-13, 41,678 acres in Black Rock DW-10, and 45,856 acres in Black Rock DS-6 in good or excellent mule deer habitat condition.

2) Improve to or maintain 45,965 acres in Black Rock PS-15 in good pronghorn habitat condition. Improve to or maintain 35,274 acres in Black Rock PY-14, 2,623 acres in Leonard Creek PW-17, and 31,466 acres in Paiute Creek PW-16 in fair or good pronghorn habitat condition.

3) Improve to or maintain 69,939 acres in Black Rock BY-15 in good to excellent bighorn sheep habitat condition.

Improve public rangeland conditions to provide forage on a sustained yield basis for livestock, with a stocking level of (2490 or 3234) AUMs.

Improve range condition from poor to fair on 161,158 acres and from fair to good on 15,938 acres. [2]

Maintain and improve the free-roaming behavior of wild horses by protecting and enhancing their home ranges.

1) Manage, maintain, or improve public rangeland conditions to provide forage on a sustained yield basis for the selected AML for wild horses to maintain a thriving natural ecological balance.

2) Maintain and improve wild horse habitat by assuring free access to water.

Improve to or maintain 86 acres of ceanothus habitat types in good condition. [2]

Improve to or maintain 345 acres of mahogany habitat types in good condition. [2]

Improve to or maintain 188 acres of aspen habitat types in good condition. [2]

Improve to or maintain 529 acres of riparian and meadow habitat types in good condition. [2]

Improve to or maintain 15 acres of serviceberry, 82 acres of bitterbrush, 55 acres of ephedra, and 112 acres of winterfat vegetation types in good condition. [2]

Improve to and maintain stream habitat conditions from the 1988 levels of 43% on Paiute Creek, 58% on Battle Creek, and 50% on Bartlett Creek to an overall optimum of 60% or above.

1) Streambank cover 60% or above.

2) Streambank stability 60% or above.
3) Maximum summer water temperatures below 70° F.
4) Sedimentation below 10%.

Protect sage grouse strutting grounds and brooding areas. Maintain the big sagebrush sites within two miles of active strutting grounds in mid to late seral stage with a minimum of 30% shrub composition by weight or 30% canopy cover.

Improve to and maintain the water quality of Paiute, Battle and Bartlett Creeks to the State criteria set for the following beneficial uses: livestock drinking water, cold water aquatic life, wading (water contact recreation), and wildlife propagation.

Improve to or maintain the 1000 acre Paiute seeding in good condition. (5-10 acres per AUM)

Footnotes:

[1] The utilization levels will be used to evaluate and adjust management practices over a period of time.

[2] Ecological status will be used to redefine/quantify these objectives where applicable.

It is expected that utilization levels will vary over the years due to climatic changes and environmental fluctuations but the target is the stated objective level. The short term objectives also contain a time at which the utilization data will be collected which will be after the grazing period in order to assess utilization as well as mechanical damage to streambank riparian habitats. Monitoring data may be collected at other times as well. For instance, data collected a the end of the growing season will reflect any regrowth of herbaceous species on riparian areas recognizing that a major function of these species is for protection and improvement of streambanks and meadows, reducing impacts from high water runoff and improving shading and structure. Woody species are particularly important along streams as they are essential for the shading and bank stability, and thereby require a lower utilization level and monitoring data collected at the end of the grazing periods.

APPENDIX 1

Stocking Level Calculations Paiute Meadows Allotment.

1. Stocking Level Calculation Procedures

Monitoring data indicates that wild horses have contributed to over utilization in the allotment. Target utilization levels were exceeded south of Paiute Creek where the use was by wild horses. Use levels north of Paiute Creek resulted from livestock and wild horses. The total amount of actual use made by livestock and wild horses was determined north and south of Paiute Creek for each year.

The stocking level for the allotment was determined using the following Actual Use/Utilization formula.

$$\frac{\text{Actual Use}}{\text{Average/Weighted Average Utilization}} = \frac{\text{Desired Actual Use}}{\text{Desired Average Utilization}}$$

The stocking level was determined for the area north of Paiute Creek and south of Paiute Creek for each year data was available and then computing the average mean for those figures.

Stocking rates were calculated as follows:

South of Paiute Creek - The average calculated stocking rate is 1708 AUMs. This was based on the four years of use pattern mapping data and the desired yearlong utilization level of 50%.

North of Paiute Creek - The average calculated stocking rate is 2234 AUMs. This was based on the four years of use pattern mapping data and the desired yearlong utilization level of 50%.

Wild horse census data and cattle licensed use were used to calculate stocking levels. Wildlife AUMs were not calculated. Utilization was determined from use pattern mapping using the Average/Weighted Average Utilization formula for those areas where forage was utilized heavy and/or severe. These figures were then used to determine the amount of reduction from the present demand necessary to achieve management objectives. The procedures for doing the calculations are outlined as follows:

1) Planimeter Use Pattern Map by utilization category for each year.

2) Figure acreage by utilization category for north of Paiute Creek and for south of Paiute Creek.

3) Using Weighted Average Utilization Formula, determine percent utilization level on acreage for heavy and severe use areas only. (As identified in the Nevada Rangeland Monitoring Handbook, 1984)

4) The Average/Weighted Average Utilization figure was entered into the Actual Use/Utilization Formula and a stocking level was determined.

5) Actual Use AUMs include cattle and wild horses only.

In the determination of a stocking rate both wild horse and livestock actual use were correlated to the dates of data collection. In some years data was collected in the fall of the year and then again at the end of winter. In these cases the data collected following the winter season (spring) was used to determine a stocking rate as it represents the entire grazing year. In 1987 data was collected in the fall only, in which case actual use was correlated to the dates of data collection and a stocking rate determined from the available data.

Use pattern maps used for these calculations were those completed in fall 1987 through spring 1991. Utilization studies using the Key Forage Plant Method were used for data collection from the fall 1991 through summer 1992. These studies cannot be entered into the weighted average calculation as they represent the utilization at the study sites only. The current key areas do not encompass the streambank riparian habitats of Bartlett and Paiute Creeks, and the majority of Battle Creek and are therefore not indicative of the more sensitive areas within the allotment. Additional key areas focusing primarily on the riparian habitats will be selected in the future in consultation and coordination with affected interests. Using the current Key Areas for calculation of the Desired Stocking Rate would not consider the streambank riparian habitats. Therefore, the weighted average and desired stocking level calculations were used for the calculating the carrying capacity by considering all heavy and severe use areas in the calculation as the actual utilization.

2. Actual Use Calculations
Wild Horses

A. 1987

South Paiute	North Paiute
448 H - 03/01/87-08/08/87 - 2,371 AUMs	218 H - 03/01/87-08/08/87 - 1,154 AUMs

UPM completed August 8, 1987 and measures use 03/01-08/08
No cattle use
Census conducted Oct. 6-8, 1987, numbers are based on census.
Wild Horse gather conducted December 1987-January 1988.

B. 1988

South Paiute	North Paiute
203 H - 03/01/88-02/28/89 - 2,436 AUMs	18 H - 03/01/88-02/28/89 - 216 AUMs 595 C - 10/17/88-01/01/89 - 1,143 AUMs 1,359 AUMs

UPM completed 04/06/89 and measures use for 03/01/88-02/28/89.
Cattle use 1,143 AUMs.

C. 1989

South Paiute		North Paiute	
203 H - 03/01/89-07/17/89 -	928 AUMs	18 H - 03/01/89-07/17/89 -	82 AUMs
408 H - 07/18/89-02/14/90 -	2,844 AUMs	243 H - 07/18/89-02/14/90 -	1,694 AUMs
264 H - 02/15/90-02/28/90 -	122 AUMs	244 H - 02/15/90-02/28/90 -	112 AUMs
	3,894 AUMs	131-701 C - 10/26/89-02/28/90 -	2,342 AUMs
			4,230 AUMs

UPM completed 04/04/90 and measures use for 03/01/89-02/28/90. On 07/18/89 a census was done and on 02/14/90 a census was again conducted.
Cattle use - 2,342 AUMs

D. 1990

South Paiute		North Paiute	
264 H - 03/01/90-02/28/91 -	3,168 AUMs	244 H - 03/01/90-02/28/91 -	2,928 AUMs
		700 C - 05/03/90-10/31/90 -	4,017 AUMs
			6,943 AUMs

UPM completed 04/17/91 and measures use from 03/01/90-02/28/91. Wild horse numbers are based on the 02/14/90 census date.
Cattle use - 4,017 AUMs.

3. Weighted Average Utilization Calculations

Paiute Meadows Allotment (South Paiute) Heavy and Severe Use Zone Acreage

Grazing Year	Total Acres Mapped	Use Zone	Total Acres Per Zone
1987	25,949	Heavy	6,465
		Severe	6,820
1988	23,047	Heavy	4,910
		Severe	9,340
1989	46,437	Heavy	23,965
		Severe	10,763
1990	59,178	Heavy	25,359
		Severe	6,850

Paiute Meadows Allotment (North Paiute) Heavy and Severe Use Zone Acreage

Grazing Year	Total Acres Mapped	Use Zone	Total Acres Per Zone
1987	10,227	Heavy	2,298
		Severe	0
1988	42,754	Heavy	6,227
		Severe	74
1989	53,974	Heavy	21,175
		Severe	0
1990	81,956	Heavy	46,934
		Severe	72

Note- The above tables display data for full grazing year (beginning 03/01 and ending 02/28) as indicated by use pattern mapping conducted in the spring. The exception to this 1987 when use pattern mapping was conducted in the fall only, and not in the following spring.

1987

North Paiute

$$\frac{2{,}298 \text{ Ac. x } 70\%}{2{,}298 \text{ Ac}} = 70\%$$

South Paiute

$$\frac{(6{,}820 \text{ Ac. x } 90\%) + (6{,}465 \text{ Ac. x } 70\%)}{13{,}285 \text{ Ac}} = 80\%$$

1988

North Paiute

$$\frac{(6{,}227 \text{ Ac. x } 70\%) + (74 \text{ Ac x } 90\%)}{6{,}301 \text{ Ac}} = 70\%$$

South Paiute

$$\frac{(9{,}340 \text{ Ac. x } 90\%) + (4{,}910 \text{ Ac. x } 70\%)}{14{,}250 \text{ Ac}} = 83\%$$

1989

North Paiute

$$\frac{(21{,}175 \text{ Ac. x } 70\%) + (0 \text{ Ac x } 90\%)}{21{,}175 \text{ Ac}} = 70\%$$

South Paiute

$$\frac{(23{,}965 \text{ Ac. x } 70\%)\ (10{,}763 \text{ Ac. x } 90\%)}{34{,}728 \text{ Ac}} = 76\%$$

1990

North Paiute

$$\frac{(46{,}934 \text{ Ac. x } 70\%) + (72 \text{ Ac x } 90\%)}{47{,}006 \text{ Ac}} = 70\%$$

South Paiute

$$\frac{(25{,}359 \text{ Ac. x } 70\%) + (6{,}850 \text{ Ac. x } 90\%}{32{,}209 \text{ Ac}} = 74\%$$

4. Stocking Level Calculations*

	South Paiute	North Paiute
1987	$\frac{2{,}371 \text{ AUMs x } 50\%}{80\%} = 1{,}482$ AUMs	$\frac{1{,}154 \text{ AUMs x } 50\%}{70\%} = 824$ AUMs
1988	$\frac{2{,}436 \text{ AUMs x } 50\%}{83\%} = 1{,}467$ AUMs	$\frac{1{,}359 \text{ AUMs x } 50\%}{70\%} = 971$ AUMs
1989	$\frac{3{,}894 \text{ AUMs x } 50\%}{76\%} = 2{,}562$ AUMs	$\frac{4{,}230 \text{ AUMs x } 50\%}{70\%} = 3{,}021$ AUMs
1990	$\frac{3{,}168 \text{ AUMs x } 50\%}{74\%} = 2{,}141$ AUMs	$\frac{6{,}943 \text{ AUMs x } 50\%}{70\%} = 4{,}959$ AUMs
	6, 830 AUMs	8,934 AUMs

6,830 ÷ 4 = 1,708 AUMs Avg. South Paiute
8,934 ÷ 4 = 2,234 AUMs Avg. North Paiute
3,942 AUMs Total

The calculations have been revised from those presented in the Appendix section of the Draft Allotment Evaluation of July 1991. Final review determined that the dates presented for the wild horse gather of December 1988-January 1989 were incorrect in that version. The referenced gather actually took place in December 1987-January 1988. This significantly affected the Actual Use figures used in the calculations which resulted in the lower figures.

Paiute Meadows

November 4, 1992

APPENDIX 2

The following indicates the actual use by livestock and wild horses for grazing years 1987-1990. These actual use figures were used in the development of recommendations to adjust livestock and wild horse forage demand to available forage levels. The years 1987-1990 were used as these are the years of data collection and also the years of recent wild horse census.

Wild horse Actual Use - 1987-1990

	South Paiute			North Paiute		
Year	# of Wild Horses	Period	AUMs	# of Wild Horses	Period	AUMs
1987	448 H	03/01-11/30	4,050	218 H	03/01-11/30	1,971
	203 H	12/01-02/28	601	18 H	12/01-02/28	53
1988	203 H	03/01-02/28	2,436	18 H	03/01-02/28	216
1989	203 H	03/01-07/18	934	18 H	03/01-07/18	83
	408 H	07/19-02/14	2,830	243 H	07/19-02/14	1,686
	264 H	02/15-02/28	122	244 H	02/15-02/28	112
1990	264 H	03/01-02/28	3,168	244 H	03/01-02/28	2,928

South Paiute	North Paiute
1987 - 4,651 AUMs	1987 - 2,024 AUMs
1988 - 2,436 AUMs	1988 - 216 AUMs
1989 - 3,886 AUMs	1989 - 1,881 AUMs
1990 - 3,168 AUMs	1990 - 2,928 AUMs
14,141 AUMs	7,049 AUMs

The actual use (AUMs) were determined by utilizing the AUMs.BAS computer program calculation. This program calculates AUMs based on the grazing years.

14,141 AUMs Actual Use South Paiute
7,049 AUMs Actual Use North Paiute
21,190 AUMs Total

The total actual use figure of 21,190 AUMs was then divided by 4 years to determine an actual use average as follows;

21,190 AUMs ÷ 4 = 5,290 AUMs Avg. (4 years) wild horses.

A census was conducted during Oct. 6-8, 1987. This number was carried back to the beginning of the calendar year.

During Dec. 1987 and Jan. 1988 horses were gathered which reduced numbers beginning 12/87.

A census was completed on 07/18/89 which increased numbers.

A census was again completed on 02/14/90 which decreased numbers.

N2 93 10
November 4, 1992

Paiute Meadows

Livestock Authorized Actual Use

1987	No Use
1988	1,143 AUMs
1989	2,342 AUMs
1990	4,017 AUMs
Total	7,502 AUMs

7,502 AUMs ÷ 4 yrs = 1,876 AUMs Avg. Livestock Use
The authorized use in 1991 and 1992 was 4350 AUMs.

Paiute Meadows

November 4, 1992

APPENDIX 3

Historical Distribution of Wild Horses in the Black Rock Range West and East HMAs

This table is based upon actual wild horse counts made by air from 1969 through 1992. This table does not include estimates, ground observations or numbers of animals removed in a gather process.

Year	Date	No. in West HMA	% of Total	No. in East HMA	% of Total	Total
1969*	03/12	3	14	18	86	21
1970	11/10	170	70	73	30	243
1974	10/07	258	68	123	32	381
1975	02/10	160	63	92	37	252
1975	07/01	200	63	115	37	315
1977	04/04	333	54	282	46	615
1979	09/17	463	49	471	51	934
1980**	winter	310	88	40	12	350
1980**	07/24	344	88	46	12	390
1986***	06/12	238	18	1075	82	1313
1987***	10/06	537	45	666	55	1203
1989***	07/17	485	43	651	57	1136
1991	07/26	521	48	558	52	1079
1991	12/28	435	37	733	63	1168
1992**	03/10	338	57	255	43	593
1992**	05/23	316	37	525	63	841
1992	07/22	383	56	299	44	682
		5,494	X = 48%	6,022	X = 52%	11,516

* flight conducted to determine presence of wild horses only

** post-gather flights--gather conducted in December/January 79/80 and February 1992

*** 1986 and 1987 total non-use was taken by permittees on both Paiute Meadows Allotment and Soldier Meadows Allotment; 1988 85% non-use in Paiute Meadows; 1989 70% non-use in Paiute Meadows; 1990-1991 44% non-use in Paiute Meadows.

Average distribution using all years of distribution flights equals 48% in the West HMA and 52% in the East HMA. However, average distribution of wild horses to the two HMAs by using all years except 1969 and 1980 is approximately 50% to each HMA. This figure is more accurate because the 1969 flight was solely to determine presence of wild horses and was not a complete census. The 1980 flights were immediately following a removal of wild horses to below 50 head on the East HMA only, leaving full numbers in the West HMA, which skews the distribution data. 1992 was included as approx. 200 animals were left in the East HMA following the gather, establishing a significant presence of animals in relation to the West HMA and retaining a distribution pattern.

Expected distribution with a combined AML will be 50/50 with any number of animals is determined. Fluctuations in actual numbers can be expected from year to year, and season to season depending on environmental factors and livestock operation fluctuations.

Paiute Meadows

November 4, 1992

Appendix 4

POPULATION MODEL

The population model uses age specific survival and fecundity rates derived from the results of the 1992 Black Rock East gather. For details see Appendix 4. To determine year-to-year survival, the number of animals in each age class is multiplied by the appropriate survival parameter, rounded to the nearest integer, and added to the next year's age class. The foals produced each year is calculated by multiplying the number of females in each age class by the appropriate fecundity parameter, summing the total, rounding to the nearest integer and dividing the foals equally between the male and female zero age class (i.e. a 50:50 sex ratio at birth is assumed). The model also incorporates a random mortality generator in the 4-9 age classes to simulate mortality which occurs, but is not caught by the model due to rounding. This involves randomly subtracting zero or one from the total number in each of these age classes.

Only one gather of the 0-5 age class is assumed. If a second gather of these same age classes is done, it will result in the virtual extinction of the population because the most fecund age classes have been removed. The following scenario illustrates this. Assume gathers of 0-5 year olds in fall 1993 and 1999.

Year	# Adult Males	# Adult Females	# Adults
1992	161	184	345
1993	163	184	347
1994	86	92	178
1995	87	92	179
1996	84	87	171
1997	78	80	158
1998	73	74	147
1999	71	69	140
2000	23	17	40
2001	18	13	31
2002	14	10	24
2003	12	8	20
2004	10	7	17
2005	8	7	15
2006	7	6	13
2007	7	7	14
2008	8	7	15
2009	7	6	13
2010	8	6	14
2011	8	6	14
2012	7	6	13
2013	7	7	14
2014	8	8	16
2015	9	10	19
2016	8	10	18
2017	9	11	20
2018	11	12	23
2019	14	13	27
2020	16	16	32
2021	18	18	36

In this case the population is not totally wiped out. This is due to the abnormally large percentage of older animals in the initial population, which were returned to the range following the 1992 gather. These animals, despite their low fecundity, will produce enough foals to maintain the population, albeit at a very low level, for several years. Wild horse populations at these levels for such a long time are much more susceptible to catastrophic events such as accidents, disease, and droughts which can seriously decimate if not totally extinguish the population.

Age Specific Survival

Assumptions:

1. Essentially all horses within this population are dead after 20 years.

2. Mortality favors younger age classes i.e. 0-3. Mortality is higher in young males than it is in young females.

3. Mortality increases in older animals i.e. 8-20. Mortality is higher in older females than in older males.

4. Mortality increases dramatically in age classes 14-20.

	% SURVIVAL	
AGE CLASS	MALES	FEMALES
0-1	.84	.86
1-2	.86	.88
2-3	.87	.89
3-4	.92	.92
4-5	.95	.95
5-6	.96	.96
6-7	.96	.96
7-8	.96	.96
8-9	.96	.94
9-10	.95	.93
10-11	.94	.92
11-12	.91	.89
12-13	.90	.88
13-14	.89	.87
14-15	.87	.85
15-16	.84	.82
16-17	.78	.72
17-18	.70	.64
18-19	.55	.45
19-20	.55	.45
20+	0	0

It is recognized that some wild horses live past twenty; however both their numbers and contribution to the population are negligible.

N2 93 10

November 4, 1992

Paiute Meadows

Age Specific Fecundity

AGE CLASS	% FECUNDITY
0-1	0
2	.30
3	.50
4-9	.75
10-13	.35
14-20	.15

N2 93 10

Paiute Meadows

November 4, 1992

PAIUTE MEADOWS ALLOTMENT WILD HORSE POPULATION MODEL
INITIAL POPULATION 345 ADULTS, GATHER FALL 1993 0-5 YEAR OLDS

Year	1992		1993		1994		1995		1996		1997		1998		1999		2000		2001	
Sex	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
	26	29	34	34	31	31	26	26	21	21	20	20	13	13	9	9	5	5	5	5
	13	16	22	25	0	0	26	27	22	22	18	18	0	0	11	11	8	8	4	4
	11	14	11	14	0	0	0	0	22	24	19	19	0	0	0	0	9	10	7	7
	12	14	10	12	0	0	0	0	0	0	19	21	0	0	0	0	0	0	8	9
	9	13	11	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9	10	8	12	10	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8	8	8	9	7	11	10	12	0	0	0	0	0	0	0	0	0	0	0	0
	6	8	8	8	7	8	6	10	9	11	0	0	0	0	0	0	0	0	0	0
	7	6	5	7	7	7	7	7	5	9	9	11	0	0	0	0	0	0	0	0
	6	6	7	6	5	6	6	7	6	6	5	8	8	10	0	0	0	0	0	0
	14	17	6	6	7	6	5	6	6	7	6	6	5	7	8	9	0	0	0	0
	7	16	13	16	6	6	7	6	5	6	6	6	6	6	5	6	8	8	0	0
	15	10	6	14	12	14	5	5	6	5	5	5	5	5	5	5	5	5	7	7
	14	12	14	9	5	12	11	12	5	4	5	4	5	4	5	4	5	4	5	4
	9	8	12	10	12	8	4	10	10	10	4	3	4	3	4	3	4	3	4	3
	8	5	8	7	10	9	10	7	3	9	9	9	3	3	3	3	3	3	3	3
	4	8	7	4	7	6	8	7	8	6	3	7	8	7	3	2	3	2	3	2
	1	7	3	6	5	3	5	4	6	5	6	4	2	5	6	5	2	1	2	1
	2	3	1	4	2	4	4	2	4	3	4	3	4	3	1	3	4	3	1	1
	1	1	1	1	1	2	1	2	2	1	2	1	2	1	2	1	1	1	2	1
	5	2	1	0	1	0	1	1	1	1	1	0	1	0	1	0	1	0	1	0
Total Ad.		345		346		181		182		175		162		150		141		138		140
AUM's		4,140		4,152		2,172		2,184		2,100		1,944		1,800		1,692		1,680		1,752

N2 93 10

Paiute Meadows

November 4, 1992

YEAR	2002		2003		2004		2005		2006		2007		2008		2009		2010	
SEX	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
	6	6	7	7	8	8	9	9	10	10	10	10	10	10	10	10	11	11
	4	4	5	5	6	6	7	7	8	8	8	9	8	9	8	9	8	9
	3	4	3	4	4	4	5	5	6	6	7	7	7	8	7	8	7	8
	6	6	3	4	3	4	3	4	4	4	5	5	6	6	6	7	6	7
	7	8	6	6	3	4	3	4	3	4	4	4	5	5	6	6	6	6
	0	0	7	8	5	5	2	3	3	4	2	3	4	3	5	5	5	5
	0	0	0	0	7	8	5	5	1	2	3	3	1	3	4	2	4	4
	0	0	0	0	0	0	6	8	4	4	1	1	3	2	1	3	4	2
	0	0	0	0	0	0	0	0	5	7	4	3	1	1	3	1	1	2
	0	0	0	0	0	0	0	0	0	0	5	6	4	3	0	1	2	0
	0	0	0	0	0	0	0	0	0	0	0	0	5	6	4	3	0	1
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	6	4	3
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5
	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4	3	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3	3	3	3	4	4	0	0	0	0	0	0	0	0	0	0	0	0
	3	2	3	2	3	2	3	3	0	0	0	0	0	0	0	0	0	0
	2	1	2	1	2	1	2	1	2	2	0	0	0	0	0	0	0	0
	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
	1	0	1	0	1	0	1	0	1	0	1	0	1	0	0	0	0	0
	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	0	0
Total Ad.		145		154		165		177		192		210		233		258		282
#M's		1,752		1,848		1,980		2,124		2,304		2,520		2,796		3,096		3,384

N2 93 10

Paiute Meadows

November 4, 1992

Year	No. Ad. Male	No. Ad. Female	No. Adults	AUMs
1992	161	184	345	4,140
1993	154	192	346	4,152
1994	89	92	181	2,172
1995	91	91	182	2,184
1996	88	87	175	2,100
1997	82	80	162	1,944
1998	76	74	150	1,800
1999	72	69	141	1,692
2000	71	67	138	1,656
2001	72	68	140	1,680
2002	74	72	146	1,752
2003	79	75	154	1,848
2004	84	81	165	1,980
2005	88	89	177	2,124
2006	95	97	192	2,304
2007	104	106	210	2,520
2008	115	118	233	2,796
2009	128	130	258	3,096
2010	140	142	282	3,384