



United States Department of the Interior

BUREAU OF LAND MANAGEMENT
ELKO DISTRICT OFFICE
3900 E. IDAHO STREET
P.O. BOX 831
ELKO, NEVADA 89801



IN REPLY REFER TO:

4120 (NV-015)

DEC 15 1993

Dear Affected Interest:

On August 23 1993, a draft copy of the environmental assessment (EA) for a change-in-kind of livestock and implementation of the Spruce Interim AMP was sent to all affected interests on the Spruce Allotment for review and comment. At the same time, I rescinded authorization of the interim AMP and Spruce and Valley Mountain Rangeline and Allotment Agreement because of four appeals received.

We received comments from several affected interests and changes to the EA were made accordingly. As per the enclosed Finding Of No Significant Impact/Decision Record and final EA, no changes in the current livestock management practices on the Spruce Allotment will occur until completion of the allotment evaluation and multiple use decision process.

If you have any questions, please contact me at (702) 753-0200.

Sincerely yours,

BILL BAKER, Manager
Wells Resource Area

Enclosure

cc:

Bert Paris and Sons
American Horse Protection
Humane Society - US
Nevada Wildlife Federation
Animal Protection Institute
Natural Resources Defense Council
U.S. Fish and Wildlife Service
Commission for the Preservation of Wild Horses
Resource Concepts, Inc.
Nevada Department of Wildlife
Wild Horse Organized Assistance
NV Department of Agriculture
HTT Resource Advisors
U.S. Wild Horse Foundation
Federal Land Bank
Sierra Club - Toiyabe Chapter
Kathryn Cushman
Nature Conservancy
Jim Mulcahy
Rutgers Law School
Wells Resource Area Grazing Association

*do they admit that
these action will increase
competition
Does EA say that they will
reduce competition (his)
to justify conversion*



United States Department of the Interior
Bureau of Land Management
Elko District Office

December 15, 1993



ENVIRONMENTAL ASSESSMENT
BLM/EK/PL-93/046

~~CHANGE-IN-KIND OF LIVESTOCK
AND IMPLEMENTATION OF SPRUCE
INTERIM AMP~~

1

File: 4120

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FINDING OF NO SIGNIFICANT IMPACT
AND
DECISION RECORD
Change-in-Kind of Livestock
and
Implementation of the Spruce Interim
Allotment Management Plan
BLM\EK\PL-093\046

Finding of No Significant Impact

Based on the analysis of Environmental Assessment BLM\EK\PL-093\046, I have determined that these actions will not have a significant effect on the human environment, and therefore, an environmental impact statement will not be prepared.

Decision

It is my decision to implement the No Action Alternative as summarized below:

1. Deny approval of the Spruce/Valley Mountain Rangeline and Allotment Agreement. The decision of whether or not to formally split the Spruce Allotment will be deferred until an evaluation of all the multiple use objectives identified for the Spruce Allotment is completed.
2. Continue to license cattle use as "temporary" until the most current data can be analyzed through the allotment evaluation process.
3. Deny approval to implement the Spruce Interim Allotment Management Plan (AMP). Any changes in livestock management necessary to achieve the multiple use objectives would be implemented following completion of the allotment evaluation process

Monitoring

Range, wildlife, and wild horse monitoring information will continue to be collected as outlined in the allotment monitoring file and in accordance with the Wells Resource Area Interdisciplinary Monitoring Schedule.

Rationale

A draft environmental assessment (EA) analyzing the impacts of the proposed Spruce Interim AMP, rangeline and allotment agreement, and conversion from sheep to cattle use on the Spruce Allotment was distributed to all affected interests. In response,, comments were received from several affected interests asking why the BLM hadn't analyzed data collected since 1986 to help determine the need for changes in management, and requesting the allotment evaluation that address the impacts and management of livestock, wildlife, and wild horses all at the same time. Several affected interests requested that no action be taken on any of the changes in management proposed in the EA until the allotment evaluation was completed and a multiple use decision was issued on whatever management actions were to be implemented.

After consideration of these concerns, it was determined that it would be prudent to delay selection of changes to current livestock grazing management practices for the Spruce Allotment until an evaluation is completed which incorporates current monitoring data collected at least through 1993, and a multiple use decision issued thereafter to finalize the management actions to be implemented on the Spruce Allotment.

The proposed actions, which include allotment division, change-in-kind of livestock (permittee's proposal), and implementation of the Spruce Interim AMP, were not selected because the proposals were based on available monitoring data up through 1986. Since that time, more monitoring data has been collected.

The alternatives to the proposed actions, change-in-kind of livestock (BLM's proposal) and alternative livestock control method, were not selected for the same reasons as the proposed actions, that is, more current monitoring data is available.

The alternative to the proposed actions, change-in-kind of livestock (no conversion from sheep to cattle), was not selected for a couple of reasons. First, through the land use planning process, it was identified that portions of the Spruce Allotment would be formally converted from sheep to cattle. Second, for the past 29 years, the grazing permittees have been authorized a "temporary" license to run cattle pending completion of an analysis for a change-in-kind of livestock use. A change back from cattle to sheep would create an economic hardship on the permittees due to their investments on the allotment and the general trends of the sheep industry.

The no action alternative is in conformance with the Wells Resource Management Plan, Issue 6 - Livestock Grazing Use, Management Decisions 1 and 4.



Area Manager

12/15/93
Date

ENVIRONMENTAL ASSESSMENT
Change-in-Kind of Livestock
and
Implementation of the Spruce Interim
Allotment Management Plan
BLM\EK\PL-093\046

I. INTRODUCTION/PURPOSE AND NEED

A. Introduction

The Wells Resource Management Plan (RMP) identified seven Resource Conflict Areas (RCAs) within the Wells Resource Area. Allotments within each RCA were categorized according to the Selective Management Process. Each allotment was evaluated with respect to: (1) existing range improvements; (2) potential for new projects; (3) resource conflicts; (4) land ownership patterns; (5) present management; (6) activity plans; and (7) condition, trend, and climax potential. Based on this evaluation, an overall allotment rating of M, I, or C was given. The objective for Category "M" allotments is to "maintain" current conditions. The objective for Category "I" allotments is to "improve" unsatisfactory conditions, and for category "C" allotments to provide for "custodial" management to protect existing resources.

The Spruce Allotment is one of fourteen allotments in the Spruce/Goshutes RCA. The Selective Management Process has given the allotment an overall "I" rating, identifying the need for management to improve unsatisfactory conditions and poor livestock distribution.

The Record of Decision (ROD) for the Wells RMP was signed on July 16, 1985. The ROD identified the management decisions to be implemented as part of the planning process. With regard to livestock grazing use, the decision was to develop activity plans on category "I" allotments and to monitor and adjust grazing management systems and livestock numbers as required.

The Spruce Allotment was originally winter sheep range (valley areas) for as many as 25,000 sheep and summer range (Spruce Mountain) for 1,500-3,000 sheep. The Spruce Allotment was adjudicated for sheep use in the early 1960's. Sheep use gradually decreased (see Tables 1-9 of the Spruce Interim AMP) and in 1964 application was made to graze cattle in winter. A yearlong cattle operation began in the east half of the allotment in 1968. Cattle use from 1964-1969 was licensed as "temporary, pending analysis of a change-in-kind of livestock use".

The National Environmental Policy Act (NEPA) of 1969 required that environmental documentation be prepared to determine the consequences of federal actions significantly affecting the human environment. In 1973 a separate winter cattle operation began in the west half of the allotment. Therefore, since 1970, cattle use has been licensed as "temporary, pending the completion of an environmental analysis for a change-in-kind of livestock".

In 1974, the Bureau was required to complete grazing EISs as per a lawsuit by National Resources Defense Council (NRDC et. al. vs. Morton et. al, Case No. 1983-73). In order to comply with the court order, the Wells Resource Management Plan/Environmental Impact Statement (RMP/EIS) was completed on January 6, 1984. The Record of Decision for the RMP/EIS was issued on July 16, 1985.

On September 15, 1986, the Rangeland Program Summary (RPS) was issued. The purpose of the RPS was to inform interested parties of the implementation of the rangeland program for the Wells Resource Area. The RPS identified that a formal conversion from sheep to cattle would be considered on portions of the Spruce Allotment.

In 1987, the BLM initiated a change-in-kind of livestock EA and completed a draft allotment management plan (AMP) for the Spruce Allotment. There were disagreements between the permittees and BLM on certain issues in the draft AMP, thus the EA was not finalized because it included the proposal to implement the proposed draft AMP.

The Spruce Allotment has been a "common" allotment with grazing use made by Von and Loyd Sorensen and Ken Jones. Following a transfer of grazing privileges from Loyd Sorensen to Von Sorensen in 1993, Von Sorensen and Ken Jones requested to split the allotment in two, creating the Spruce and Valley Mountain Allotments. Von Sorensen would have the grazing privileges on the Spruce Allotment and Ken Jones would have the grazing privileges on the Valley Mountain Allotment. See Attachment 1 identifying the proposed division line. Earlier requests had been made by the permittees to split the allotment but it was never completed because of disputes between the permittees on the location of the boundary. Bertrand Paris and Sons currently hold a sheep permit on the Bald Mountain Sheep Use Area within the Valley Mountain Allotment. However, this area is not part of the "common" use allotment and is used solely by Paris.

This EA would address the proposed allotment division of the Spruce Allotment into the Spruce and Valley Mountain Allotments, a change-in-kind of livestock for the Spruce and Valley Mountain Allotments, and implementation of the proposed interim AMP for the Spruce Allotment. An AMP for the Valley Mountain Allotment is not being developed at this time. Management changes necessary to attain multiple use objectives on the Valley Mountain Allotment will be identified and implemented through the BLM allotment evaluation process. An AMP for the Valley Mountain Allotment may be developed at a later date.

A site specific EA will be written for each range improvement proposed in the interim AMP.

B. Purpose and Need

The purpose of the proposed allotment division is to create two separate allotments; Spruce and Valley Mountain.

The purpose of the proposed change-in-kind of livestock is to convert the adjudicated sheep use to cattle use on both the Spruce and Valley Mountain Allotments. The livestock permittees, Von Sorensen and Ken Jones, have requested that all sheep AUMs be converted to cattle AUMs. Bertrand Paris and Sons will continue to graze sheep on the Bald Mountain Sheep Use Area.

The purpose for the proposed implementation of the Spruce Interim AMP is to prescribe the manner in which livestock grazing would be conducted and managed to meet the multiple use objectives identified in the Wells Resource Management Plan Record of Decision and Rangeland Program Summary. The AMP is considered "interim" in the sense that identified livestock management actions, including initial stocking levels (equal to current

active use), are subject to modification, as necessary, following completion of the allotment evaluation process for the Spruce Allotment.

The need for the allotment division is to formalize the theoretical split that has been in existence since about 1973. The permittees have run two separate livestock operations in separate use areas of the allotment.

The need for implementation of the proposed Spruce Interim AMP is that it would allow for construction of range improvement projects necessary to initiate prescribed changes in management (including a conversion from sheep to cattle) which are designed to attain the multiple use objectives for the Spruce and Valley Mountain Allotments. Many projects identified in the 1987 draft Spruce AMP were completed by the permittee, Von Sorensen, under Section 4 Range Improvement Permits. These constructed projects included fences, wells, and pipelines. Implementation of the proposed Spruce Interim AMP is contingent upon implementation of the proposed change-in-kind of livestock.

C. Land Use Plan Conformance Statement

The proposed action and alternatives described below are in conformance with the Wells Resource Management Plan, Issue 6, management decisions 1 and 4, and are consistent with Federal, State, and local laws, regulations, and plans to the maximum extent possible.

II. PROPOSED ACTIONS AND ALTERNATIVES

A. Proposed Actions

1. Spruce Allotment Division

The proposed action is to divide the Spruce Allotment into two separate allotments creating the Spruce and Valley Mountain Allotments. The proposed division is based on historical use and management practices of the permittees since about 1973.

2. Change-in-Kind of Livestock (Permittee's Proposal)

The proposed action is to convert the existing total grazing preference of active sheep AUMs and suspended nonuse AUMs to active cattle AUMs, voluntary non-use AUMs, and suspended nonuse AUMs on both the Spruce and Valley Mountain Allotments. The following table outlines existing total preference and conversions by permittee:

Preference	Von Sorensen /Spruce Allotment		Ken Jones/Valley Mountain Allotment	
	Existing	Conversion	Existing	Conversion
Active	22,128	13,100	12,117	5,155
Suspended	395	395	125	125
Voluntary Non-use	—	9,028	—	6,962
Total	22,523	22,523	12,242	12,242

The conversion ratio on the Spruce Allotment was proposed by Von Sorensen. The 59% (13,100 + 22,128) proposed conversion ratio was based on actual use since 1983 and the permittee's future management plans. The following table outlines the proposed initial stocking rates for the Spruce Allotment.

Herd	# Livestock	Kind of Livestock	Period of Use	% PL	Total AUMs
Spruce Mtn. Herd	700	Cattle	5/1-3/31	100	7,700
Secret Pass Herd	675	Cattle	10/1-5/31	100	5,400
Total	1,375				13,100

The proposed conversion ratio for Ken Jones was calculated using the same rationale as proposed by Von Sorensen, that is, historical use and future management plans. The conversion ratio amounted to approximately 43% (5,155 + 12,117). The following table outlines the initial stocking rates proposed for Ken Jones.

# Livestock	Kind of Livestock	Period of Use	%PL	Total AUMs
800	Cattle	11/1-5/15	100	5,155

3. Implementation of the Spruce Interim AMP

The proposed action is also to implement an interim Allotment Management Plan (AMP) for the Spruce Allotment.

A detailed description of the proposed grazing management plan and specific issues and objectives can be found in the proposed Spruce Interim AMP. See Attachment 2 for a summary of the proposed grazing management plan. The proposed Spruce Interim AMP is available for review in the Elko District Office. A summary sheet of multiple use issues and conflicts, objectives, and solutions is also attached (see Attachment 3).

Implementation of the proposed Spruce Interim AMP would include the following management actions:

- 1) Implementation of a change-in-kind of livestock and grazing system consisting of two herds: the Secret Pass Herd and the Spruce Mountain Herd. Also, the Spruce Allotment would be divided into manageable units establishing a proper season of use for each subunit or use area, as well as maximum allowable use for key forage species.
- 2) Crested wheatgrass seedings would be developed and utilized as a management tool to allow cattle to be removed from the desert shrub ranges during the growth period of key forage species which begins in early April each year

Crested wheatgrass seedings currently exist in Independence Valley in the Spruce Allotment. The additional proposed seedings in Independence Valley along with the base property in Steptoe Valley would not only remove cattle from desert shrub ranges in the spring, but also defer use of summer range on Spruce Mountain.

3) Interior fencing would be constructed around the proposed and existing seedings. The fencing would not only prevent livestock drift into the summer range and desert shrub communities, but also allow for a deferred-rotation system of the seedings. An allotment division fence would be constructed.

4) Additional water developments would be constructed on the proposed seedings and native range to allow for better livestock distribution.

A site specific EA would be prepared for all proposed rangeland improvement projects prior to their approval and construction.

B. Alternatives to the Proposed Actions

1. Change-in-Kind of Livestock

a. BLM's Proposal

Under this alternative, the conversion would be based on the BLM's calculations consisting of a 53% conversion ratio on the native range and 100% conversion ratio on the existing seedings. The 53% conversion ratio was based on an analysis for a change-in-kind of livestock on the adjacent Currie Allotment in 1971 (see Attachment 4). The 53% conversion ratio indicates that 53% of the original sheep AUMs would be usable by cattle.

This conversion ratio was applied to the Spruce Allotment because the range sites on the Currie, Spruce, and Valley Mountain Allotments are similar in character. The BLM's proposed conversions are based on: 1) vegetation types; 2) forage preference values; 3) seasons of use; 4) available livestock facilities (waters, fences, etc.); 5) and range site suitability (i.e, slope and available forage). Further, this was the best available data on the allotments until completion of the allotment evaluation. Through the allotment evaluation process, the initial stocking rates would be adjusted as necessary.

The following table outlines the initial stocking rates proposed by BLM for each permittee.

Preference	Von Sorensen/Spruce Allotment		Ken Jones/Valley Mountain Allotment	
	Existing	Conversion	Existing	Conversion
Active	22,128	10,939	12,117	5,319
Suspended	395	7,859	125	3,522
Non-use (Sheep only AUMs) ¹	—	3,725	—	3,401
Total	22,523	22,523	12,242	12,242

¹ These AUMs are suitable for sheep use only and not convertible to cattle use due to steep terrain and lack of water.

The overall result would be a 49% conversion ratio for Von Sorensen (10,939 + 22,128) and 44% conversion ratio for Ken Jones (5,319 + 12,117) of the active preference. Attachments 5 and 6 show the calculations on the conversions for the Spruce and Valley Mountain Allotments.

- b. No Conversion From Sheep to Cattle (100% Sheep Use)
Under this alternative, only sheep would be authorized to graze the Spruce and Valley Mountain Allotments. Cattle use, which has been licensed as "temporary" for the last 29 years, would be terminated.

2. Implementation of the Spruce Interim AMP
The proposed Spruce Interim AMP was developed through close consultation, cooperation, and coordination with the livestock permittee in the Spruce Allotment. Many alternatives to the proposed action exist, however, only the most feasible alternatives for each unit established by the proposed Spruce Interim AMP would be addressed in this assessment.

Alternative Livestock Control Method (interior fencing on existing seedings, allotment division, and water developments on native range)

Under this alternative, only the interior fences on the existing seeding and allotment division fence would be constructed. Also, additional waters proposed on the native range for better livestock distribution would be developed. No new seedings or fences and water developments associated with the new seedings would be developed.

Implementation of management actions would need to consider several factors for both the Secret Pass and Spruce Mountain herds.

- 1) Two major factors must be considered in the development of an alternative livestock control method for the Secret Pass Herd: a) the location of the base property (Secret Pass) would make it unavailable for use until 6/1; and, b) rotational use of native range on public lands must occur prior to the March calving

season

It would be necessary for the Secret Pass Herd to graze the desert shrub range of the Spruce Allotment until 5/31 annually. In order to allow for some rest during the critical growth period, an early (11/1-2/15) and late (2/16-5/31) use rotation would be implemented with each area receiving use after 4/1 every other year.

The proposed interior fencing on the existing seeding in Independence Valley would be constructed to allow for deferred use on part of the seeding by the Spruce Mountain Herd. An allotment division fence would be constructed.

No additional seedings would be developed in Independence Valley. This could result in using the desert shrub communities during the critical growing season.

2) Only those proposed water developments on the native range would be constructed.

3. No Action

a. Spruce Allotment Division

The no action alternative would result in not formalizing a theoretical allotment division through the Spruce/Valley Mountain Rangeline and Allotment Agreement. The permittees would continue to be authorized to operate in the historical use areas that have existed for the past 20 years.

The decision of whether or not to formally split the Spruce Allotment would be deferred until an evaluation of all the multiple use objectives for the Spruce Allotment is completed through the allotment evaluation and multiple use decision process.

b. Change-in-Kind of Livestock

The no action alternative would result in continuing to license cattle use as "temporary" pending completion of the allotment evaluation.

c. Implementation of the Spruce Interim AMP

The no action alternative would result in not implementing the proposed Spruce Interim AMP. Any changes in livestock management necessary to achieve the multiple use objectives identified for the Spruce Allotment would be identified through the allotment evaluation and multiple use decision process.

C. Alternative Considered but Eliminated from Further Discussion

The alternative of converting 100% of the active sheep AUMs to active cattle AUMs was considered, but will not be discussed further. The rationale for eliminating this alternative is that the current unsatisfactory conditions cannot justify an increase in current active cattle use. Active use by cattle of a 100% conversion in active preference would be higher than what available monitoring data indicates current production could support.

III. AFFECTED ENVIRONMENT

A. Proposed Actions

The Spruce Allotment is located on the southeast corner of the Elko District spanning across portions of Antelope, Steptoe, Independence, and Clover Valleys. The major mountain ranges include Spruce Mountain, Pequops, Goshutes, and the Dolly Vardens. The Valley Mountain Allotment is also located in the southeast corner of the Elko District spanning across portions of Steptoe, Butte, and Ruby Valleys. The Medicine Range is the dominant mountain range while the other smaller ranges include Delcer Buttes, West Buttes, and Valley Mountain.

The desert shrub communities are dominant in the valleys while pinyon, juniper, mountain mahogany, white fir, and limber pine are dominant in the higher elevations. Bristlecone pine also occurs on Spruce Mountain and the Goshutes.

The following critical elements of the human environment are not present or not affected by the proposed action or alternatives in this EA:

- Air Quality
- Areas of Critical Environmental Concerns
- Farm Lands (prime or unique)
- Floodplains
- Native American Religious Concerns
- Paleontology
- Wastes (hazardous or solids)
- Water Quality (drinking/ground)
- Wild and Scenic Rivers
- Threatened, Endangered, and Candidate Species

A detailed description of the affected environment can be found in the proposed Spruce Interim AMP. A summary of the resources addressed in the interim AMP follows.

Bureau specialists have further determined that the following resources, although present in the project area, are not affected by the proposed actions within the Spruce and Valley Mountain Allotments:

Mining Activities - Mining activity has occurred and/or is ongoing in many areas of the Spruce Allotment. Mining has benefitted livestock management as a result of access routes being upgraded and in some instances, water for mining has been available for stockwater use.

Woodland Products - Christmas trees, pine nuts, fuel wood, and fence posts are harvested commercially and non-commercially in many areas of the Spruce Allotment.

Recreation - Recreational activities include off road vehicle (ORV) use, big and small game hunting, upland game bird hunting, camping, and special recreation permit (SRP) races.

The following resources are present and may be affected by the proposed actions on the Spruce and Valley Mountain Allotments:

Range

Livestock forage management - Livestock have grazed the desert shrub communities during the critical growth period resulting in declining range conditions. Livestock distribution has been poor as a result of no interior fencing and lack of water facilities.

Wildlife

Mule deer habitat - No serious conflicts between livestock use and mule deer summer range have been identified. However, late season use by cattle on crucial mule deer winter range has resulted in declining habitat conditions.

Bighorn sheep habitat management - The Goshute Mountains have been considered for reintroduction of bighorn sheep.

Antelope habitat management - Spring use by cattle in antelope yearlong ranges has resulted in general lack of vegetative diversity.

Sage Grouse habitat management - Sage grouse strutting grounds have been identified on the northwest corner of the Spruce Allotment along the upper valley benches of Clover Valley. Strutting grounds are also present south of Spruce Mountain. A strutting ground is also found on the northeast end of the Medicine Range within the Valley Mountain Allotment. NDOW currently monitors sage grouse strutting activities. However, it is unknown if, or how much of, these sagebrush habitats are utilized by sage grouse as nesting habitat. Therefore, it is unknown how much "potential nesting habitat" would be directly affected by the proposed seeding projects.

There are many thousands of acres of sagebrush dominant range in the Spruce Allotment that have been degraded to poor ecological condition by historical overgrazing. Since natural seed source is no longer present, artificial revegetation is the only viable alternative for restoring these areas to a more productive and useful condition.

Wild Horse Management - Three wild horse Herd Management Areas (HMA) occur within the Spruce Allotment. They are the Spruce-Pequop HMA, Antelope Valley HMA, and Goshute HMA.

Two wild horse HMAs occur within the Valley Mountain Allotment. They are the Antelope Valley HMA and Maverick-Medicine HMA.

The Wells RMP/EIS identified specific wild horse population levels which would be managed in each herd area (1981 population levels). However, according to a recent ruling by the Interior Board of Land Appeals (IBLA), wild horse population levels would be managed to a herd size which would maintain a thriving ecological balance consistent with other multiple uses while remaining within the wild horse herd boundary. The Wild Horse Amendment to the Wells RMP/EIS, approved on August 2, 1993, established initial herd size within the wild horse herd management areas (HMAs)

as per the selected alternative. A Wild Horse Herd Management Area Plan (HMAP) would identify specific objectives for the management of wild horses within each HMA.

Wetland/Riparian Zones - Only 27 surface waters exist on public lands within the Spruce and Valley Mountain Allotments. Most of the springs and/or wet meadows are located on Spruce Mountain. Fifteen of the 27 surface waters have been developed with a spring box and trough or dug-out pond. The water source and associated riparian zone, in some cases, has been fenced. Habitat conditions for these springs and/or wet meadows range from poor to fair.

Most of the surface waters and wet meadows within the Spruce Allotment on Spruce Mountain are located above 7,000 feet. Livestock had been turned into these areas around 5/1 annually.

Cultural Resources - Cultural resources occur throughout the entire allotments. A site specific EA would be written for each identified project and potential impacts and mitigating measures, if necessary, would be addressed.

Wilderness - The South Peguop WSA occurs within the Spruce Allotment. Livestock grazing would continue in the WSA as per the proposed action.

Winter cattle grazing would continue under the proposed action in the lower elevations of the Goshute Peak WSA, resulting in negligible impacts to wilderness values.

Visual Resources Management - The valleys of the Spruce and Valley Mountain Allotments are in a VRM Class IV while the Peguop Mountains and the Goshute Mountains are rated in VRM Class III. Spruce Mountain and the Medicine Range are rated in VRM Class III and Class II. The objectives for each VRM Class are as follows:

Class II - Changes caused by management activities should not be evident in the landscape. A contrast may be seen, but should not attract attention.

Class III - Contrasts caused by management activities may be evident and begin to attract attention, however, changes should remain subordinate to the existing landscape.

Class IV - Contrast may attract attention and be a dominate feature in the landscape.

B. Alternatives to the Proposed Actions

The description of the affected environment for the alternatives would be the same as that for the proposed actions.

IV. ENVIRONMENTAL IMPACTS

A. Proposed Actions

1. Spruce Allotment Division

The allotment division is primarily an administrative function necessitating a range line agreement between the

permittees to determine allotment boundaries. Impacts from the allotment division are not anticipated as permittees have been running two separate livestock operations since about 1973.

2. Change-in-Kind of Livestock (Permittee's Proposal)
The conversion from sheep to cattle use has been allowed as "temporary" on the Spruce and Valley Mountain Allotments for the last 29 years. Throughout this period, many adjustments in the livestock operation have occurred and many range improvements have been constructed to accommodate this change-in-kind of livestock use. The multiple use issues and conflicts which have developed over the years and those which currently exist on the Spruce Allotment are discussed in detail in the proposed Spruce Interim AMP.

In general, the following impacts have resulted or would result in a change from sheep to cattle use on the Spruce and Valley Mountain Allotments:

Range

Fences - Stockwater facilities or water hauling practices are currently utilized to control cattle use patterns. However, in some areas of the Spruce Allotment the need for drift fences and/or division fences has been identified.

Water Developments - Cattle use is usually more concentrated around waters. Additional water developments are needed to distribute cattle use more evenly. However, forage utilization levels by cattle would increase in these areas which previously received only light to moderate use.

Area Suitability - Some areas of the Spruce and Valley Mountain Allotments are not suitable for cattle use due to steep terrain and/or lack of water (see Attachment 7). These areas had previously been used by sheep. Therefore, the AUMs in these areas partially account for the voluntary non-use AUMs.

Forage Utilization - Cattle utilize shrubby vegetation in the winter months. However, cattle use is more concentrated near stockwater facilities. Therefore, some areas of the desert shrub range are grazed more heavily.

In April and May sheep were generally herded away from the valley bottoms into the valley uplands, following snow for water and green feed for lambing season. Without fencing, riding and/or salting, it is difficult to keep cattle off the winter range during this period. Consequently, the conversion from sheep to cattle increased the use of the desert shrub ranges in April and May. Grazing use of key desert shrubs during the growing season can seriously affect plant vigor, composition density, and ultimately lower overall ecological conditions.

Generally, cattle prefer to graze grasses, whereas sheep prefer forbs and more shrubby vegetation.

Wildlife

Fences - The construction of interior/division fences could have potentially adverse impacts on wildlife movements.

Water Developments - Developing water facilities would benefit mule deer, antelope, and sage grouse by providing water in areas where it was not previously available. However, water could draw cattle into areas not previously used, thereby increasing the potential for wildlife/livestock conflicts in some cases.

Area Suitability - Without cattle or sheep use in those areas classified as unsuitable for cattle use, competition for available forage in these areas between livestock and wildlife would be reduced.

Forage Utilization - The conversion from sheep to cattle has decreased the competition between sheep, antelope, and deer. Decreasing the amount of domestic sheep use on the Spruce Allotment has lessened the competition for forage and potential for disease transmission to bighorn sheep being considered for reintroduction in the Goshute Mountains by the Nevada Department of Wildlife.

Wild Horse Management

Fences - The construction of interior/division fences could have potentially adverse impacts on wild horse movements.

Water Developments - Developing water facilities would benefit wild horses by providing water in areas where it was not previously available.

Area Suitability - Without cattle or sheep use in those areas classified as unsuitable for cattle use, competition for available forage in these areas between livestock and wild horses would be reduced.

Forage Utilization - The conversion from sheep to cattle has increased the competition for forage between cattle and wild horses in some areas.

Wetland/Riparian Zones

Riparian habitat around the springs would be used heavily by either sheep or cattle if left unfenced, thus, there is no distinction on the impacts of sheep versus cattle grazing.

Cultural Resources

Cultural concentrations are normally heavier around natural waters. Cattle congregate around these waters for longer periods of time than sheep, thus trampling by cattle would result in more impacts on cultural resources. Also, there is a difference in the intensity of use over the allotment as sheep are tended while cattle are not.

Overall, there are too many factors to determine the overall effect on cultural resources of cattle versus sheep use.

Wilderness

Changes in livestock grazing, including changes in numbers and kind of livestock or period of use, may be permitted in designated wilderness study areas, as long as (1) the changes do not cause declining condition or trend of the vegetation or soil, and (2) the changes do not cause unnecessary or undue degradation of the lands (Chap. III.H.2.a. of the Interim Management Policy (IMP) and Guidelines for Lands under Wilderness Review).

Domestic sheep grazing in the Spruce Allotment portion of the Goshute Peak WSA has been very limited since 1976. The proposed action would eliminate domestic sheep grazing in this area of the Goshute Peak WSA. This would reduce conflicts with bighorn sheep being proposed for reintroduction into the Goshute Mountains. Because of limited historical domestic sheep grazing within the Goshute WSA, the proposed action would maintain or improve current vegetative conditions as well as current wilderness values.

The proposed action would also allow for reduced cattle use within the South Peguop WSA. Adjustments to livestock numbers would occur through the allotment evaluation process.

Visual Resource Management

Cattle grazing versus sheep grazing would not significantly impact visual resources.

3. Implementation of the Spruce Interim AMP

A summary of the impacts of this proposed action along with the estimated cost of implementation is shown in Attachment 8. Following is a description of the impacts.

Range

Livestock Forage Management - Implementation of the Spruce Interim AMP would result in a beneficial impact to the forage resource through more effective livestock management. Implementation of the Spruce Interim AMP is expected to maintain or improve the current ecological condition of each key area within ten years of full implementation of the grazing system.

Under the proposed action, additional spring forage would be provided allowing cattle to be removed from the winter range during the critical growth period of key desert shrub species. In addition, increased and more substantial grazing use would be made of existing seeded range in Independence Valley as well as private base property in Steptoe Valley. Interior/division fencing would be developed to allow deferred use of summer range on Spruce Mountain, deferred rotational use of existing seedings, and removal of livestock on the desert shrub communities by 4/1.

Utilization patterns within each use area would be improved by developing additional water facilities.

For a further discussion of how livestock forage management would improve, see Section IV.B. of the

proposed Spruce Interim AMP (Grazing System Design).

Wildlife

Mule Deer Habitat Management - The proposed action is expected to maintain or improve the current good habitat condition ratings of crucial deer winter range in the Basco/Spruce Spring, Black Forest, and Honeymoon Chaining areas. Overutilization of bitterbrush by cattle in the Boone Springs area is an issue identified in the proposed Spruce Interim AMP. The proposed action would establish a rest-rotation grazing treatment with cattle in this area, allowing for deferred grazing followed by complete rest the following year. By reducing the amount of cattle grazing pressure, the fair habitat condition ratings of the Boone Springs crucial deer winter range are expected to improve from fair to good within 10 years of full implementation of the grazing system.

During heavy snow years, wintering mule deer may be forced out of the Boone Springs Area (Subunit E-3) and into the upper benches of subunits C-1 and C-2. Competition between domestic sheep and wintering mule deer for desert shrubs (particularly black sage) would occur if sheep were also grazing these subunits. However, with the implementation of the proposed Spruce Interim AMP (which is contingent upon the proposed change-in-kind of livestock), there would be no sheep use. Considering the chances of a heavy snow year, coupled with no sheep use, the opportunities for competition are greatly reduced.

The proposed Spruce Interim AMP does not identify any serious conflict with current livestock use and mule deer summer range. For further details, see proposed Spruce Interim AMP.

Bighorn Sheep Habitat Management - By not grazing sheep along the west slopes of the Goshute Mountains (Subunit J), competition for forage and the potential for disease transmission to bighorn sheep which are being considered for reintroduction in this area by the NDOW would be eliminated.

Antelope Habitat Management - Spring use of desert shrub ranges by cattle has increased competition with antelope for available key forage species. The proposed Spruce Interim AMP identifies a general lack of vegetative diversity over the entire yearlong antelope range within the Spruce Allotment (vegetative diversity is necessary for good antelope habitat). The proposed action would reduce competition between antelope and livestock and improve vegetative diversity on yearlong antelope ranges by eliminating spring use by cattle on native range. The production of grasses and forbs as well as key desert shrubs is expected to increase as a result of the proposed action.

The proposed action would increase available waters in yearlong antelope range within the Spruce Allotment.

Since water is a limiting factor to most antelope populations, making these waters available to antelope would improve the habitat for antelope, allowing for possible expansion of current antelope populations and ranges.

The proposed action is expected to improve the current overall habitat condition ratings for all yearlong antelope ranges within the Spruce Allotment to good condition within 10 years of full implementation of the grazing system. For further details see the proposed Spruce Interim AMP.

Sage Grouse Habitat Management - The proposed action would implement site specific rangeland improvement projects, having an overall beneficial impact to the forage resource. Proposed projects such as sagebrush type conversions (crested wheatgrass seedings, etc.) would be developed in compliance with the standard operating procedures identified in the Wells RMP. These guidelines are based on recommendations of the Western States Sage Grouse Committee.

The need for removing livestock from desert shrub ranges in early April is clearly identified in the proposed Spruce Interim AMP. The proposed interim AMP proposes to convert approximately 11,000 acres of poor condition sagebrush dominant range to crested wheatgrass. These new seedings would be used as a tool to eliminate livestock use of desert shrub ranges during the critical growth period each year and to improve the ecological condition of desert shrub ranges.

Some areas suitable for development are adjacent to sage grouse strutting grounds. These impacts would be further analyzed in the site specific EA for these seeding projects.

Making increased substantial use of existing seeded range in Independence Valley is expected to improve the ecological condition of native range in Antelope and Steptoe Valley (reducing use after 4/1 each year) as well as on Spruce Mountain (deferring use until 7/1 each year). Benefits to sage grouse would be the concurrent improvement of mesic areas which are important habitat features for sage grouse.

Wild Horse Management

The proposed action would establish an intensive livestock grazing plan, identifying specific rangeland improvement projects necessary to achieve specific management objectives. Improving the forage resource through better grazing management would benefit the wild horse and wildlife resources. Rangeland improvement projects such as water developments would also benefit the wild horse and wildlife resources.

The proposed action would divide the Spruce Allotment into manageable units. The development of pasture fences and allotment division fence could affect wild horse movements. These impacts would be analyzed and mitigated by a site

specific environmental assessment for each fence project. Although the proposed action would control cattle use, wild horses would still be able to graze rested or deferred pastures. This should not affect achievement of specific objectives as long as wild horse populations are kept at a level that would maintain a thriving ecological balance.

Wetland/Riparian Zones

The proposed action would defer cattle use during the critical growth period until 7/1, reducing livestock use by two months each year. Sheep would no longer use these areas. Certain areas would also receive a rest treatment (see proposed Spruce Interim AMP for grazing system details).

It is anticipated that deferment together with a rest treatment would greatly improve the condition of certain riparian areas. Deferment until 7/1 alone is not expected to reduce concentrated use of riparian areas. However, deferment for two months during the critical growth period would greatly improve plant vigor and forage production. The Spruce/Goshutes Habitat Management Plan (HMP) is currently a high priority plan scheduled for completion. The HMP would identify certain high priority poor or fair condition springs and/or wet meadows to be improved. The proposed action would develop and improve three springs and/or wet meadows. Development would include fencing the spring source or wet meadow to exclude livestock use. Water would still be available for cattle outside the enclosure, therefore, increased use of other riparian areas would not be expected.

Improved grazing management, together with fencing three additional springs and/or wet meadows to be identified in the Spruce/Goshutes HMP, is expected to improve the current poor to fair habitat condition ratings to good condition within 10 years (allotment objective).

Cultural Resources

Implementation of the Spruce Interim AMP could have both positive and negative effects on cultural resources which are difficult to quantify. As previously mentioned, there are too many factors to determine the overall effects.

The positive effects would be the elimination of livestock grazing over most of the allotment during the spring which would minimize trampling of archaeological sites during the wet season. The improvement of ecological condition would lessen erosion, reducing destruction of cultural resources.

Negative effects would result from increased livestock use around proposed range improvement projects and other changes in traditional patterns of grazing.

A site specific EA would be written for each proposed project, along with a cultural resources report. Any potential impacts to cultural resources and necessary mitigating measures would be addressed in the site specific EA. The immediate and local effects of any given project can be analyzed by a site specific EA. However, the data to assess the overall effects of implementation of the proposed interim AMP is simply not available.

Wilderness

The grazing system outlined in the proposed Spruce Interim AMP would provide rest from grazing every other year and deferment until 7/1 during years of use in the South Pequop WSA. These actions would maintain and, in some areas, enhance the vegetative screening and natural landscape. Monitoring and subsequent grazing adjustments would assure negligible impacts to wilderness values.

Visual Resources Management

Livestock grazing would not significantly impact visual resources. A visual contrast rating worksheet would be prepared along with the EA for each site specific range improvement project. Visual impacts of proposed seedings and fences may be pronounced. Mitigation of these impacts would be assessed in each site specific EA regarding seedings and fences.

B. Alternatives to the Proposed Actions

1. Change-in-Kind of Livestock

a. BLM's Proposal

Under the BLM's proposal for the change-in-kind of livestock, the environmental impacts would be similar to those in the proposed action.

The major difference is the overall conversion ratio. The differences between the overall conversion ratios are 10% (59% - 49%) for the Spruce Allotment and 1% (43% - 44%) for the Valley Mountain Allotment.

The proposed action is based on current active use and would be adjusted following evaluation of the available monitoring data. The 1% conversion on the Valley Mountain Allotment is not measurable. Until the allotment evaluation are completed to more accurately determine carrying capacity for cattle, a change from current active use cannot be justified.

b. No Conversion From Sheep to Cattle (100% Sheep Use)

If only sheep were allowed to graze the Spruce and Valley Mountain Allotments, there would be a reduced need for division or pasture fences because of herding practices for sheep. This would be beneficial to wildlife and wild horses. There would also be a reduced need for additional water developments which would lessen the benefits to wildlife and wild horses.

With only sheep use, there would be a lesser impact on the desert shrub ranges in the spring after the growing season begins. Sheep would utilize the upper valley benches more heavily in April and May. Since sheep would be able to utilize native range more effectively in April and May, there would be less need to develop seeded range for spring forage.

Livestock utilization patterns would be more uniform or at least more controllable with sheep use only. There would be less concentrated use around waters than with cattle.

If only sheep were grazed, the entire Spruce and Valley Mountain Allotments would be suitable for grazing. There would be no areas of non-use by livestock.

Because of the dietary preference of sheep, competition with horses for forage would decrease, whereas competition with wildlife would increase. The potential conflicts with bighorn sheep reintroductions would also increase.

The change from sheep to cattle grazing has occurred on the Spruce and Valley Mountain Allotments gradually over the last 29 years. If only sheep use were allowed, the change from cattle use back to sheep use would create an economic hardship for the grazing permittees due to their investments on the allotment and the general trend of the sheep industry.

2. Implementation of the Spruce Interim AMP

Alternative Livestock Control Method (interior fencing on existing seedings, allotment division fence, and water developments on native range)

Without the development of seeded pastures in the Spruce Allotment, the Secret Pass herd would continue grazing the desert shrub range after the growing season of key forage species begins. Rotating grazing use areas after 4/1, allowing for a rest treatment every other year, would not allow for achievement of objectives. Utilization of white sage in excess of 25% during the growing season, for example, could reduce vigor and prevent seed production. The improvement of ecological condition on desert shrub ranges would not be possible in 10 years as predicted under the proposed action. Ecological condition and trend would most likely remain static.

Use of desert shrub ranges after spring growth begins is not in compliance with the livestock grazing treatments outlined in the Implementation Section of the Wells RMP/EIS.

Without the development of seeded range, potential adverse impacts to the sage grouse resource due to habitat loss would be reduced.

Without seedings, proposed interior fences for the proposed seedings would not be required, reducing adverse impacts to wildlife and wild horse movements.

The interior fences in the existing seeding in Independence Valley would still be constructed and allow for deferred use of native range until 7/1 annually. However, because no additional seedings would be developed in Independence Valley, there would not be enough forage for the Spruce Mountain Herd and the pastures would require that some of the native range be fenced within the seeding. This would require part of the native range to be grazed during the critical growing season.

The allotment division fence would be constructed to allow for delineation of two separate allotments resolving administrative problems.

The water facilities proposed within the seeded pastures would not be developed, reducing the benefits of additional waters to wildlife and wild horses. However, the waters identified in the proposed interim AMP that are not associated with the proposed seedings would be developed. This would allow for better livestock distribution on the native range.

A summary of the impacts of this alternative along with the estimated cost of implementation is shown in Attachment 8.

3. No Action

a. Spruce Allotment Division

If the allotment division is not approved, common and historic use areas would continue to be authorized to operate as they have in the past, unless the allotment evaluation identifies the need for a formal division.

b. Change-in-Kind of Livestock

Management on the Spruce Allotment would continue as it has for the past 29 years pending completion of the allotment evaluation. Current unsatisfactory conditions would continue to exist as current management practices would exist.

Over the past years, one of the permittees, Von Sorensen, has completed many range improvements under Section 4 Range Improvement Permits in preparation for the formal conversion from sheep to cattle. There are still more range improvements that need to be developed to not only allow for more intensive livestock management, but also improve resource conditions. Some of the improvements may consist of wells, pipelines, fences, and possibly vegetation manipulation projects.

c. Implementation of the Spruce Interim AMP

Without implementation of the proposed Spruce Interim AMP, implementation of the management actions necessary to achieve objectives would be postponed until completion of the allotment evaluation process. Therefore, the overall condition rating for the native range within the Spruce Allotment would remain as fair to mid seral with trends static or slightly downward until management actions could be initiated through the multiple use decision process.

A summary of the impacts of the No Action Alternative and an estimated cost of implementation is shown in Attachment 8.

C. Cumulative Impacts

All resource values have been evaluated for cumulative impacts. It has been determined that cumulative impacts would be negligible as a result of the proposed actions or alternatives.

D. Monitoring Needs

Range, wildlife, and wild horse monitoring information will continue to be collected as outlined in the allotment monitoring file and in accordance with the Wells Resource Area Interdisciplinary Monitoring Schedule.

V. CONSULTATION AND COORDINATION

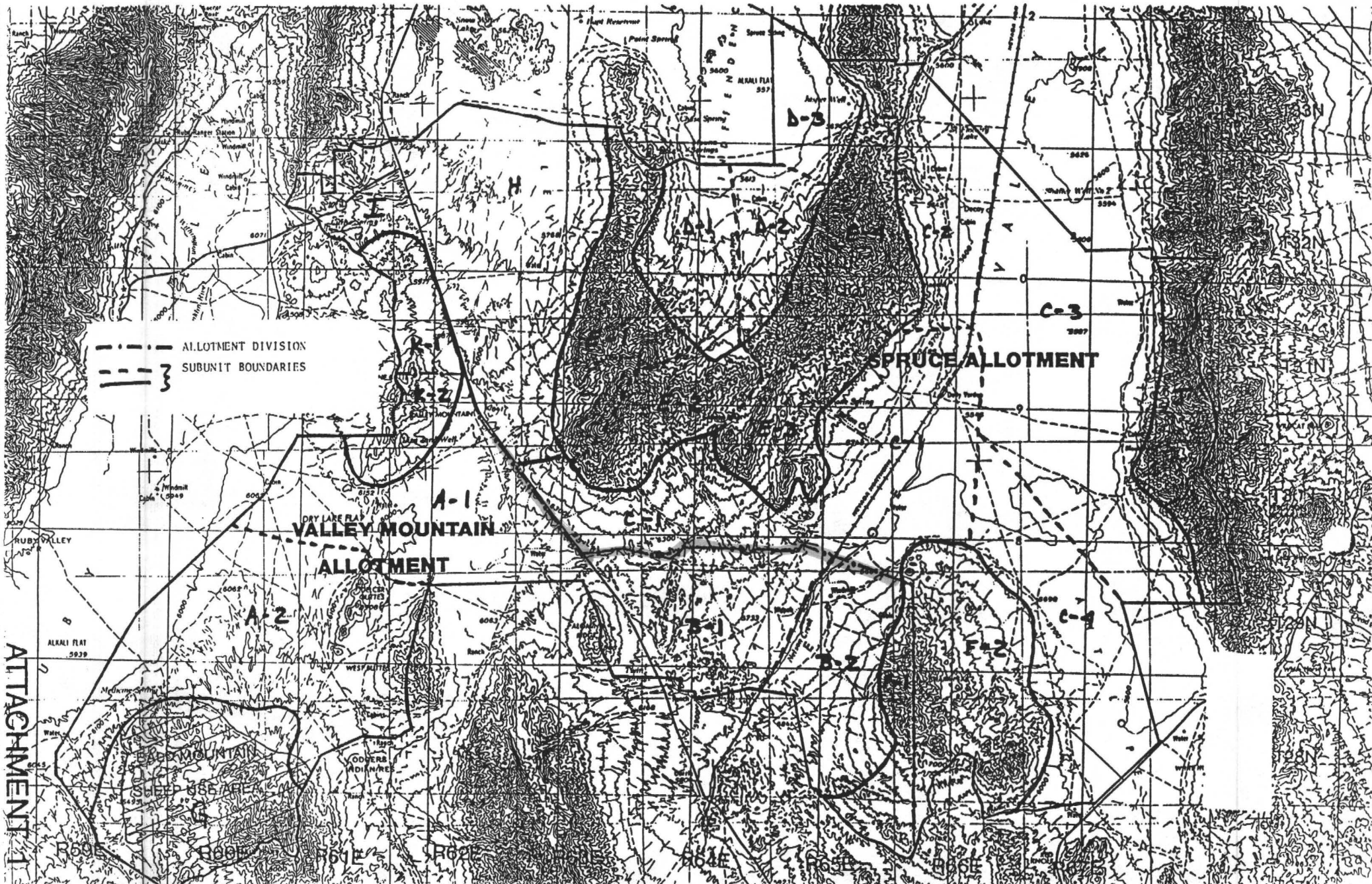
List of Preparers

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Ray Lister - Range and Wildlife
Karl Scheetz - Range
Roy Price - Threatened, Endangered, and Candidate Species
Laura Gutzwiller - Riparian/Wetlands and Wildlife
Dave Mermejo - Recreation, Visual Resources, and Wilderness
Kathy McKinstry - Wild Horses
Skip Ritter - Woodland Products
Sarah Schmidt - Mining
Bob Marchio - Lands
Carol Marchio - Watershed
Tim Murphy - Cultural
Lauren Mermejo - Environmental Coordinator

Persons, Groups, and Agencies Consulted

Von Sorensen - Permittee ;
Loyd Sorensen - Permittee
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Nevada Department of Wildlife
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 Duane Erickson - Supervising Habitat Specialist
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Humane Society - US
Nevada Wildlife Federation
Animal Protection Institute
National Resources Defense Council
U.S. Fish and Wildlife Service
Commission for the Preservation of Wild Horses
Wild Horse Organized Assistance
Nature Conservancy
U.S. Wild Horse Foundation
Sierra Club - Toiyabe Chapter
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HTT Resource Advisors
Federal Land Bank
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ALLOTMENT DIVISION AND SUBUNIT BOUNDARIES



PROPOSED GRAZING SCHEDULE FOR SECRET PASS HERD

Subunit/ Use Area	Associated Water Development	APPROXIMATE TIME FRAMES*		
		Year 1	Year 2	Year 3
H, I & K-1	Sorensen Well Government Spring Curtis Spring Sorensen Deep Well Middle Well Sorensen Well No. 6 Spruce Well East Highway Well	10/20 - 11/30 5/16 - 5/31	10/20 - 11/15 4/16 - 5/31	R E P E A T C Y C L E
C-1**	Basco Spring Pipeline Spruce Spring Pipeline Gravel Pit Well East Highway Well	12/1 - 12/10 5/1 - 5/15	11/1 - 11/20 4/1 - 4/15	
C-1	Tom Eager Well Indian Creek Well Crane Well Warehouse Well	12/1 - 2/28	11/15 - 11/30 2/1 - 3/31	
C-1	Goshute Well Old Mizpah Well Mizpah Point Well	3/1 - 4/30	12/1 - 1/31	

* Due to the variability of annual conditions (i.e., growing conditions, winter snow patterns, etc.), the rotation of livestock may vary somewhat from this schedule as qualified in Section IV.D. of this AMP.

** This area of Subunit C-1 will be used mostly for trailing between Clover and Steptoe Valleys.

PROPOSED GRAZING SCHEDULE FOR SPRUCE MOUNTAIN HERD

Subunit/ Use Area	Associated Water Developments	APPROXIMATE TIME FRAMES*		
		Year 1	Year 2	Year 3
D-3	Jasper Well	11/1 - 11/20 5/1 - 5/10	11/1 - 11/20 5/1 - 5/10	R E P E A T C Y C L E
C-2	Warehouse Well Crane Well Indian Creek Well Goshute Well	3/1 - 3/31	11/10 - 12/10	
C-4 & F-2	Goshute Well Antelope Well Dolly Varden Well Dolly Varden Spring Well	1/21 - 3/21	12/11 - 1/31	
C-3	Shafter Well No. 3 Basque Well Black Point Wells Itcaina Black Point Well	11/20 - 1/20	2/1 - 3/31	
Private Land Seedings		4/1 - 4/30	4/1 - 4/30	
D-2	Ninemile Well Feedlot Well	9/1 - 11/10	5/1 - 6/30	
D-1	East Spruce Well	5/1 - 6/30	9/1 - 11/10	
E-1 & E-2	All	7-1 - 9/30	7/1 - 9/30	
E-3	All	REST		
E-4	All	7/1 - 9/30	REST	

* Due to the variability of annual conditions (i.e., growing conditions, winter snow patterns, etc.), the rotation of livestock may vary somewhat from this schedule as qualified in Section IV.D. of this AMP.

**ATTACHMENT NUMBER 3
SPRUCE INTERIM AMP
SUMMARY OF MULTIPLE USE ISSUES AND CONFLICTS**

MULTIPLE USE ISSUEAMP OBJECTIVEPLANNED ACTION1. LIVESTOCK GRAZING

- change-in-kind of livestock never analyzed to establish proper carrying capacity and stocking levels.
- use of desert shrub range after 4/1 not in compliance with RMP/EIS and physiological needs of key forage.
- overutilization of bitterbrush in Boone Springs deer winter range by cattle.
- poor cattle distribution problems.
- ecological condition of key areas is mid to late seral.
- cattle drift problems.

- initiate a grazing plan to establish maximum stocking levels for cattle and proper season of use.
- divide the allotment into manageable units.
- improve livestock distributions with water developments.
- provide sufficient spring forage to allow livestock to be removed from desert shrub range 4/1 annually.
- improve ecological condition of all key areas to late seral within 10 years of implementation of grazing system. --

- initiate environmental assessment for change-in-kind.
- develop 11,000 acres of AGCR to eliminate use on desert shrubs after 4/1.
- establish rest-rotational use in Boone Springs area.
- develop waters to improve cattle distributions.
- construct fences to control cattle drift, etc.

2. WILDLIFE MANAGEMENT

- habitat condition of crucial deer winter range in Boone Springs area is fair (overuse of PUTR2 by cattle).
- major migration route exists across Highway 93 in spring and fall.
- overall habitat condition of year-long antelope range is fair.
- poor vegetative diversity in yearlong antelope range.
- lack of water in antelope ranges.
- competition between cattle and antelope for spring forage.
- potential conflict with domestic sheep use and bighorn sheep reintroductions in Goshute Mountains
- 17 sage grouse strutting grounds.
- potential conflict with fences in yearlong antelope ranges.

- improve habitat conditions of Boone Springs crucial deer winter range to good condition within 10 years.
- improve yearlong antelope range habitat condition ratings to good within 10 years.
- ensure all seeding projects comply with guidelines established in the Wells RMP/EIS.

- establish rest-rotational cattle use in Boone Springs deer winter range.
- mitigate impacts to antelope and deer in site specific EAs for fence projects. Make all new stockwater facilities available to wildlife.
- eliminate spring use of yearlong antelope range by cattle.
- design AGCR seedings in mozaic patterns.
- mitigate impacts to sage grouse in site specific EA for seedings.
- close Goshute Mountain portion of Spruce Allotment to sheep grazing.

ATTACHMENT NUMBER 3
 SPRUCE INTERIM AMP
 SUMMARY OF MULTIPLE USE ISSUES AND CONFLICTS

<u>MULTIPLE USE ISSUE</u>	<u>AMP OBJECTIVE</u>	<u>PLANNED ACTION</u>
<p>3. <u>WILD HORSES</u></p> <p>-potential conflict with new fences. -portions of three wild horse herd areas on Spruce Allotment.</p>		<p>-mitigate impacts to wild horses with site specific EA for fence projects.</p>
<p>4. <u>WILDERNESS</u></p> <p>-portions of two wilderness study areas on Spruce Allotment.</p>	<p>-maintain suitability for wilderness designation.</p>	<p>-ensure all planned actions within the proposed Spruce Interim AMP comply with IMP guidelines.</p>
<p>5. <u>T/E SPECIES</u></p> <p>-no conflicts</p>	<p>-</p>	<p>-mitigate any impacts to T/E species in site specific project EAs.</p>
<p>6. <u>RIPARIAN HABITAT</u></p> <p>-springs and/or wet meadows on Spruce Allotment are in poor to fair habitat condition.</p>	<p>-improve the habitat condition of at least 3 springs or wet meadows to good or excellent condition within 10 years.</p>	<p>-fence or develop three springs and/or wet meadows as identified in the Spruce/Goshutes HMP. -defer use of Spruce Mountain summer range by cattle until 7/1 annually.</p>
<p>7. <u>WOODLAND PRODUCTS</u></p> <p>-no conflicts with livestock grazing.</p>		
<p>8. <u>MINERALS MANAGEMENT</u></p> <p>-no conflict with livestock grazing and mining activity.</p>		
<p>9. <u>RECREATION</u></p> <p>-no conflicts with livestock grazing.</p>		

BILL LEAR ANALYSIS

On April 10, 1961, Mr. Lear purchased from Itcaina Livestock Company, certain ranch properties to which 6,137 AUMs of Federal Range Privileges were attached.

In checking back through the records, it was determined that the 6,137 AUMs originated as follows:

Walker Ranch	864 AUMs - Cattle
Cordano Ranch	1,233 AUMs - Cattle
Ordaqui Ranch	3,164 AUMs - Sheep
Itcaina Original	<u>876 AUMs - Sheep</u>
TOTAL:	6,137 AUMs

The original class of livestock that used these AUMs is as follows:

Cattle	2,097 AUMs
Sheep	<u>4,040 AUMs</u>
TOTAL:	6,137 AUMs

Mr. Lear's use has been with cattle and horses, except just a small amount of sheep use from 1962 through 1966. The following is a breakdown of this use:

1961	683 AUMs - All Cattle
1962	3,251 AUMs - 3,150 Cattle 46 Horses 55 Sheep
1963	3,201 AUMs - 3,050 Cattle 137 Horses 14 Sheep
1964	3,522 AUMs 3,386 Cattle 96 Horses 40 Sheep
1965	3,859 AUMs - 3,681 Cattle 124 Horses 84 Sheep
1966	3,992 AUMs - 3,729 Cattle 147 Horses 116 Sheep

He has been licensed for the following AUMs in the past four (4) grazing seasons:

1967	3,977 AUMs - 3,823 Cattle 154 Horses
1968	4,257 AUMs - 4,071 Cattle 186 Horses
1969	4,215 AUMs - 4,029 Cattle 186 Horses
1970	4,341 AUMs - 4,155 Cattle 186 Horses

On April 28, 1961, District Manager Lowell Udy, wrote a letter to the Nevada Range Service and stated that the Bureau would allow Mr. Lear to use only the AUMs that were classified for cattle, and he would not be allowed to use the sheep AUMs until a conversion of sheep use to cattle use was determined. Mr. Lear has never been held to the cattle AUM figure.

On December 24, 1964, an Advisory Board Adverse Recommendation was issued to Bill Lear, setting up an Allotment boundary between Robison & Sorensen and Mr. Lear. On January 26, 1965, a District Manager's decision was issued on the Allotment boundary line between Robison & Sorensen and Mr. Lear. As a part of this decision, certain project work was committed by the Bureau to be completed on Bill Lear's area of use. There are listed as follows:

1. Complete boundary fence at the South end of Bald Mountain Allotment. Fence completed.
2. Development of water in the Northeast corner of the Currie Allotment. Water developed.
3. Development of approximately 2,000 acres of seeding West of the Phalen Ranch. 1600 acres seeding completed.
4. BLM to furnish one-half of the materials for the fence line between Robison & Sorensen and Mr. Lear. Material furnished.

On February 25, 1965, District Manager Clair Whitlock had further discussion with Bill Lear and his Attorney, Charles Evans, concerning project work within Mr. Lear's area of use.

On January 5, 1970, Bill Lear appeared before the Elko District Advisory Board concerning the promised BLM range improvement projects, in connection with the Lear Range Line Agreement and the meeting held with Mr. Whitlock on February 25, 1965. The main concern was 1,400 acres of crested wheatgrass seeding that had not been completed.

On January 5, 1970, the Elko District Advisory Board recommended and Elko District Manager Kent Giles concurred with this recommendation, that an analysis be made of Mr. Lear's area of use to determine available forage for cattle before further development work is done.

Bill Lear's areas of use are within two (2) common allotted areas. The Bald Mountain Allotment is in common with the TeMoak Indians. Bill Lear has 56% and the TeMoak Indians have 44% of the use in this allotted area. Bill Lear has 937 AUMs and the TeMoak Indians have 736 AUMs assigned to this area. The Currie Allotment is in common with Pete Cordano. Bill Lear's demand in this area is 5,200 AUMs and Pete Cordano's demand is 910 AUMs.

In coming up with a conversion factor to convert sheep AUMs to cattle AUMs, I took the average carrying capacities for cattle and for sheep from the late 1930s and early 1940, forage surveys and compared these with the average carrying capacities that I came up with in a recheck of Bill Lear's area of use.

In using the old forage surveys, cattle AUMs would constitute 49.0% of the sheep AUMs. In using the recheck survey, cattle AUMs would constitute 53% of the Sheep AUMs.

In using these percentages, Bill Lear's conversion of original sheep AUMs would be as follows:

$$4,040 \text{ Sheep AUMs} \times 49\% = 1,980 \text{ Cattle AUMs}$$

$$4,040 \text{ Sheep AUMs} \times 53\% = 2,141 \text{ Cattle AUMs}$$

For purposes of this analysis, the recheck survey percentage will be used, which will allow Bill Lear to use 2,141 AUMs for cattle of the original 4,040 sheep AUMs.

The following is Bill Lear's total cattle AUM figure:

2,097 Original Cattle AUMs

2,141 Converted Cattle AUMs

4,238 Total Cattle AUMs

In coming up with an available cattle forage figure, I have broken Mr. Lear's area of use into three (3) parts, the Bald Mountain area, Cherry Creek Mountain Area and the spring, fall and winter area.

In the Bald Mountain Allotment, a summer use area, present use amounts to approximately 770 cattle AUMs. Until additional water is available or the users are willing to haul water, this is all the cattle use that

can be allowed in this area. To increase AUM availability for cattle beyond the presently used 770 AUMs without hauling water, will be very costly to the Government. If enough money is put into this area, I feel that the assigned 1,673 AUMs could be satisfied. Sheep could use this area at a much smaller cost to the Government.

The Cherry Creek Mountain area in the Currie Allotment is a summer ^{use} area, which has approximately 1,885 cattle AUMs available. With water development and fencing, this area could produce at least 2,500 cattle AUMs. Again, this would be very costly to the Government. At the present time, the spring, fall and winter range area of the Currie Allotment produces approximately 2,323 cattle AUMs.

The following is the available cattle forage within the areas used in common by Bill Lear, Pete Cordano and the TeMoak Indians:

Bald Mountain	770 AUMs
Cherry Creek Mountain	1,885 AUMs
Spring, fall & winter range	<u>2,323 AUMs</u>
	4,978 AUMs

Bill Lear's use is approximately 437 AUMs in the Bald Mountain Allotment, the TeMoak Indians use approximately 333 AUMs and the remainder of Bill Lear's use would have to be in the Currie Allotment, which would amount to 380 cattle AUMs. Pete Cordano has 910 cattle AUMs of use in the Currie Allotment, for a total of 4,711 cattle AUMs needed. The above information shows there are 4,208 cattle AUMs available in the Currie Allotment and 770 cattle AUMs available in the Bald Mountain Allotment, for a total of 4,978 cattle AUMs being available.

David J. Short

1-5-71

Attachment 5

CONVERSIONS ON THE SPRUCE ALLOTMENT

The conversions on the Spruce Allotment were based on the following demands and percentages:

<u>Secret Pass Herd</u>	6,973 Sheep AUMs
<u>Spruce Mountain Herd</u>	<u>15,155 Sheep AUMs</u>
<u>Total</u>	<u>22,128 Sheep AUMs</u>
15,155	Sheep AUMs (Spruce Mountain Herd available Active Preference)
-3,725	Sheep AUMs (Subunit F-2 and parts of subunits E and J suitable for sheep use only).
(62%) <u>11,430</u>	Sheep AUMs (Spruce Mtn. Herd's part of Active Preference convertible to cattle AUMs).
(38%) +6,973	Sheep AUMs (Secret Pass Herd's Active Preference, all AUMs convertible to cattle AUMs).
<u>18,403</u>	Sheep AUMs (Total sheep AUMs in the Spruce Allotment suitable for conversion).

ATTACHMENT 5 (CON'T). Spruce Allotment Conversion Calculations.

Subunit	Current Avail Sheep AUMs	Livestock Suitability	% of Demand	Conversion Ratio	Converted AUMs
C	8628	CA/SH	x .62	x .53	2835 CA (SM)
			x .38	x .53	1738 CA (SP)
D-Native	1176	CA/SH		x .53	623 CA (SM)
D-Seeding	2521	CA/SH			2521 CA (SM) ¹
E	2353	SH			2533 SH (SM) ²
E	2941	CA/SH		x .53	1559 CA (SM)
F-2	784	SH			784 SH (SM) ²
H	2549	CA/SH		x .53	1351 CA (SP)
I	196	CA/SH	x .62	x .53	65 CA (SM)
			x .38	x .53	39 CA (SP)
J	588	SH			588 SH (SM) ²
J	392	CA/SH		-x .53	208 CA (SM)
Totals	22,128				7811 CA (SM) ³ 3725 SH (SM) ³ 3128 CA (SP) ³

¹ Existing seedings in Independence Valley were converted as 1:1 ratio (i.e. 1 sheep AUM = 1 cow AUM).

² AUMs suitable for sheep use only and not convertible to cattle use due to steep terrain and/or lack of water.

³ The total converted AUMs for the Spruce Allotment equals 10,939 CA AUMs and 3,725 SH AUMs. The active preference for the Spruce Allotment is 22,128 AUMs, thus, the remaining 7,464 AUMs would be placed in suspension. Adjustments would be made upon completion of the allotment evaluation.

SM = Spruce Mountain Herd
SP = Secret Pass Herd

ATTACHMENT 6. Valley Mountain Allotment Conversion Calculations.

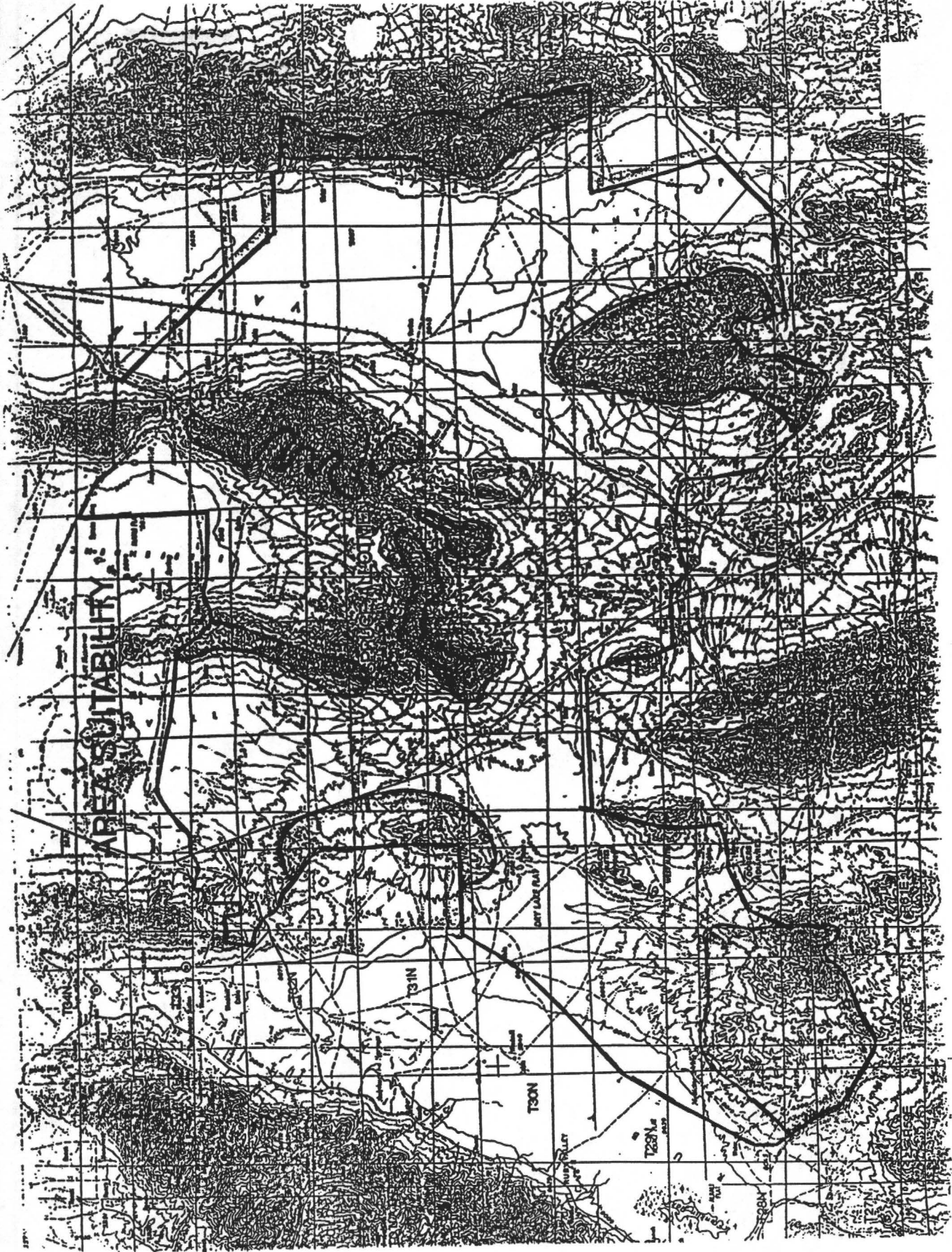
Subunit	Current Avail. Sheep AUMs	Livestock Suitability	Conversion Ratio	Converted AUMs
A	7472	CA/SH	x .53	3960 CA
B	2392	CA/SH	x .53	1268 CA
F-1	796	SH		796 SH ²
G	1760	SH		1760 SH ²
K	845	SH		845 SH ²
I ¹	172	CA/SH	x .53	91 CA
Total	13,437			5319 CA ³ 3401 SH ³

¹ As per Von Sorensen's and Ken Jones' proposed allotment division, Ken Jones desired to not have any interest in the "common use" area (subunit I). The total AUMs will not be adjusted until after completion of the allotment evaluation.

² AUMs suitable for sheep use only and not convertible to cattle use due to steep terrain and/or lack of water.

³ The total converted AUMs for the Valley Mountain Allotment equals 5,319 CA AUMs and 3,401 SH AUMs. The active preference for the Valley Mountain Allotment is 12,117 AUMs, thus, the remaining 3,397 AUMs will be placed in suspension. Adjustments would be made upon completion of the allotment evaluation.

AREAS UNSUITABLE FOR
CATTLE USE DUE TO STEEP
TERRAIN AND/OR LACK
OF WATER



Attachment 8

SUMMARY OF ENVIRONMENTAL IMPACTS AND COST FOR
IMPLEMENTATION OF THE SPRUCE INTERIM AMP
AND PROPOSED ALTERNATIVES

Multiple Use Resource	Implement Proposed Interim AMP	ALT. 1 (Interior fencing and water developments)	No Action
Livestock Forage	+	+,-	-
Mule Deer Habitat	+,-	+,-	-
Antelope Habitat	+,-	+,-	-
Bighorn Sheep Habitat	+	+	-
Sage Grouse Habitat	+,-,U	+	-
Wild Horses	+,-	+	+,-
Riparian Habitat	+	+,-	-
Woodland Products	0	0	0
Cultural Resources	+,-	+,-	-
Wilderness	0	0	0
Visual Resources	0,-	0,-	0
T/E Species	0	0	0
Total Costs-BLM	\$390,000	\$56,000	\$0
-Permittee	\$200,000	\$100,000	\$100,000
	\$590,000	\$156,000	\$100,000
+ = potentially beneficial impact - = potentially negative impact 0 = no impacts U = Unknown impacts may exist			