

6/4/93



IN REPLY REFER TO:
4120 (NV-015)



United States Department of the Interior

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

JUN 4 1993

Dear Affected Interest:

In 1991 you indicated that you would like to be involved in the allotment evaluation process on the Spruce Allotment. A draft of the allotment evaluation is scheduled for completion in fiscal year 1994.

Prior to you receiving the allotment evaluation, I think that it is important to provide you with an update on what has been happening on the allotment.

In 1987, a draft allotment management plan (AMP) was completed for the Spruce Allotment. However, the draft AMP was never signed as a result of unresolved conflicts with the permittees.

In 1991, after several meetings with one of the permittees, it was decided that he would hire Resource Concepts, Inc. (RCI) to complete an interim AMP. There were two main purposes of the interim AMP. First, the Spruce Allotment would be formally divided into two separate allotments (Spruce and Valley Mountain). The interim AMP would only outline management on the Spruce Allotment and not the Valley Mountain Allotment. Second, the interim AMP would outline management while the allotment evaluation is being completed.

RCI used the format of the 1987 draft Spruce AMP as a guideline for completing the Spruce Interim AMP. The interim AMP was signed on April 13, 1993. A copy is enclosed for your information.

Therefore, upon completion of the draft allotment evaluations for the Spruce and Valley Mountain Allotments, a copy will be forwarded to you for review and comment.

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

Sincerely yours,

BILL BAKER, Manager
Wells Resource Area

*Elko 11DOW
738-5332
SWEDE ERICKSON*

*DID THEY?
ON WH'S
1) ALLOT SPEC OBJECT?
2) MONITORING?
3) WHT
DECISION*

Enclosure

- cc: Bert Paris and Sons
- American Horse Protection
- 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

- Jim Mulcahy
- Nature Conservancy
- Rose Strickland
- Kathryn Cushman
- Federal Land Bank
- U.S. Wild Horse Foundation
- HTT Resource Advisors
- NV Department of Agriculture

Bob Brown
289-4865

JOHANNA
415-777-0220

I hereby
Appeal your
Decision to
Sign plan.

Site wrong
horse #'s

Violation of BLM
Conservation
Plan
Failure to
consult w/ affected
interests
Failure to
consult w/ affected
interests
Failure to
consult w/ affected
interests

1) Failure to consult w/ affected interests
2) no EA on change in investment
regulatory + statutory requirements of NEPA
3) no EA on change in investment
regulatory + statutory requirements of NEPA
4) no EA on change in investment
regulatory + statutory requirements of NEPA

no EIS or EA
must be done before
approval of
Spruce
AMP
Range Agency is
no Agency is
Range Agency is
no Agency is

serious
conflicts on allotment
doesn't comply w/wells
RMP
A major action is the formal
discussin of 2 allotments
need to be done

we
have to work
w/ the BLM on a relationship

AMP
must be
set aside

Violates process
unconscionable/shut this
w/ out of process

for letting or using an unauthorized dump site
we're proposing in this bill. Isn't killing a
wild horse at least equal to that?
Special interest dictating management
based on this will effect who.
Failure to consult w/ affected interests
Failure to consult w/ affected interests
Failure to consult w/ affected interests

NO PUBLIC
COMMENT PERIOD
THIS IS
PROTECTOR
WE FEEL THIS
WILL MEET OUR OBJECTIVES

exempt from NEPA

40 CFR 1500.3/1501.4(a)(6)

38 miles of fencing
for the seedings

1/2 million dollars
subsidy to permittee

**INTERIM
ALLOTMENT MANAGEMENT PLAN FOR
SPRUCE ALLOTMENT
WELLS RESOURCE AREA
NEVADA**

March 9, 1993

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I. INTRODUCTION

A. GENERAL INFORMATION

1. Land Use Planning

The Wells Resource Management Plan and Environmental Impact Statement (RMP/EIS) divided the Wells Resource Area into eight resource conflict areas (RCAs) having similar resource uses and conflicts. The Spruce Allotment is the largest of fourteen allotments located in the Spruce/Goshutes RCA. The Spruce/Goshutes RCA was identified as one of three RCAs with a high intensity conflict level. The selective management process categorized this allotment as an "I" allotment, identifying the need for improving current unsatisfactory range conditions. Therefore, the Spruce Allotment is in a high priority RCA and has a high priority for improvement. The Record of Decision (ROD) for the Wells RMP/EIS was signed on July 16, 1985.

2. Location

The Spruce Allotment is located in the southeast corner of the Elko District, spanning across portions of Antelope, Steptoe, Independence, Clover, and Ruby Valleys (see Map 1) with Spruce Mountain located near the center of the allotment. The crest of the Goshute Mountains form the eastern allotment boundary. The southern boundary is bordered by Alternate Highway 93 in Antelope Valley, the Dolly Varden Mountains, the Currie Hills, Palomino ridge, West Buttes, and the Medicine Range. The east edge of the pluvial Franklin Lake in Ruby Valley and Valley Mountain make up the west boundary. The northern allotment boundary is bordered by Snow Water Lake in Clover Valley, the Union Pacific Railroad where it crosses the Pequop Mountains and Flowery Lake in Steptoe Valley. Highway 93 and the Nevada Northern Railroad run generally north-south through the west and east halves of the allotment respectively (see Map 2).

3. Acreage by Ownership

The Spruce Allotment totals 813,267 acres (slightly larger than the state of Rhode Island) of which 797,142 acres (98%) are public lands and 16,125 acres (2%) are private lands (Map 2). Von and Marian Sorensen and Kenneth Jones are the current livestock permittees who control approximately 85% of these unfenced private lands. The remaining 15% are controlled by non-permittees.

4. Elevational and Topographical Variations

The topography of the Spruce Allotment is typical of the Basin and Range physiographic Province, ranging from basin valley floors to alluvial fan piedmonts and mountains and hills. The valley floors within the Spruce Allotment are generally 5,000 - 6,000 feet with the mountains as high as 10,262 feet at Spruce Mountain.

5. Climatic Factors

The continental weather regime prevails over the Spruce Allotment, with most of the precipitation being in the form of winter snows and spring rains. Summer and fall moisture is variable based on altitude and intense storm patterns. Summers are generally very dry with occasional thunderstorms and runoff. The average annual precipitation for the Spruce

Allotment varies from 4-20 inches or more, depending on particular locations within the allotment.

Based on the Nevada Air Quality and Climatological Atlas of December 24, 1980, there are three locations within the southern half of the Wells Resource Area with climatological data available. These three locations are all located outside the Spruce Allotment and have differing climatic data. All three locations, however, fall within isobars representative of the Spruce Allotment and can be used to show the variability of available moisture within this large area.

The average annual precipitation for these three locations is:

- Wells, NV - 9.87 inches
- Ruby Lake - 12.23 inches
- Wendover - 4.5 inches

A limited amount of climatic data is also available for the Currie Highway Station, located at Currie, NV along the southern border of the Spruce Allotment. This data shows average annual precipitation to be about 8 inches.

Snowfall within the Spruce Allotment is variable based on elevation. Mean annual snowfall varies from 10-40 inches in the valleys to 40-80 inches in the Goshute Mountains and on Spruce Mountain. The average number of frost-free days ranges from 70-100 days in the lower elevations or valley areas to less than 70 days in the upper elevations.

Temperature extremes in the Spruce Allotment area generally reach a high in July and a low in January. The mean July maximum temperature ranges between 88 and 92 degrees Fahrenheit. The mean January minimum ranges from 8 to 12 degrees Fahrenheit.

6. Historical Grazing Use

The grazing privileges on what is now known as the Spruce Allotment evolved from the acquisition of several different sheep operations in the Spruce Mountain area. The current Spruce Allotment privileges can be traced back to the Griswold Livestock Co. and the Itcaina Livestock Co. The historical use of the Spruce Allotment can best be described as it originated from these two operators.

The Griswold Livestock Co. established a "priority" use in the Spruce Range Unit (Map 3) during those years (1929-1934) prior to the Taylor Grazing Act and the establishment of the Division of Grazing; later renamed the Grazing Service. The original Griswold Livestock Co. was a 10,000 head sheep operation based in Elko County. Most of their herd (8,500 sheep) "wintered" in White Pine County each year from 11/1-3/31. The remainder of the herd (1,500-2,000 sheep) grazed the desert shrub areas of the Spruce Unit in Elko County adjacent to Spruce Mountain during the winter months. Spring (4/1-5/31) and fall (11/1-11/15) use was made in the Spruce Unit with the entire herd of 10,000 sheep. From 6/1-10/31 only 1,500-2,000 sheep were grazed in an individual use area on Spruce Mountain. The remainder of the herd "summered" on National Forest Lands.

In the 1940's, the Griswold Livestock Co. began an effort to centralize their grazing operation and to eliminate the long stock trails to winter range in White Pine. Co. Griswold began acquiring base properties and winter grazing privileges in those "common" use areas adjacent to the Spruce Unit (Currie, Medicine Butte, Utah-Idaho and Shafter Units - see

Map 3). These were primarily the desert shrub regions of Steptoe, Antelope and Ruby Valleys which supported many migratory sheep operations during the winter months. From 1942-1947, the Griswold Livestock Company made eight acquisitions and transfers expanding their grazing use area into The Currie Unit (Appendix A). In 1946, the Griswold Livestock Co. no longer held winter privileges in White Pine Co. The size of the operation remained essentially the same throughout the 1940's, the only change being winter use with the entire herd of 10,000 sheep in the Currie and Spruce Units in Elko Co. rather than White Pine Co. Active use varied from 86-92% of total available federal privileges through the 1940's (Table 1). A portion of grazing privileges purchased by Griswold included cattle grazing, the most notable of which included the U.C. Land & Livestock Co. purchase in 1946 (Appendix A).

In 1950, the Robinson/Sorensen Partnership purchased the Griswold Livestock Co. operation and continued efforts to acquire additional winter sheep privileges in the adjacent Currie, Medicine Butte, Shafter and Utah-Idaho Units (Map 3). From 1950-1973, sixteen acquisitions and/or transfers of base properties and/or federal grazing privileges were made (Appendix A). With this increase in available federal privileges from 1950-1961, the operation was increased to 12,000-13,500 sheep during the fall/winter/spring and 3,000 sheep in summer on Spruce Mountain. However, active use during this time averaged only 82% of total available federal privileges (Table 2).

More federal grazing privileges were acquired from 1961-1966 and winter grazing use by Robison/Sorensen was further increased to 15,000 sheep. Summer use remained at 3,000 sheep on Spruce Mountain. Active use averaged 76% of available federal privileges from 1961-1966 (Table 2).

From 1967-1973, the Robison/Sorensen operation gradually decreased to 6,000 sheep in winter and was as low as 1,100 sheep in the summer of 1972 on Spruce Mountain. Active use dropped from 78% of available privileges in 1969 to 10% in 1973 (Table 2).

In 1973, the Robinson/Sorensen Partnership privileges were transferred to Loyd Sorensen. These privileges were subsequently split with half being retained by Loyd Sorensen and half transferred to Von Sorensen/Kenneth Jones (Appendix A and C). From 1973 - 1983, Loyd Sorensen continued to winter 1,200-3,200 sheep in the Currie and Medicine Butte Units (Table 3). The last year sheep were grazed on Spruce Mountain in summer was 1974. Sorensen/Jones also "wintered" 1,200-3,400 sheep in the Currie and Medicine Butte Units (Table 6). In addition to their winter sheep operations, both Loyd Sorensen and Sorensen/Jones began grazing cattle together in the Currie and Medicine Butte Units from 11/1-5/31 each year. Between 1973 and 1983, the total combined cattle herd (Loyd Sorensen and Sorensen/Jones) has ranged from 450-1,500 head (Tables 3 and 6).

In 1961, Loyd Sorensen (at the time a partner in the Robison/Sorensen Partnership) together with Von Sorensen (doing business as Sorensen/Sorensen) acquired winter sheep privileges from the Itcaina Livestock Co. in the "common use" areas of the Currie, Medicine Butte and Utah-Idaho Units (Appendix B). No use was made by Sorensen/Sorensen until 1964 when they began to graze cattle during the winter in the Currie Unit (Table 4). Summer use was made on private land and National Forest Lands in the Secret Pass area. From 1964 to 1968, more federal grazing privileges were acquired (Appendix B) and winter cattle use increased from 500 to 650 cattle. Active use went from 11% of available privileges in 1964 to 75% in 1968.

In 1968, the Sorensen/Sorensen privileges were transferred to Von and Marian Sorensen who began a yearlong cattle operation on the federal range with 600-700 cattle each year. This

yearlong cattle operation has continued through the present with fall/winter/spring use in Antelope, Northern Steptoe, and Independence Valleys and summer use on Spruce Mountain.

Grazing allotments (both "common" and individual) were adjudicated within each range unit in the Wells Resource Area during the late 1960's and early 1970's. The original Griswold Livestock Co. et. al. privileges acquired by Robison/Sorensen (later transferred to Loyd Sorensen and Sorensen/Jones) and the Itcaina Livestock Co. privileges acquired by Sorensen and Sorensen (later transferred to Von and Marian Sorensen) established a historic use area covering portions of five different range units (Map 3). In 1975, this use area was adjudicated and identified as the Spruce Allotment.

93
64
29 years too late

In 1983, an adjustment and transfer of grazing privileges was made based on a proposed future allotment split and the following grazing privileges resulted (Appendix A, B and C):

- Loyd Sorensen - 14,974 AUMs Active, 138 AUMs Suspended
- Von and Marian Sorensen - 7,154 AUMs Active, 257 AUMs Suspended
- Kenneth Jones - 13,437 AUMs Active, 125 AUMs Suspended.

More recently, the remaining grazing privileges held by Loyd Sorensen have been transferred in their entirety to Von and Marian Sorensen.

To date, the Spruce Allotment has not been divided and still remains a "common" allotment grazed by two permittees. In addition, the grazing preference held by these permittees remains as adjudicated sheep use (AUMs). An official conversion from sheep privileges to cattle has never been completed. Cattle use from 1964-1969 was licensed as temporary pending analysis of a change-in-kind of livestock use. However, there was cattle use prior to 1964. Following the passage of the National Environmental Policy Act in 1969, cattle use has been licensed as "temporary pending the completion of an environmental assessment concerning a change-in-kind of livestock".

In summary, the Spruce Allotment as it is known today, was originally winter sheep range for as many as 15-20 migratory sheep operations and summer range (on Spruce Mountain) for 1,500-3,000 sheep. Winter use was made in the desert shrub regions of Ruby, Steptoe, Independence and Antelope Valleys from 11/1-3/31 with as many as 25,000 sheep. Although acquired federal grazing privileges may have allowed for this many sheep to be grazed, the Robison/Sorensen and Sorensen/Sorensen operations only grazed a maximum of 15,000 sheep in winter during the early 1960's. Winter cattle use on the Spruce Allotment began in 1964. In 1968, a yearlong cattle operation was established by Von and Marian Sorensen which still continues today with winter/spring use in Antelope, Steptoe, and Independence Valleys from 11/1-5/31 and summer/fall use on Spruce Mountain from 6/1-10/30 (Table 5). In 1973, Loyd Sorensen and Sorensen/Jones began a winter/spring cattle operation in Steptoe and Ruby Valleys (450-1,500 cattle 11/1-5/31) together with their winter/spring sheep operations (2,500-6,000 sheep 11/1-6/30). Summer use on Spruce Mountain with sheep ended in 1974. The average percent active use from 1979-1986 for the entire allotment has been 47% of total available grazing privileges (Tables 8 and 9, Figure 1). The average number of livestock which have grazed the Spruce Allotment since 1983 are as follows (Tables 3, 5 and 7):

| | |
|-------------------------|-------------|
| Loyd Sorensen | 3,324 sheep |
| | 471 cattle |
| Von and Marian Sorensen | 665 cattle |
| Kenneth Jones | 371 cattle |

B. EXISTING INFORMATION

1. Livestock Qualifications and Management

The Spruce Allotment continues to be a "common" allotment with a total active grazing preference of 35,565 AUMs adjudicated sheep use. There are currently two livestock permittees on the Spruce Allotment who have operated together since 1973. Cattle have grazed the allotment since 1964 when they were first licensed as "temporary". Von and Marian Sorensen and Kenneth Jones currently graze only cattle (Tables 5 and 7). The grazing preferences and normal season-of-use for each operator is as follows:

| Operator | Grazing Record Number | Preference (adjudicated sheep use) | | | Kind of Livestock | Use Period | | % Federal Range |
|-------------------------|-----------------------|------------------------------------|-----------|--------|-------------------|------------|------|-----------------|
| | | Total | Suspended | Active | | From | To | |
| Von and Marian Sorensen | 1061 | 22,523 | 395 | 22,128 | Cattle | 3/1 | 2/28 | 100% |
| Kenneth Jones | 1030 | 12,242 | 125 | 12,117 | Cattle | 11/1 | 5/31 | 100% |

In preparation for a possible future split of the livestock operations, a division line was established which generally divided the allotment into an east and west half. The grazing preference as outlined above for Kenneth Jones reflects the carrying capacity of the west half of the allotment. The grazing preference for Von and Marian Sorensen reflects the carrying capacity of the east half. Although grazing preference is now based on a theoretical split of the allotment, Kenneth Jones continues to graze in the west half of the allotment. Von and Marian Sorensen graze livestock in the east half of the allotment.

2. Existing Range Improvements

Existing range improvement projects on the Spruce Allotment are shown on Map 4 and are listed in Appendix D. These improvements are summarized as follows:

| Type of Range Improvement | Unit | Number |
|---------------------------|-------|--------|
| Stockwater Wells | Each | 33 |
| Spring Developments | Each | 13 |
| Fences: Boundary | Miles | 121 |
| Interior | Miles | 13.5 |
| Pipelines | Miles | 8 |
| Cattleguards | Each | 11 |
| Seedings | Acres | 7,562 |
| Chainings | Acres | 4,992 |
| Corrals/Cabins | Each | 7 |

3. Baseline Data

a) Soils

An Order III Soil Survey of the Spruce Allotment is currently being conducted by the Soil Conservation Service. The field work for the soil survey was completed in 1991. The published results for this soil survey are scheduled to be completed by 1994. As it becomes available, this detailed soils information will be used to identify specific range sites and ecological conditions within the allotment and will establish a basis for developing and monitoring specific allotment objectives. According to the 1939-41 Nevada Interagency Cooperative Land Use Study, most of the Spruce Allotment (approximately two-thirds) can be described as desert shrub range characterized by heterogeneous, saline soils which vary in texture, parent material and chemical composition. The soils of these large valleys are of sedimentary and alluvial origin, having developed from lake deposits or outwash from the near-by mountains. Textures vary from heavy clays to sands and variations occur in alkalinity and salinity. These heterogeneous soils create varying degrees of vegetative productivity.

The remainder of the allotment (approximately one-third) is characterized by erosion resistant mountain and bench (terrace or alluvial fan soils of limestone origin or similar fine grained parent material. These mountain and alluvial soils vary from moderate to high productivity and light to moderate texture. These bench or alluvial fan soils are also generally characterized by a lime hardpan.

b) Vegetation

The Spruce Allotment has a wide variety of vegetative types typical to northeastern Nevada. About two-thirds of the allotment, primarily the large open valleys, is characterized by a variety of salt-desert shrub communities, which exhibit both mosaic and zonal patterns ranging from almost pure stands of single species to fairly complex mixtures. Generally, shadscale, winterfat (white sage), budsage, low rabbitbrush,

Nuttall's saltbush (sweet sage), greesewood, and big or Wyoming sagebrush are found in these valley bottoms and lower valley slopes.

The valley uplands and foothills support black sagebrush, Wyoming big sagebrush, budsage, winterfat, low rabbitbrush, Indian ricegrass, squirreltail, and Sandberg's bluegrass. Approximately 7,562 acres (project nos: 0429, 0533, and 0634) of big sagebrush range in Independence Valley were plowed and seeded to crested wheatgrass in the 1950's to provide spring forage for livestock.

The mountains and benches contain communities of pinyon pine, juniper, mountain mahogany, snowberry, serviceberry, bitterbrush, Wyoming and mountain big sagebrush, bluebunch wheatgrass and a variety of other perennial grasses. Approximately 4,992 acres of pinyon-juniper range in the lower foothills of Spruce Mountain (project nos. 0665 and 4108) were chained in the 1960's for wildlife habitat improvement. Areas of white fir, Engelmann spruce and bristlecone pine can be found on the upper north slopes of Spruce Mountain.

A summary of the vegetative types for the Spruce Allotment, by unit (based on general use areas and land forms) and acres, can be found in Table 10. These units or use areas are shown on Map 5.

The source of this information is the 1979-81 Wells Resource Area Weight Estimate/Vegetation Inventory. Plant symbols used are in accordance with the Soil Conservation Service Region 8 Plant List.

The following is a summary of the acreages from Table 10:

| GENERAL LAND FORM-VEGETATIVE ASPECT | UNIT (Map 9) | ACRES | | |
|---|-----------------|---------|---------|---------|
| | | BLM | PRIVATE | TOTAL |
| Valley-Desert Shrub | A | 141,428 | 742 | 142,170 |
| | B | 60,169 | 129 | 60,298 |
| | C | 229,136 | 11,818 | 240,954 |
| | D | 39,697 | 23 | 39,720 |
| | H | 68,456 | 10 | 68,466 |
| | I | 12,610 | 158 | 12,768 |
| Mountain-Sage/Grass | E | 120,050 | 2,910 | 122,960 |
| | F-1 | 20,567 | --- | 20,567 |
| | F-2 | 22,164 | 101 | 22,265 |
| | G | 38,181 | 234 | 38,415 |
| | J | 25,998 | --- | 25,998 |
| | K | 18,686 | --- | 18,686 |
| | | 797,142 | 16,125 | 813,267 |

c) Watershed Condition and Trend

The Watershed Conservation and Development System, Phase I Watershed Inventory (1976), classified approximately 70% of the Spruce Allotment in a slight erosion condition. Approximately 20% of the allotment was classified in a moderate erosion condition. The remaining 10% was classified as stable.

d) Range Condition and Trend

An Order III Soils Survey began on the Spruce Allotment in 1986. The soil survey was completed in 1991 with published results scheduled for completion by 1994. An ecological status inventory was being completed as the soil survey progressed. The inventory was also completed in 1991.

During the 1986 and 1987 field seasons, twenty-three key area locations in desert shrub (winter use) areas and six key areas in the mountain/upland (summer use) areas were selected to monitor the specific management objectives developed for the Spruce Allotment. Initial production data at these key area study sites was updated during the 1991 ecological status inventory. From this inventory the current ecological status (seral stage) for each of these key areas has been determined to be as follows:

| Key Area | Range Site | Seral Stage | % of Potential Native Community |
|----------|-------------------------------|-------------|---------------------------------|
| SP-12 | Coarse Gravelly Loam 6-8" | Mid | 37 |
| SP-13 | Coarse Gravelly Loam 6-8" | Mid | 36 |
| SP-14 | Coarse Gravelly Loam 6-8" | Mid | 27 |
| SP-15 | Silty 8-10" | Late | 51 |
| SP-16 | Coarse Gravelly Loam 6-8" | Mid | 30 |
| SP-17 | Coarse Gravelly Loam 6-8" | Mid | 34 |
| SP-18 | Silty Clay 8-10" | Late | 52 |
| SP-19 | Silty Clay 8-10" | Late | 58 |
| SP-20 | Silty 8-10" | Late | 65 |
| SP-21 | Silty Clay 8-10" | Late | 52 |
| SP-22 | Silty Clay 8-10" | Late | 54 |
| SP-23 | Coarse Silty 8-10" | Mid | 32 |
| SP-25 | Stony Mahogany Savanna 16-22" | Mid | 43 |
| SP-26 | Calcareous Loam 14-16" | Mid | 45 |
| SP-28 | Mountain Ridge 14+ | Late | 70 |
| SP-29 | Calcareous Mountain Ridge | Mid | 43 |

C. PUBLIC PARTICIPATION AND INTERDISCIPLINARY APPROACH

On January 20, 1988, the Bureau of Land Management (BLM) issued a draft allotment management plan (AMP) for the Spruce Allotment for review by the affected interests. The intended purpose of this AMP was to review and resolve current multiple use issues or conflicts identified within the allotment through more intensive livestock management and associated range improvements. However, due to the inability of the involved parties to reach consensus on several key issues, the draft AMP was not finalized, signed or enacted. Areas of disagreement in the draft AMP included:

1. Change-in-Kind of Livestock Conversion Ratio: The draft AMP proposed a 53 percent conversion ratio from licensed sheep use to cattle AUMs, with the remaining adjudicated preference being placed in suspended use. The permittees contested this unilateral reduction in active preference due to the fact that it was not based on actual monitoring results, but rather on a 20-year-old range analysis which relied on forage survey data that is now 40 years old. The permittees also contended that a significant portion of the originally adjudicated preference associated with the allotment was in fact based on cattle grazing, not sheep.
2. Extent of Proposed Seedings: The draft AMP proposed the development of approximately 7,000 acres of crested wheatgrass seedings to allow the removal of livestock from the native winter desert shrub ranges during the critical growing period. The permittees contended that the proposed 7,000 acres of seedings were insufficient to accommodate spring forage demands for the involved livestock operations and failed to account for past agency promises for seeding developments to replace forage lost through historic allotment boundary adjustments.
3. Wild Horse Management: In accordance with the Wells RMP, the draft AMP identified five separate wild horse herd areas which lie either entirely or partially within Spruce Allotment. In addition, the draft AMP disclosed that the 1987 estimate for horse population levels significantly exceeded the desired population level in four of the five WHMAs. The permittees' position on this issue was that all the wild horses on the allotment had been claimed and removed during the authorized "claiming period", and therefore, the allotment should be designated as horse-free.

On June 10-11, 1991, the permittees and the Bureau met to discuss and seek resolution to the issues listed above. Recognizing that the lack of monitoring data would not allow successful resolution of some of these issues, all parties did agree that these impasses should not preclude the advancement of improved livestock management on the allotment. As such, the parties agreed to jointly develop this interim AMP that would allow for the initiation of project planning and would be implemented and followed until such time as the monitoring data was available to indicate that the provisions and conditions contained in this interim plan were no longer valid. This is expected to occur upon the completion of the allotment evaluation which is currently under progress. At that time, the resource information resulting from the evaluation will be used to modify allotment specific objectives, specify any livestock management revisions required to this interim plan, be used to develop a new AMP, and to evaluate stocking rates initially agreed to in this Interim AMP and modify as necessary.

As noted in Section IV. A. below, a major action associated with this plan is the formal division of Spruce Allotment into two separate, private allotments. As such, the following interim AMP only applies and is specific to the newly formed allotment in the East Unit, hereafter referred to as Spruce Allotment (see Map 10).

II. MULTIPLE USE ISSUES

A. LIVESTOCK GRAZING

1. Change-in-Kind of Livestock: During the late 1960's and the early 1970's the grazing permits for the grazing area now known as Spruce Allotment were adjudicated for sheep. However, some cattle use was authorized prior to this time. (Refer to the historical grazing use summary in Section I.A.6. and in Appendix A). Application was first made by Loyd Sorensen to graze cattle on Spruce Allotment in 1964, at which time winter cattle use was licensed as "temporary pending analysis of a change-in-kind of livestock use". In 1968, yearlong cattle use began in the east half of the allotment. In 1973, winter cattle use began in the west half of the allotment.

Since 1968, active cattle use has risen from an average 27% to 68% of active use. Sheep use since 1968 has dropped from an average 73% to 32% of active use (Table 9). However, with the change to cattle use, total active use has dropped, averaging 47% of total available privileges since 1979 (Table 9). The proper carrying capacity for cattle on the Spruce Allotment needs to be established.

2. Season of Use: Annual use of desert shrub communities during the growing season is a major concern with winter livestock use on the Spruce Allotment. The growing season of key shrub species such as winterfat (white sage), black sage, bud sage, and saltbush (sweet sage) begins in late March or early April. Although grazing use during the winter-dormant season may approach 75% of current year's growth without harm, use beyond slight to light levels during the active growing season may preclude seed production and adversely impact the vigor of key shrub species. Therefore, it is most desirable to rest these desert shrub communities from grazing between April 1 and Nov. 1.

In order to achieve some sort of rest during the growing season, a grazing agreement was initiated in 1975 to rotate grazing use on desert shrub communities after April 1. However, consistent rotational use after April 1 each year has not been achieved. If livestock use after April 1st can be terminated or (at a minimum) a rotational grazing system successfully implemented on these winter use areas, range conditions would be expected to improve on the allotment. In order to terminate all use after April 1st, it will be necessary to develop additional spring forage.

Cattle graze the deer winter range in the Boone Springs area late in the season each year. This late use has resulted in excessive use of bitterbrush by cattle. Use of bitterbrush beyond 25% by cattle each year, prior to the arrival of wintering deer herds, may result in a loss of production of this important browse species and subsequent reduction in habitat conditions. This problem is not as serious in the areas of Basco and Spruce Springs, since most of the cattle tend to drift into Independence Valley in the fall when water hauling stops. However, late season cattle use needs to be rotated or terminated in the Boone Springs area.

3. Livestock Distribution: The lack of interior fencing and lack of water facilities in some areas of the Spruce Allotment creates livestock control problems and disproportionate livestock distribution. Historically, sheep distribution is controlled for the most part by herding and the location of available waters. Using snow for water was most preferable. However, if snow was not available during the grazing season, live surface waters were utilized on Spruce Mountain and/or water was pumped at lower elevation wells if necessary. Cattle distribution is also closely associated with the location of available water and weather conditions during

the grazing season. Cattle use patterns tend to be better when there is snow on the ground and/or during cooler weather. In addition to water hauling practices for cattle on Spruce Mountain and in the Pequop Range, salting is also done in an effort to improve distribution patterns. However, salting too close to live waters has been a problem in some areas. Placing salt and other supplements at least ¼ mile from live waters needs to be enforced. Livestock distribution problems are summarized for each unit or general use area as follows (see Map 5 for unit locations):

Unit H (Clover Valley Winter Range): Currently, the winter cattle operation in the west half of the allotment is a combined herd belonging to Kenneth Jones. The transfer of grazing privileges in 1983 was based on an eventual separation of this common winter cattle use operation. When this separation occurs, winter cattle use in Clover Valley (between Highway 93 and Spruce Ridge) will increase. This will require a fence to prevent cattle drift onto and across Highway 93.

The area on the upper valley bench west of Spruce Ridge has the potential for being developed into a seeded-spring use pasture. A seeded pasture in this area could be used in early April, removing cattle from the desert shrub range when the growing season of key desert shrub species begins.

Unit D (Independence Valley Spring and Fall Range): The 7,500 acres of crested wheatgrass seedings in Independence Valley are not fenced separate from adjacent native range. The seeding is currently grazed in both spring and fall. When livestock use is made early, cattle drift into summer range on Spruce Mountain and early annual use is made of the lower saline bottoms of Independence Valley.

There are several live surface waters in the bottoms near Spruce Ridge, making it difficult to control use patterns with other water facilities. Therefore, grazing this seeded and native range without fences results in irregular use patterns with most of the use made adjacent to Spruce Ridge.

When this area is grazed in the fall, cattle drift to the northeast toward the railroad tunnel. To stop this inherent drift, a drift fence was constructed in Independence Valley in 1990 to make substantial fall use of the seedings and defer use of the desert shrub ranges.

Units C and F2 (North Steptoe Valley and Antelope Valley Winter Range): Winter cattle use in this area is concentrated along the west bench of the Goshute Mountains and near Dolly Varden Spring. Cattle have generally been distributed at stockwater wells throughout the valley each year. Rotational use with water control has only been done on occasion.

The area is fairly well watered with only two or three areas needing water development for better cattle distribution. The areas between Dolly Varden Spring and Itcaina Well and between Dolly Varden Siding and Mizpah Point are currently underutilized for lack of water. Most of all these existing wells in Antelope Valley are located in white sage areas. With the change from sheep to cattle use, utilization is more concentrated around these existing waters. Additional water developments in light use areas would help distribute the use more evenly. Rotational use with water control needs to be seriously considered.

There are approximately 12,000 acres of private land near Flowery Lake. Approximately 6,000 acres of this private land has been plowed and seeded to crested wheatgrass and/or Russian wild rye. It has been the intention of the permittee/land owner to graze these seedings each year, removing all cattle from the winter range (public lands) in March or

early April. Development of these lands has taken several years and is now near completion. Use of these lands in the spring needs to be emphasized.

These private lands are also used in the fall after cattle are trailed from Independence Valley and before they enter the winter range. Without some sort of fencing, it is difficult to control cattle drift onto the public lands.

The area along the south and southwest flank of Spruce Mountains has the potential for development of a spring use pasture. A seeded pasture in this area could be used in early April, removing cattle from the desert shrub ranges when the growing season of key desert shrub species begins.

Unit E (Spruce Mountain Spring/Summer Range): With the conversion from summer sheep to cattle use on Spruce Mountain, livestock use has become more concentrated in those areas where there is live surface water. The greatest amount of cattle use is made at Basco Spring, Spruce Spring, Latham Spring, and near the Sprucemont and Black Forest mining areas. Water is currently hauled by truck to water tanks in several areas of Coyote Basin and the Pequop Mountains. Several miles of pipeline need to be constructed to help distribute cattle use.

Cattle drift from the seedings in Independence Valley into the canyons of Spruce Mountain, particularly Latham and Cole Creek Canyons, in the spring each year. Fences need to be developed to stop drift and defer cattle use on Spruce Mountain.

Units K and I (Valley Mountain and Curtis Spring): The east benches of Valley Mountain have historically received occasional spring and fall sheep use. The area around Curtis Spring receives overnight trail use during spring and fall when livestock are being moved between the Spruce Allotment and private or USFS lands in North Ruby Valley. As a result of the latest grazing preference transfer, the Valley Mountain benches will no longer be grazed by sheep. The area near Curtis Spring will continue to be used for trailing.

The area north of the Ruby Highway 229 and west of Highway 93 has the potential to be developed into a seeded-spring use pasture. A seeded pasture in this area could be used in early April. This would remove cattle from the desert shrub range when the growing season of key desert shrub species begins.

B. WILDLIFE

1. Big Game

The Wells Rangeland Program Summary (RPS) estimates current mule deer use on the Spruce Allotment to be 4,613 AUMs. Small populations of deer spend the summer months in the higher elevations of the Medicine Range, Spruce Mountain, and the Pequops, migrating to adjacent lower elevations in winter. The majority of the deer use on the Spruce Allotment is during the winter months along the lower benches of Spruce Mountain and the Pequop Mountains. As many as 5,000 deer cross Highway 93 each spring and fall, migrating to and from summer range in the East Humboldt Range (Map 6). This highway right-of-way is currently unfenced. An interior fence along this right-of-way could adversely affect this deer migration.

As reflected in Map 6, several areas of the Spruce Mountain deer winter range have been identified as "crucial" habitat by the Nevada Department of Wildlife (NDOW). The

Spruce/Basco Spring (DW-2-T-01), Black Forest (DW-2-T-02) and Honeymoon Chaining (DW-2-T-03) areas were rated in good habitat condition in 1986. The Boone Springs area was rated in fair condition in 1986 (DW-2-T-04).

The Boone Springs area is the most critical portion of the Spruce Mountain winter range. Deer move to this area when heavy snows force them out of the Spruce/Basco Springs areas. Late season use by cattle near Boone Springs has resulted in heavy use of bitterbrush and low habitat condition ratings.

Competition between domestic livestock and mule deer on summer and yearlong ranges has been reduced considerably since 1973 when summer sheep use was last made on the Spruce Allotment. Riparian areas associated with springs and wet meadows are important habitat features within these summer and yearlong ranges. Although ecological conditions of upland areas have improved, many of the nearby mesic areas are currently rated in poor to fair condition.

Almost the entire Spruce Allotment below 6,500 feet elevation is used by antelope yearlong (Map 7). The Wells RPS estimates current antelope use to be 134 AUMs. Dietary overlap is greatest between antelope and domestic sheep. These yearlong antelope ranges were historically grazed by as many as 25,000 sheep during the winter months. This historic heavy winter sheep use may have created an apparent lack of vegetative diversity necessary for good antelope habitat. The gradual reduction in winter sheep use and conversion to cattle use over the years has reduced competition with antelope considerably. However, because of the low site potential of these areas, improvement of range or habitat conditions has been slow or non-existent in some cases. Habitat conditions in Steptoe Valley north of Mizpah Point were rated as poor in 1984 (AY-2-T-02). The overall current habitat conditions for yearlong antelope range in the Spruce Allotment range from poor to fair.

In addition to lack of vegetative diversity, water is a key limiting factor within the yearlong antelope ranges of the Spruce Allotment. Live surface waters are very limited and antelope are usually forced to move to adjacent allotments to find water in the summer months. When new stockwater facilities are constructed within yearlong antelope ranges, leaving troughs full of water when livestock are removed would greatly benefit antelope. The installation of antelope guzzlers should also be considered in some areas.

In order to avoid potentially adverse impacts to antelope, the construction of new interior pasture fences must be built to Bureau standards for antelope range. The Wells RPS states 46 miles of existing boundary fences will be modified to facilitate the movements of antelope. The exact location of these fences will be identified in the Habitat Management Plan for the Spruce/Goshutes RCA.

The Goshute Mountains have been identified as historic bighorn sheep range by NDOW. The NDOW has proposed to reintroduce bighorn sheep into the Goshutes, and this proposed reintroduction has been included in the Department's Big Game Release Plan since 1988. The Goshute Mountains have also been identified by the Wells RMP as a potential reestablishment area. Currently, the west benches of the Goshute Mountains are grazed by cattle in the winter.

2. Upland Game

Blue grouse and sage grouse are important game bird species which can be found in the Spruce Allotment. Blue grouse generally inhabit the upper north slopes of Spruce Mountain

in conifer zones above 8,500 feet elevation. Since summer sheep use on Spruce Mountain was curtailed in 1973, little conflict now exists between blue grouse and domestic livestock use.

There are seventeen known historic or active sage grouse strutting grounds identified in the Spruce Allotment. Most of these strutting grounds are located in the northwest corner of the allotment along the upper valley benches of Clover Valley near Curtis Spring (Map 7). The development of seeded range for livestock in this area could create potential conflicts with important sage grouse habitat.

3. Predator Control

The United States Department of Agriculture - Animal Plant Health Inspection Service (APHIS) operates an Animal Damage Control (ADC) program in many areas of Elko County, pursuant to the Animal Damage Control Act of March 2, 1931 (46 Stat. 1468; 7 U.S.C. 426-426b), as amended. The ADC program is conducted in cooperation with the State Predator and Rodent Control Committee, the State Department of Agriculture, and the local Grazing Boards. The program responds to requests for assistance received from other federal, state, and local agencies and private individuals and is directed toward alleviating damage to livestock caused by individual mammalian predators and local depredating populations. Target species include coyotes, bobcats, and mountain lions. The impacts associated with the ADC program have been analyzed in an environmental assessment report, which is on file at the Elko District BLM office.

The ADC program on the Spruce Allotment has been closely associated with the sheep operation and focused primarily on the coyote, since it is the most widespread predator affecting livestock. Under the current proposal to convert all sheep AUMs to cattle, the need for animal damage control on the Spruce Allotment will have to be re-evaluated.

C. WILD HORSES

The Spruce Allotment makes up all or portions of five wild horse herd use areas (Map 8). The Wells RMP has identified the 1981 population levels for future management. The current and desired wild horse numbers for each herd area are as follows:

| Herd Area | Desired Population Level (1981)* | Current Population Level (1992) | Last Gather |
|-------------------|----------------------------------|---------------------------------|-------------|
| Spruce-Pequop | 64-80 | 129 | 1978 ** |
| Goshute | 96-120 | 201 | 1987 |
| Antelope Valley | 131-164 | 576 | 1987 |
| Maverick-Medicine | 196-244 | 589 | 1986 |
| Cherry Creek | 51-64 | *** | 1987 |

* The herd size was established by the Wells RMP.

** This was during the Claiming period and was not a Bureau gather.

*** Census data for the Cherry Creek Herd was combined with the Antelope Valley (east side of the Cherry Ck. Mtns.) and the Maverick-Medicine (westside of the Cherry Cr. Mtns.)

There are no interior fences within the Spruce Allotment; therefore, wild horse movements are generally unrestricted. The population of horses in any one location within a herd use area varies considerably depending on the time of year and availability of forage and water. Use areas are generally seasonal, with winter use in the valleys and benches and summer use in the upper elevations. Use patterns are tied very closely to water availability in some areas of the allotment. In areas of Independence and Antelope Valleys where live surface water is available, wild horses can be seen on the desert shrub ranges yearlong. Therefore, the problem of utilization of desert shrub ranges during critical growth periods can only be controlled by keeping population levels at the minimum levels allowable by law and the planning system. In addition, the Wells RPS has identified two catchment-type water developments (Dolly Varden and Palomino Ridge) to be constructed for wild horses to improve water availability and distribution patterns. These projects will be implemented through specific Wild Horse Herd Management Area Plans.

D. WILDERNESS STUDY AREA

Pursuant to Section 603 of the Federal Land Policy and Management Act of 1976, two wilderness study areas (WSAs) - the South Pequop and part of the Goshute Peak WSA - were designated within the Spruce Allotment (Map 9). Until such time as Congress designates or does not designate these areas as wilderness, all management actions in these WSAs are subject to the Interim Management Policy (IMP) and Guidelines for Lands under Wilderness Review dated December 12, 1979. Livestock grazing within these WSAs is a "grandfathered" use which may continue so long as their impacts do not impair wilderness suitability.

If any areas encompassed by the allotment are designated as wilderness, it will be necessary to review congressional guidelines and policy and make any necessary modifications with regard to grazing management on the Spruce Allotment.

E. THREATENED AND ENDANGERED SPECIES

Bald eagles and peregrine falcons, both federally listed endangered species, are spring-fall migrants in the Wells Resource Area and are known to inhabit the Spruce Allotment during winter (November - March). A winter bald eagle roost is known to exist on the west side of Spruce Mountain near 9,000 feet elevation. There are no conflicts or issues concerning these endangered species and livestock grazing.

F. SURFACE WATERS/RIPARIAN HABITAT

Riparian habitats associated with surface waters are important habitat features for an abundance of wildlife species. For example, these areas are important to sage grouse because they can, if properly managed, produce an abundance of insects (a protein-rich food source essential for the survival of young sage grouse), and provide succulent grasses and forbs late into the summer (highly preferred foods for both young and mature sage grouse). Riparian zones also provide a diversity of thermal cover, hiding cover, succulent forage, and water needed for mule deer fawning and fawn-rearing habitat. In essence, the riparian habitats or zones associated with surface waters are the most important wildlife habitat type in managed rangelands for wildlife, wild horses and livestock.

Many of the surface waters in the Spruce Allotment are located on private lands. Only 23 surface waters exist on public lands. Most of these public surface waters are located above 6,500 feet elevation in the Spruce and the Dolly Varden Mountains. Only 4 public surface waters exist in valley bottoms or upper valley bench areas (2 in Independence Valley and 2 in Clover Valley).

Fifteen of the surface waters located on public lands in the Spruce Allotment have been developed for livestock use. A spring box and trough or a dug-out pond are common improvement techniques utilized. Some of the water sources and associated riparian zones have been fenced while others remain unprotected.

The surface waters and associated riparian habitats were inventoried on the Spruce Allotment in 1980-81. Habitat conditions for these mesic sites generally range from poor to fair. The Wells RPS states that 3 springs within the Spruce Allotment will be developed and/or improved. One objective of the Spruce Goshute HMP will be to improve three poor-to-fair condition springs to good or excellent condition.

G. WOODLAND PRODUCTS

Christmas trees, pine nuts, fuel wood, and fence posts are harvested commercially and non-commercially in many areas of the Spruce Allotment. There are currently no conflicts with livestock grazing and the harvest of woodland products. The Wells RPS has identified 16,000 acres of crucial deer winter range in the Spruce Allotment to be improved by thinning (cutting) pinyon-juniper (thin 4,000 acres to improve 16,000 acres). An additional 2,500 acres (which may include pinyon-juniper) is also identified to be chained or burned and seeded to improve habitat conditions. These vegetation manipulation projects and how they will affect pinyon-juniper zones in the Spruce Allotment will be addressed in the Spruce/Goshutes Habitat Management Plan.

H. MINING ACTIVITIES

Mining activity has occurred and/or is ongoing in many areas of the Spruce Allotment. Spruce Mountain and the Dolly Varden Mountains have several patented mining claims. Exploratory activity has occurred in the Medicine Range, West and Delcer Buttes, several areas of Spruce Mountain, and the Goshute Mountains. The Victoria Mine in the Dolly Vardens is currently inactive. Livestock operations on the Spruce Allotment have derived many benefits from these mining activities over the years. As a result of mining activity, access routes have been upgraded in many areas and in some instances water for mining has been made available for stockwater use. Therefore, there are currently no conflicts with mining activities and livestock grazing.

I. LANDS ACTIONS/PUBLIC ACCESS/UTILITY CORRIDOR DESIGNATION

There are no "checkerboard" lands within the Spruce Allotment. Except for some isolated parcels on Spruce Mountain, private lands are consolidated primarily in Steptoe Valley (Map 2). The Wells RMP/EIS has designated the entire Spruce Allotment for "retention/consolidation" with regards to land tenure adjustments.

Public access is currently not a problem within the Spruce Allotment. However, the acquisition of legal access for 7 roads (approximately 66 miles) within the Spruce Allotment for enhancement of opportunities to use public land resources has been identified in the Wells RMP/EIS.

A three mile wide transportation and utility corridor has been identified along the Nevada Northern Railroad and alternate Highway 93. An additional five mile wide corridor is designated through the Currie Hills. The White Pine Power Project would increase railroad traffic on the Nevada Northern Railroad Corridor. High speed trains may necessitate the fencing of this right-of-way for safety purposes. This may affect grazing management in Steptoe Valley.

III. MANAGEMENT OBJECTIVES

General resource objectives have been established for Spruce Allotment through the Wells RMP and the subsequent Rangeland Program Summary (RPS). Lacking allotment specific objectives for the allotment, this interim AMP identifies objectives which will be followed until the allotment evaluation is completed and allotment specific objectives can be developed through a new AMP. (However during the interim the following allotment objectives will be followed.) It should be noted that the permittee's signature to this interim plan does not necessarily mean that they are in concurrence with all the objectives identified in the RMP and RPS for this particular allotment.

A. RESOURCE MANAGEMENT PLAN (RMP) OBJECTIVES

1. Provide for livestock grazing consistent with other resource uses.
2. Continue management of the existing wild horse herds consistent with other resource uses.
3. Conserve and/or enhance wildlife habitat to the maximum extent possible.
4. Eliminate all of the fencing hazards in crucial big game habitat, most of the fencing hazards in non-crucial big game habitat.
5. Eliminate all of the high and medium priority terrestrial riparian habitat conflicts in coordination with other resource uses.
6. Prevent undue degradation of all riparian habitat due to other uses.

B. RANGELAND PROGRAM SUMMARY (RPS) OBJECTIVES

1. Improve livestock distribution in Steptoe Valley (north of Mizpah Point), Antelope Valley (north and east of Dolly Varden Spring), and Spruce Mountain (in the areas of Basco Spring, Latham Spring, and Coyote Basin).
2. Improve ecological status of winterfat and saltbush winter use areas in Antelope, Steptoe, and Clover Valleys.
3. Maintain summer use areas on the upper elevations of Spruce Mountain (north and west sides) and the Pequop Mountains (between Nine-mile Canyon and Brush Creek).
4. Consider formal conversions from sheep to cattle on portions of the allotment.
5. Periodically evaluate the monitoring data for the allotment to reinstate suspended non-use when they become permanently available.
6. Develop an AMP to be signed in FY87.
7. Improve or maintain all seasonal big game habitat in the Spruce Allotment to good or excellent condition to provide forage and habitat capable of supporting the following reasonable numbers and forage demands:

| | |
|-------|--------------------------|
| 8,838 | Mule deer - 6,510 AUMs |
| 180 | Antelope - 432 AUMs |
| 120 | Bighorn Sheep - 288 AUMs |

8. Reintroduce bighorn sheep in the Goshute Mountains.
9. Facilitate big game movements by modifying existing fences to Bureau standards, where necessary (46 miles).
10. Improve crucial deer winter habitat by cutting pinyon and juniper (thin 16,000 acres).
11. Improve crucial big game habitat by chaining or burning and seeding (2,500 acres).
12. Improve, enhance or develop 3 springs to good or excellent condition.
13. Manage for a wild horse herd size which will maintain a thriving ecological balance consistent with other multiple uses while remaining within the wild horse herd boundaries.
14. Construct the Dolly Varden and Palomino Ridge water catchments for wild horses.

C. ALLOTMENT SPECIFIC OBJECTIVES

1. Show a static or upward trend in ecological status on all key areas within five years of full implementation of the grazing system. Upward trend will be identified by a significant increase in % frequency of occurrence of each key species as defined by Duncan's Multiple Range Test.
2. Improve the ecological status of all key areas to (or maintain in) late seral stage within 10 years of full implementation of the grazing system.
3. Maintain the current good habitat conditions of crucial deer winter range in the Spruce/Basco Spring and Black Forest areas and improve the crucial deer winter range in the Boone Springs area from fair to good habitat condition within 10 years of full implementation of the grazing system. Habitat condition ratings will be monitored by the Wells Resource Area Wildlife Biologist.
4. Improve all yearlong antelope range within the Spruce Allotment from fair to good habitat condition within 10 years of full implementation of the grazing system. Habitat condition ratings will be monitored by the Wells Resource Area Wildlife Biologist.
5. Improve three high priority poor or fair condition spring and/or wet meadow complexes located within the Spruce Allotment to good or excellent condition within 10 years following the full implementation of the grazing system (as per Wells RPS). An inventory of the spring and/or wet meadow complexes on the Spruce Allotment will identify the specific springs or riparian areas to be improved or developed. Condition ratings will be monitored by the Wells Resource Area Wildlife Biologist.

Management Objectives

6. Maintain good bighorn sheep habitat conditions in the Goshute Mountains (Subunit J) within 10 years of full implementation of the grazing system. Habitat condition ratings will be monitored by the Wells Resource Area Wildlife Biologist.
7. Manage livestock use so that average utilization of key forage species does not exceed the allowable percentages outlined in Appendix F.

IV. PLANNED ACTION

Under this interim AMP, the principle means to obtain the RMP, RPS and allotment specific objectives listed above will be to:

1. Convert all of the current total grazing preference from adjudicated sheep use to cattle use. As such, the initial stocking rate for Spruce Allotment will be as follows:

Table 11: Initial stocking rates under the interim AMP for Spruce Allotment.

| Unit/Operator/Herd | Number of Livestock | Kind of Livestock | Period of Use | Total (AUMs) |
|--------------------------------------|---------------------|-------------------|---------------|---------------|
| EAST UNIT (Spruce Allotment): | | | | |
| Spruce Mtn. Herd | 700 | Cattle | 5/1-3/30 | 7,700 |
| Secret Pass Herd | 675 | Cattle | 10/1-5/31 | 5,400 |
| TOTAL | 1,375 | | | 13,100 |

During the interim, the remaining active preference (9,028 AUMs) will be held in abeyance under voluntary nonuse. Reinstatement or suspension of active or voluntary nonuse preference will occur as verified by the evaluation of collected monitoring data.

2. Provide sufficient spring forage through seeding to allow livestock to be removed from winter desert shrub ranges during the critical growth period of the key forage species.
3. Divide Spruce Allotment into manageable units to allow: 1) deferred rotational use of desert shrub winter ranges; 2) deferred and/or rest rotational use of the higher elevation summer ranges; and 3) increased use of existing and proposed seedings.
4. Develop stockwater facilities in Steptoe Valley, Antelope Valley and on Spruce Mountain to improve livestock distribution

A. GRAZING UNITS AND AREAS OF USE

Relative to the proposed division of Spruce Allotment, the allotment is divided upon acceptance of this plan into two units (Map 10), based largely on the historic use areas of the current livestock operations and existing grazing preference transfers. Kenneth Jones will continue to graze cattle in the West Unit, while Von Sorensen will graze cattle in the East Unit as two separate herds (i.e., the Spruce Mountain herd and the Secret Pass herd, respectively). As identified in Map 10, the Secret Pass herd will use subunits C-1, H, K-1 and I, while the Spruce Mountain herd will utilize subunits C-2, -3 and -4, D-1, -2 and -3, E-1, -2, -3 and -4, F-2, I and J.

B. GRAZING SYSTEM DESIGN

The purpose of this Interim AMP is to outline a consensus grazing plan to be followed while the necessary rangeland improvements (i.e., seedings and fences) are implemented. As a new grazing plan, slight adjustments may be required and are expected during the first two to three years of

operation to refine this grazing strategy to reflect actual field conditions. The resulting grazing plan described here is designed to:

1. Improve the ecological status of the native desert shrub ranges by eliminating winter livestock use when the critical growth period for key forage species begins in early April each year.
2. Improve the ecological status of native range on Spruce Mountain by increasing spring and fall use within the existing seedings located in Independence Valley, allowing for deferment of summer cattle use on Spruce Mountain until the first of July.
3. Improve crucial deer winter range in the Boone Springs area by establishing a rest rotation grazing system with cattle to decrease use of and improve age class structure of bitterbrush.
4. Improve cattle utilization patterns on desert shrub ranges by:
 - a) establishing a deferred rotation grazing system and,
 - b) utilizing stockwater facilities to govern use areas.

A description of the grazing plan for each herd in the East Unit follows:

Spruce Mountain Herd

The Spruce Mountain herd will graze Spruce Allotment eleven months each year from approximately May 1 to the following March 30 (see Table 12). During the month of April, cattle will be on private lands (which adjoins some unfenced federal land) for the spring calving period. These private land seedings will continue to be improved and expanded with a division fence constructed to allow the rotation of spring and fall cattle use.

After the calving period, cattle will be moved from the private land seedings through Subunit D-3 to graze the seedings in Independence Valley from May 1 to June 30. These existing seedings will be crossed fenced and divided into two pastures in order to rotate spring and fall cattle use. Use of these seedings will allow the deferment of cattle grazing on Spruce Mountain until July 1 each year. As outlined in Table 12, this spring grazing will occur the first year in Subunit D-1, as rotated with Subunit D-2 every other year. Until such time as the fencing called for in Appendix E is constructed, livestock use in the Independence Valley seedings will be controlled by alternating the operation of Nine Mile Well with East Spruce Well.

On July 1, cattle will be turned out from the Independence Valley seedings to Spruce Mountain summer range. Subunits E-1 and E-2 will be grazed each year from July 1 to September 30. While used in conjunction with Subunits E-1 and E-2, cattle use in Subunits E-3 and E-4 will be alternated every other year.

Cattle will begin moving off of the Spruce Mountain summer range around the first of September. Fall cattle use from September 1 to November 10 will be made in the Independence Valley seeding not grazed the previous spring. Shipping calves sometime during the period of October 15 to November 15 will require the continued use of the Feedlot Corrals each year regardless of which seeded pasture being grazed in the fall. While monitoring will be used to quantify the actual acreage required, current projections indicate that approximately 840 acres of additional seedings will be required in Independence Valley to support the Spruce Mountain herd in both the spring and fall.

After calves are shipped, cattle will be herded from Independence Valley to winter range located in Steptoe Valley through Subunit D-3. Cattle use in the winter range will occur from November 20 to March 31 when cattle are again moved to private lands for calving. The winter range in Antelope and Steptoe Valleys will be divided in a north-south manner, with winter and early spring use being rotated each year. Livestock movements within the winter range will be controlled by stockwater, as specified in Table 12. As discussed in greater detail in the following section, there will be some overlap of livestock use between the Spruce Mountain and Secret Pass herds in the area of Warehouse, Crane and Indian Creek Wells. The Spruce Mountain herd will use these waters on their way to Antelope and Steptoe Valleys, while the Secret Pass herd will use these same water sources as part of their winter range in Subunit C-1.

Secret Pass Herd

As outlined in Table 13, the Secret Pass herd will be allowed to enter the Spruce Allotment for winter grazing as early as October 20 through the Polar Star and Curtis Spring pastures (Subunits I and K-1). Fall and early winter use will be made in the native range portions of Clover Valley (Subunit H) with cattle being herded around the south end of Spruce Mountain through Subunit C-1 to the winter range located in the west portions of Steptoe Valley.

To synchronize winter grazing with the Spruce Mountain herd and to alternate the area of spring use, the Secret Pass herd will alternate its arrival and departure dates in Steptoe Valley on an annual basis. During year 1, the Secret Pass herd will graze Clover Valley (Subunits H, I and K-1) from October 20 to November 30. At the end of November the herd will be herded around the south end of Spruce Mountain to arrive in Steptoe Valley on December 1. During this rotation the herd will depart Steptoe Valley by April 30 and slowly trail back to Clover Valley and exit the allotment by May 31.

In contrast, during the second year substantial use in Subunit H will be deferred until spring by hazing cattle through Clover Valley and the south end of Spruce Mountain for a November 15 arrival date in Steptoe Valley. During this rotation the herd will depart the winter range in Steptoe Valley by March 31 and will be herded back to Clover Valley (Subunit H) for a April 16 to May 31 grazing season. In effect, the interim grazing strategy alternates spring grazing between Clover and Steptoe Valleys on a yearly basis by either emphasizing fall or spring grazing in Clover Valley.

As outlined in Table 13, livestock distribution in the Steptoe Valley winter range will be controlled by alternating stockwater at the following wells:

- Group 1 - Tom Eager, Indian Creek, Crane and Warehouse Wells.
- Group 2 - Goshute, Old Mizpah and Mizpah Point Wells.

The sequencing of use between these two well groups will be reversed on a yearly basis so as not to conflict with livestock use in the adjacent unfenced areas grazed by the Spruce Mountain herd.

One of the primary actions of this interim grazing plan is to develop sufficient spring forage through seedings to allow livestock to be removed from the winter shrub ranges during the critical growth period (See Table 14 and Map 11 for justification and proposed locations for these seedings). When these seedings have been developed this interim grazing plan for the Secret Pass herd will be adjusted. However during the interim, spring use within the native range will be alternated between Clover and Steptoe Valleys on a yearly basis.

C. MAXIMUM USE

Based on the current active grazing preference and the overall carrying capacity of each grazing subunit, the maximum actual use for each herd may not exceed the total AUM listed in Table 11, until such time as monitoring indicates otherwise. During the interim, the remaining active preference will be held in abeyance under voluntary non-use. However, this provision does not preclude the opportunity for the permittees to cooperatively alter the ownership of the respective cattle herds as long as the total actual use does not exceed the total AUMs for each herd cited in Table 11.

D. FLEXIBILITY

In consideration of events beyond the control of the BLM and permittees (i.e., fire, snow cover, drought, insect damage, etc.) the grazing schedule may, upon written approval of the Area Manager, be modified to account for these events. A 20-day flexibility period will be allowed, that is, 10 days prior to the start of scheduled use and 10 days at the end of the scheduled use, without prior notification of the authorized officer. Average allowable utilization within the seedings will not exceed 60 percent.

Due to the currently unfenced nature of the allotment, a certain amount of cattle drift is unavoidable and expected. The permittees will work in good faith to control this drift and follow as closely as possible the proposed grazing plan as specified herein. Until the proposed fencing is in place, livestock movements will primarily be controlled through available stockwater sources and stockwaters will only be used as identified in Tables 12 and 13.

E. PROPOSED RANGE IMPROVEMENTS

Range improvement projects necessary for implementation of this interim AMP are illustrated in Map 11 and are listed and prioritized in Appendix E. Proposed range improvement projects necessary for the implementation of this plan shall be completed as soon as possible, pending the availability of funds. Expected completion dates for these improvements are also listed in Appendix E.

V. STUDIES AND EVALUATION

The studies described below are designed to monitor the attainment of the specific management objectives developed for this allotment. The selection of studies methodology and key area/key species to which these studies are correlated was accomplished in accordance with procedures established by the Nevada Rangeland Monitoring Handbook (NRMH), BLM Manual 4400, (BLM Manual Handbook H-4410-1, and Technical References TR4400-1 through 7). The actual location of key areas and selection of key species for each area will be agreed upon jointly with the permittees. BLM will notify the livestock permittees to coordinate key area selection and the actual reading of the monitoring studies. Analysis of the monitoring data to determine compliance or non-compliance with the allotment specific objectives will also include consideration of the necessary revisions to these objectives based on the determination of site potentials.

A. UTILIZATION

Utilization studies will be conducted to assist with grazing use adjustments and/or changes in the grazing management system. The method for documenting utilization of grasses and forbs will be the key forage plant technique described in the NRMH and BLM Manual TR 4400-3. As a minimum, Cole Browse Transects (as per BLM Manual 6600) will be conducted on upland browse sites utilizing bitterbrush as a key species (deer winter range).

Utilization transects will be conducted at two different times during the year: prior to cattle use; and again, within 10 days following the removal of cattle. The BLM will make every effort to coordinate the reading of utilization studies with the permittee.

Use pattern maps will also be made each year following the end of the grazing season or growing season, whichever occurs last. These maps will assist in identifying distribution problems within each pasture or use area.

The key species which will be monitored in each key area along with target utilization levels are listed in Appendix F.

B. ACTUAL USE

An Actual Grazing Use Report will be submitted by each permittee within 15 days following the end of each grazing operation each year, or:

- a) by 4/15 each year for the Spruce Mountain yearlong cattle operation; and
- b) by 6/15 each year for the Secret Pass fall/winter/spring cattle operation.

C. TREND

Trend will be measured by the Quadrat Frequency Method as per NRMH and TR 4400-4. Trend studies will continue to be read as scheduled in the monitoring file. These trend studies will be read in consultation with the permittee and other affected interests.

D. CONDITION

Ecological range condition will be determined to establish a baseline from which progress towards the desired plant community for each key area will be measured. This information will be available and used to develop long-term allotment objectives prior to the evaluation of monitoring data. Range condition will be measured as per Bureau policy outlined in the NRMH and Bureau manuals. Condition transects will be reevaluated upon measurement of a statistically significant change in frequency data.

VI. ANNUAL BILLING

Grazing fees on Spruce Allotment will follow one of the two following options: 1) payment of grazing fees will continue as a monthly payment; or 2) will be paid in full at the start of the grazing season and then reconciled at the conclusion of the grazing season (reconciliation of these before-the-fact billing options will be through submittal of actual use records as discussed in Section V.B. above).

VII. COOPERATOR'S AND BLM'S RESPONSIBILITIES

1. Von and Marian Sorensen will:

- a) Be responsible for livestock control as set forth in this Allotment Management Plan.
- b) Keep an up-to-date Actual Use Record during the grazing season and submit this record for final utilization computation and billing at the end of the grazing season. This record will be submitted to the BLM Elko District Office within 15 days following removal of all livestock from the allotment or no later than 6/15 for the Secret Pass herd, and, 4/15 for the Spruce Mountain herd.
- c) Be responsible for maintaining all structural range improvement projects to Bureau standards.
- d) Ensure that all salting for livestock is done in conjunction with the BLM to promote good livestock distribution and away from wet and/or dry meadows and live waters during the Interim AMP.
- e) Grant easements for all range improvement projects funded in whole or in part by BLM which cross their deeded lands.
- f) Ensure that all stocktroughs at water facilities utilized during the second half of the winter grazing season are left full of water in the spring when cattle are removed.

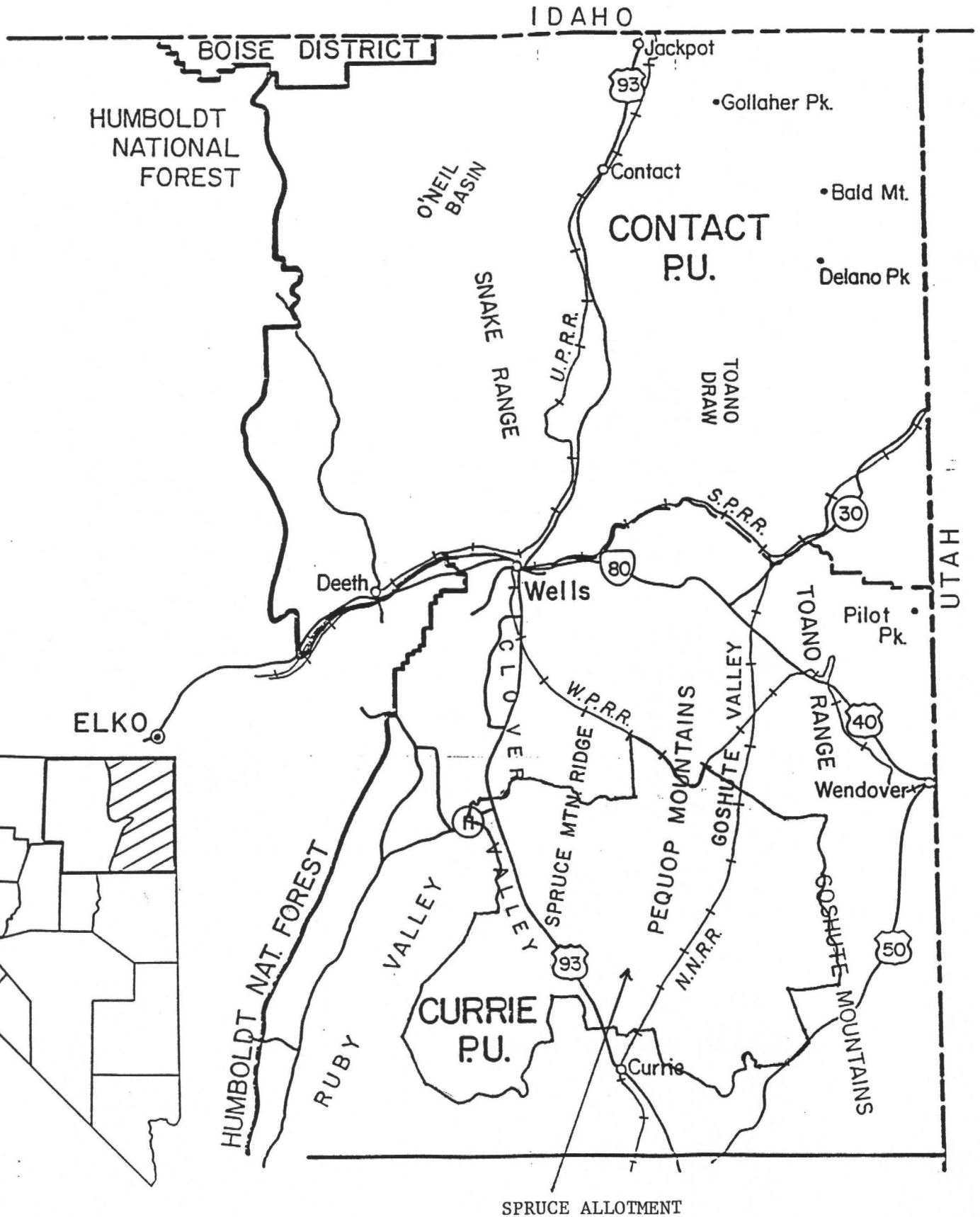
2. The Bureau of Land Management will:

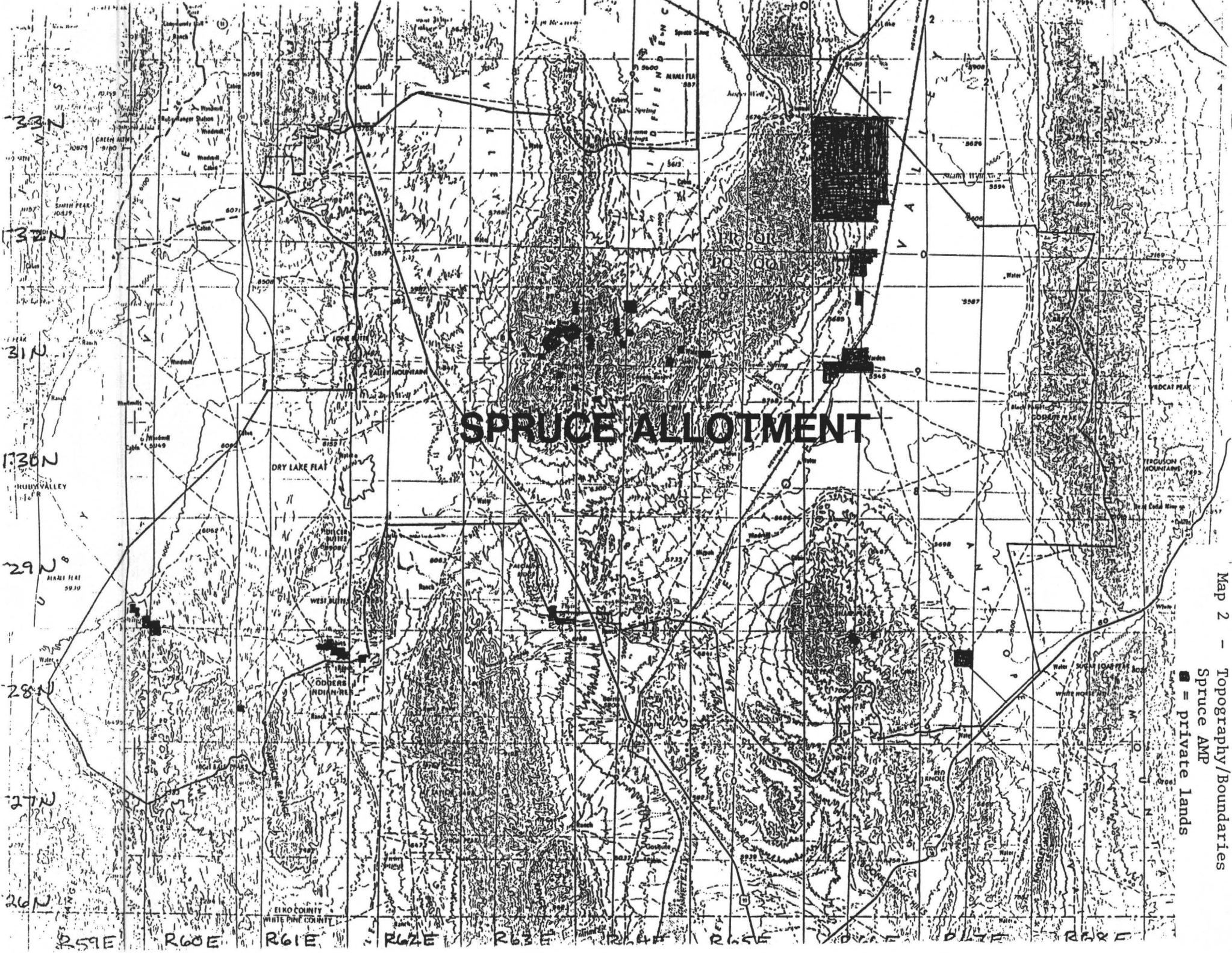
- a) Initiate and ensure compliance with the grazing system.
- b) Conduct resource studies and allotment evaluation in conjunction with affected interests.
- c) Maintain all land treatment projects.
- d) Modify the plan when resource studies or other circumstances indicate that progress towards the objectives are not being made or that multiple-use values are not being maintained.
- e) Acquire easements for improvement projects crossing deeded lands.
- f) Install all range improvements in compliance with the Wells RMP.

**SPRUCE AMP
LIST OF MAPS**

| <u>MAP NO.</u> | <u>DESCRIPTION</u> |
|----------------|---|
| 1 | General Location Map |
| 2 | Topography/Boundary Map |
| 3 | Old Range Unit Boundaries |
| 4 | Existing Range Improvements |
| 5 | Major Subunit Boundaries |
| 6 | Mule Deer Habitat |
| 7 | Antelope and Sagegrouse Habitats |
| 8 | Wild Horse Herd Use Areas |
| 9 | Wilderness Study Areas |
| 10 | Spruce Allotment and Subunit Boundaries |
| 11 | Proposed Range Improvements |

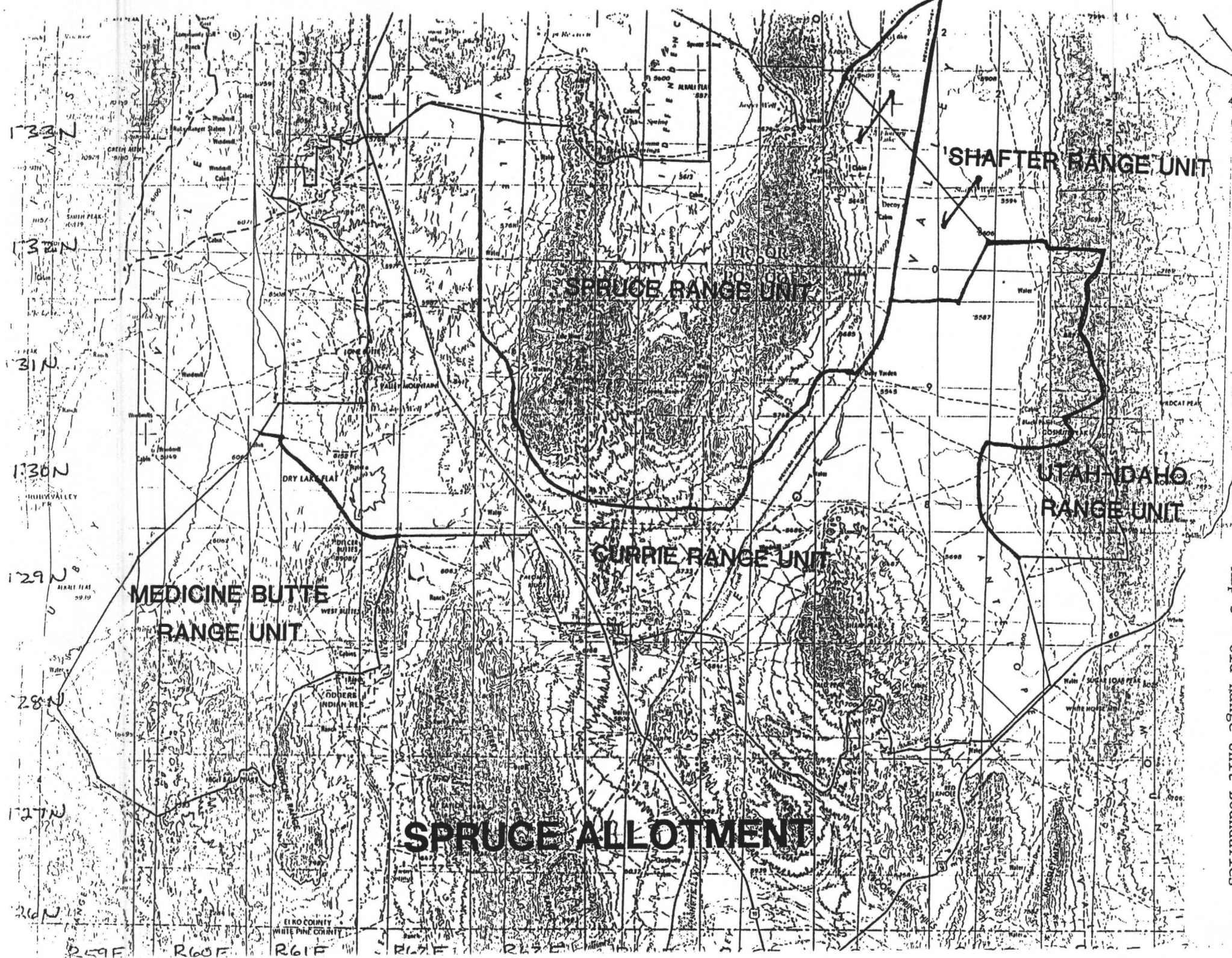
WELLS RESOURCE AREA ELKO DISTRICT NEVADA





SPRUCE ALLOTMENT

Map 2 - Topography/Boundaries
Spruce AMP
■ = private lands



SHAFTER RANGE UNIT

SPRUCE RANGE UNIT

UTAH IDAHO RANGE UNIT

CURRIE RANGE UNIT

MEDICINE BUTTE RANGE UNIT

SPRUCE ALLOTMENT

map 3 - Old range unit boundaries

**SPRUCE AMP
LIST OF TABLES AND FIGURES**

| <u>TABLE</u> | <u>DESCRIPTION</u> |
|--------------|--|
| 1 | Historical Use Summary - Griswold Livestock Co. |
| 2 | Historical Use Summary - Robison/Sorensen Partnership |
| 3 | Historical Use Summary - Loyd Sorensen |
| 4 | Historical Use Summary - Sorensen and Sorensen |
| 5 | Historical Use Summary - Von and Marian Sorensen |
| 6 | Historical Use Summary - Sorensen/Jones |
| 7 | Historical Use Summary - Kenneth Jones |
| 8 | Historical Use Summary - Spruce Allotment |
| 9 | Active Use Summary - Spruce Allotment |
| 10 | Vegetation Type/Acreage Summary - Spruce Allotment |
| 11 | Initial Stocking Rates Under the Interim AMP |
| 12 | Grazing Schedule for the Spruce Mountain Herd |
| 13 | Grazing Schedule for the Secret Pass Herd |
| 14 | Estimated Seeding Requirements to Defer Spring Livestock Grazing In Spruce Allotment |

| <u>FIGURE</u> | <u>DESCRIPTION</u> |
|---------------|----------------------------------|
| 1 | Historical Summary of Active Use |

HISTORICAL ACTIVE USE
GRISWOLD LIVESTOCK COMPANY
1935-1950

| <u>Dates</u> | <u>Spg/Fall Numbers</u> | <u>Summer Numbers</u> | <u>Available AUMS</u> | <u>Active Use AUMS</u> | <u>Non-Use AUMS</u> | <u>% Active Use</u> | <u>Remarks</u> |
|-------------------|-----------------------------|---------------------------|---------------------------|----------------------------|-------------------------|-------------------------|---|
| 08/01/35-03/31/36 | 8,200 SH | 1,500 SH | --- | 6,280 | -- | -- | Maximum # are spg. & fall use; Winter use in Ely Dist.; Estab. "Priority Use" |
| 04/01/36-03/31/37 | 8,700 SH | 1,500 SH | --- | 8,050 | -- | -- | |
| 04/01/37-01/31/38 | 7,700 SH | 1,000 SH | --- | 5,260 | -- | -- | |
| 04/01/38-11/15/38 | 8,100 SH | 1,000 SH | --- | 5,410 | -- | -- | . |
| 04/01/39-11/15/39 | 8,000 SH | 1,500 SH | --- | 5,500 | -- | -- | |
| 04/01/40-11/15/40 | 8,000 SH | 1,500 SH | --- | 5,500 | -- | -- | |
| 04/01/41-11/15/41 | 8,000 SH | 1,500 SH | --- | 5,500 | -- | -- | |
| 04/01/42-11/15/42 | 9,000 SH | 1,650 SH | --- | 6,150 | -- | -- | |
| 04/01/43-03/01/44 | 10,000 SH | 2,000 SH | 9,419 | 8,665 | 754 | 92% | 10 yr. grazing permit issued in Elko for 9,419 AUMs Spring & summer use in Spruce & Shafter units. Winter use in Currie unit. |
| 04/01/44-03/31/45 | 10,000 SH | 2,000 SH | 9,419 | 8,665 | 754 | 92% | |
| 04/01/45-03/31/46 | 10,000 SH | 2,000 SH | 9,419 | 8,665 | 754 | 92% | |
| 04/01/46-03/31/47 | 10,000 SH | 2,000 SH | 17,484 | 16,000 | 1,484 | 92% | |
| 04/01/47-03/31/48 | 10,000 SH | 2,000 SH | 17,484 | 15,000 | 2,484 | 86% | |
| 04/01/48-03/31/49 | 10,000 SH | 2,000 SH | 17,484 | 15,000 | 2,484 | 86% | |
| 04/01/49-03/31/50 | 10,000 SH | 2,000 SH | 17,484 | 15,000 | 2,484 | 86% | Permit transferred to Robinson/Sorensen (17,919 AUMs Spruce Unit & 4,656 AUMs Currie Unit) |

HISTORICAL USE
ROBISON/SORENSEN PARTNERSHIP
1950-1974

| <u>Dates</u> | <u>Maximum Numbers (Winter)</u> | <u>Minimum Numbers (Summer)</u> | | <u>Available AUMS</u> | <u>Active Use AUMS</u> | <u>Non-Use AUMS</u> | <u>% Active Use</u> | <u>Remarks</u> |
|-------------------|---|---|---------------------------|---|--|-------------------------|-------------------------|----------------|
| 04/01/50-03/31/51 | 13,500 SH 100 CA | 3,000 SH | Spruce Currie | 17,919 4,565 <u>22,484</u> | 21,050 SH 900 CA <u>21,950 Total</u> | 534 | 98% | 87% F.R. |
| | | TOTAL | | | | | | |
| 04/01/51-03/31/52 | 13,500 SH 100 CA | 3,000 SH | | 22,484 | 21,050 SH 900 CA <u>21,950 Total</u> | 534 | 98% | 87% F.R. |
| 04/01/52-03/31/53 | 12,920 SH | 3,000 SH | Spruce Currie UT/ID | 15,669 4,565 1,508 <u>21,742</u> | 21,811 SH | --- | 100.3% | 82% F.R. |
| | | Total | | | | | | |
| 04/01/53-03/31/54 | 12,000 SH 10 H | 3,000 SH | | 21,742 | 18,834 SH 104 H <u>18,938 Total</u> | 2,804 | 87% | 86% F.R. |
| 04/01/54-03/31/55 | 12,000 SH 10 H | 3,000 SH | | 21,742 | 18,834 SH 104 H <u>18,938 Total</u> | 2,804 | 87% | 86% F.R. |
| 04/01/55-03/31/56 | 12,000 SH 10 H | 3,000 SH | Spruce Currie UT/ID | 15,669 4,565 1,778 <u>22,012</u> | 18,834 SH 104 H <u>18,938 Total</u> | 3,074 | 86% | 86% F.R. |
| 04/01/56-03/31/57 | 12,000 SH 10 H | 3,000 SH | | 27,519 | 18,834 SH 104 H <u>18,938 Total</u> | 8,581 | 69% | 86% F.R. |
| 04/01/57-03/31/58 | 12,000 SH 10 H | 3,000 SH | | 27,519 | 18,834 SH 104 H <u>18,938 Total</u> | 8,581 | 69% | 86% F.R. |
| 04/01/58-03/31/59 | 12,000 SH 10 H | 3,000 SH | | 27,519 | 18,834 SH 104 H <u>18,938 Total</u> | 8,581 | 69% | 86% F.R. |
| 04/01/59-03/31/60 | 12,000 SH 10 H | 3,000 SH | | 27,519 | 18,903 SH 104 H <u>19,007 Total</u> | 8,512 | 69% | 86% F.R. |
| 04/1/60-03/31/61 | 12,000 SH 10 H | 3,000 SH | | 27,519 | 18,903 SH 104 H <u>19,007 Total</u> | 8,512 | 69% | 86% F.R. |
| 04/01/61-03/31/62 | 15,000 SH 10 H | 3,000 SH | | 27,519 | 21,635 SH 104 H <u>21,739 Total</u> | 5,780 | 79% | 86% F.R. |

HISTORICAL USE
ROBISON/SORENSEN PARTNERSHIP (Continued)
1950-1974

| <u>Dates</u> | <u>Maximum Numbers (Winter)</u> | <u>Minimum Numbers (Summer)</u> | <u>Available AUMS</u> | <u>Active Use AUMS</u> | <u>Non-Use AUMS</u> | <u>% Active Use</u> | <u>Remarks</u> |
|-------------------|---|---|--|------------------------------------|-------------------------|-----------------------------|---|
| 04/01/62-03/01/63 | 15,000 SH 10 H | 3,000 SH | 27,784 | 23,939 SH 107 H 24,046 Total | 3,738 | 86% | 89% F.R. |
| 04/01/63-03/31/64 | 15,000 SH 10 H | 3,000 SH | 30,940 | 24,035 SH 107 H 24,142 Total | 6,798 | 78% | 89% F.R. |
| 04/01/64-03/31/65 | 15,000 SH 10 H | 3,000 SH | Lamoille 90 Currie 8,293 Spruce 15,579 Med. Butte 2,531 UT/ID 3,534 N-4 270 30,297 | 24,274 SH 107 H 24,381 Total | 5,916 | 80% | 89% F.R. |
| 04/01/65-02/28/66 | 15,000 SH 10 H | 3,000 SH | 30,207 | 20,107 SH 984 20,205 total | 10,002 | 67% | 89% F.R. |
| 03/01/66-02/28/67 | 13,000 SH | 2,000 SH | Currie 13,581 UT/ID 3,534 Med. Butte 2,531 Spruce 10,579 30,225 | 19,634 SH | 10,591 | 65% | 89% F.R. |
| 03/01/67-02/28/68 | 13,500 SH 15 H | 2,000 SH | 30,225 | 19,799 SH 101 H 19,900 Total | 10,325 | 66% | 89% F.R. |
| 03/01/68-02/28/69 | 13,500 SH | 2,000 SH | 30,225 | 19,238 SH | 10,987 | 78% | 89% F.R. |
| 03/01/69-02/28/70 | 11,070 SH 15 H | 3,000 SH | 30,225 | 23,647 SH 161 H 23,808 Total | 6,417 | 79% | 89% F.R. |
| 03/01/70-02/28/71 | 10,656 SH | 1,500 SH | 30,225 | 16,498 SH | 13,727 | 55% | 89% F.R. |
| 03/01/71-02/28/72 | 9,856 SH | 1,700 SH | 29,948 | 16,271 SH | 13,874 | 54% | 100% F.R. |
| 03/01/72-02/28/73 | 4,700 SH | 1,100 SH | 29,948 | 14,589 SH | 15,359 | 49% | 100% F.R. |
| 03/01/73-02/28/74 | 2,950 SH | 3,000 SH | 29,948 | 2,936 SH | 27,012 | 10% | 100% F.R. - Permit transferred to Loyd Sorensen |

| <u>Dates</u> | <u>Maximum numbers (Beginning winter Numbers)</u> | HISTORICAL USE LOYD SORENSEN 1973-1986 | | | | <u>% Active Use</u> | <u>Remarks</u> |
|-------------------|---|---|--|-------------------------|-----|---|----------------|
| | | <u>Available AUMS</u> | <u>Active Use AUMS</u> | <u>Non-Use AUMS</u> | | | |
| 11/21/73-02/28/74 | 350 SH .250 CA | 14,974 Act. 138 Susp. <u>15,112 Total</u> | 210 SH 817 CA <u>1,027 Total</u> | 13,947 | 7% | 100% F.R. Cattle licensed as tempor- ary pending completion of an environmental assessment for a change in kind of livestock. | |
| 03/01/74-02/28/75 | 3,250 SH 200 CA | 14,974 Act. | 4,766 SH <u>1,350 CA</u> 6,116 Total | 8,858 SH | 41% | 100% F.R. Last year for summer sheep on Spruce Mtn. | |
| 03/01/75-02/28/76 | 2,910 SH 300 CA | 14,974 Act. | 4,115 SH <u>1,690 CA</u> 5,805 Total | 9,169 | 39% | 100% F.R. | |
| 03/01/76-02/28/77 | 2,700 SH 240 CA | 14,974 Act. | 2,072 SH <u>1,488 CA</u> 3,560 Total | 11,414 | 24% | 100% F.R. Used Boone Springs Allotment for 1200 AUMs TNR w/sheep 12/16-2/28 | |
| 03/01/77-02/28/78 | 2,525 SH 340 ca | 14,974 Act. | 2,628 SH <u>1,831 CA</u> 4,459 Total | 10,515 | 30% | 100% F.R. Used 240 AUMs TNR on Boone Springs Allot. w/sheep | |
| 03/01/78-02/28/79 | 2,256 SH 250 CA | 14,974 Act. | 3,154 SH <u>1,734 CA</u> 4,898 Total | 10,076 | 33% | 100% F.R. | |
| 03/01/79-02/28/80 | 1,290 SH 300 CA | 14,974 Act. | 2,184 SH <u>1,800 CA</u> 3,984 Total | 10,990 | 27% | 100% F.R. | |
| 03/01/80-02/28/81 | 1,731 SH 310 CA | 14,974 Act. | 2,508 SH <u>1,944 CA</u> 4,452 Total | 10,522 | 30% | 100% F.R. | |
| 03/01/81-02/28/82 | 2,220 SH 300 CA | 14,974 Act. | 1,846 SH <u>1,880 CA</u> 3,726 Total | 11,248 | 25% | 100% F.R. Used Boone Springs Allot. for 1,110 AUMs TRN w/sheep 12/16-2/28 | |

HISTORICAL USE
LOYD SORENSEN (Continued)
1973-1986

| <u>Dates</u> | <u>Maximum numbers (Beginning winter Numbers)</u> | <u>Available AUMS</u> | <u>Active Use AUMS</u> | <u>Non-Use AUMS</u> | <u>% Active Use</u> | <u>Remarks</u> |
|------------------------|---|---------------------------|-------------------------------------|-------------------------|-----------------------------|--|
| 03/01/82-02/28/83 | 4,270 SH | 14,974 Act. | 4,301 SH 900 CA 5,201 Total | 9,773 | 35% | - All Loyd Sorensen's cattle licensed on Sorensen/Jones Permit for winter 1982-83, cattle use (AUMs) is carry over from winter 81-82. - Used Boone Springs Allot. for 361 AUMs TNR (sheep). |
| 03/01/83-02/28/84 | 3,876 SH 966 CA | 14,974 Act. | 6,126 SH 3,806 CA 9,932 Total | 5,042 | 66% | 566 cattle from 12/1-2/29 are Von Sorensen's licensed on Loyd Sorensen's Permit (1,698 AUMs). |
| 03/01/84 - 02/28/85 | 3,287 SH 515 CA | 14,974 | 5,318 SH 4,225 CA 9,543 Total | 5,431 | 64% | - Grazed Boone Springs Allot. For 706 AUMs TNR 12/21-2/28 - Von Sorensen licensed on Loyd Sorensen's permit for 617 CA 1/1-2/28 1,234 AUMs. |
| 03/01/85 - 02/28/86 | 3,060 SH 470 CA | 14,974 | 2,490 SH 3,080 CA 5,570 Total | 9,404 | 37% | - Grazed Boone Springs Allot. for 3,714 aums THR 11/7-2/28 (Sheep) |
| 03/01/86 - 02/28/87 | 3,073 SH 500 CA | 14,974 | 3,832 SH 2,548 CA 6,380 Total | 8,594 | 43% | - Grazed Curtis Springs Allot. for 130 AUMs THR 3/23-4/2 (Sheep) |

HISTORICAL USE
SORENSEN AND SORENSEN
1960-1968

| <u>Dates</u> | <u>Maximum Numbers</u> | <u>Total Available AUMS</u> | <u>Active Use AUMS</u> | <u>Non-Use AUMS</u> | <u>% Active Use</u> | <u>Remarks</u> |
|-------------------|------------------------|--|------------------------|---------------------|---------------------|---|
| 1960 | 0 | 7,000 | 0 | 7,000 | 0 | |
| 1961 | 0 | 7,000 | 0 | 7,000 | 0 | Winter cattle use licensed |
| 1962 | 0 | 7,000 | 0 | 7,000 | 0 | as temporary pending completion of an |
| 1963 | 0 | 7,000 | 0 | 7,000 | 0 | EA for change in kind. |
| 12/20/64-02/28/65 | 500 CA | 2832-UT/ID 654 UT/ID Trail <u>7,097</u> Currie 10,583 Total | 1,150 CA | 9,433 | 11% | |
| 03/01/65-02/28/66 | 500 CA | 10,583 | 3,547 CA | 7,036 | 34% | " |
| 03/01/66-02/28/67 | 600 CA | 9,944 | 4,250 CA | 5,694 | 43% | " |
| 03/01/67-02/28/68 | 650 CA | 5,679 Currie <u>2,904</u> UT/ID 8,583 Total | 6,395 CA | 2,188 | 75% | " Permit transferred to Von & Marian Sorensen 4,948 - Currie/Mid. Butte 1,235 - Ut/ID (Active) 247 - " (Susp.) 6,083 - Total Active 247 - Total Susp. |

HISTORICAL USE
VON AND MARIAN SORENSEN
1968-1986

| <u>Dates</u> | <u>Maximum Numbers</u> | <u>Total Available AUMS</u> | <u>Active Use AUMS</u> | <u>Non-Use AUMS</u> | <u>% Active Use</u> | <u>Remarks</u> |
|-------------------|------------------------|-----------------------------|------------------------|---------------------|---------------------|---|
| 02/15/68-02/29/68 | 237 CA | 6,083 | 119 | 5,964 | 2% | - Carry over from 1968 Sorensen/Sorensen Winter Permit |
| 03/01/68-02/28/69 | 750 CA | 6,083 | 7,827 | --- | 129% | - Yearlong cattle use licensed as temp. pending completion of EA. - 1,744 AUMs TNR |
| 03/01/69-02/28/70 | 800 CA | 6,083 | 7,750 | --- | 127% | - Cattle use temp. pending EA. - 1667 AUMs TNR |
| 03/01/70-02/28/71 | 800 CA | 6,083 | 6,069 | 14 | 99.8% | - Cattle use temp. pending EA. |
| 03/01/71-02/28/72 | 600 CA | 6,083 | 3,438 | 2,645 | 57% | " |
| 03/01/72-02/28/73 | 615 | 6,083 | 6,065 | 18 | 99.7% | " |
| 03/01/73-10/31/73 | 575 CA | 6,083 | 4,600 | 1,483 | 76% | " |
| 03/01/74-12/06/74 | 620 CA | 6,083 | 5,626 | 457 | 92% | " |
| 03/01/75-11/30/75 | 675 CA | 6,083 | 5,580 | 503 | 92% | " |
| 03/01/76-11/20/76 | 778 CA | 6,083 | 6,074 | 9 | 99.9% | " |
| 03/01/77-02/28/78 | 595 CA | 6,083 | 6,082 | 1 | 100% | " |
| 03/01/78-02/28/79 | 694 CA | 6,083 | 6,082 | 1 | 100% | " |
| 03/01/79-02/28/80 | 574 CA | 6,083 | 6,012 | 71 | 99% | " |
| 03/01/80-12/31/80 | 552 CA | 6,083 | 5,393 | 690 | 89% | " |
| 03/01/81-02/28/82 | 606 CA | 6,083 | 6,733 | -- | 111% | " |
| 03/01/82-11/30/82 | 606 CA | 6,083 | 5,326 | 757 | 88% | - Cattle use temp. pending EA. - 631 cattle 12/1-2/28 (1922 AUMs) on Sorensen/Jones Permit |

HISTORICAL USE
VON AND MARIAN SORENSEN (Continued)
1968-1986

| <u>Dates</u> | <u>Maximum Numbers</u> | <u>Total Available AUMS</u> | <u>Active Use AUMS</u> | <u>Non-Use AUMS</u> | <u>% Active Use</u> | <u>Remarks</u> |
|-------------------|------------------------|-----------------------------|------------------------|---------------------|---------------------|---|
| 03/01/83-02/28/84 | 631 CA | 6,083 | 5,598 | 485 | 92% | - Cattle use temp. pending EA. - 566 cattle 12/1-2/29 on L. Sorensen Permit (1,698 AUMs) |
| 03/01/84-02/28/85 | 692 CA | 7,154 | 6,725 | 429 | 94% | - Cattle use temp. pending EA. - 1234 AUMs used on L. Sorensen Permit |
| 03/01/85-02/28/86 | 617 CA | 7,154 | 6,953 | 201 | 97% | - Cattle use temp. pending EA. |
| 03/01/86-02/28/87 | 720 CA | 7,154 | 6,686 | 468 | 93% | " |

HISTORICAL USE
SORENSEN/JONES
1973-1983

| <u>Dates</u> | <u>Maximum Numbers (winter use)</u> | <u>Total Available AUMS</u> | <u>Active Use AUMS</u> | <u>Non-Use AUMS</u> | <u>% Active Use</u> | <u>Remarks</u> |
|--|---|-------------------------------------|-------------------------------------|-------------------------|-----------------------------|--|
| 10/13/73-02/28/74 | 3,400 SH 880 CA | 14,974 Act. 139 Susp. | 3,268 SH 3,283 CA 6,551 Total | 8,423 | 44% | - Cattle use licensed temp. pend- ing comple- tion of EA. for change in kind |
| 03/01/74-06/30/74 11/01/74-02/28/75 | 3,040 SH 845 CA | 14,974 | 4,476 SH 3,118 CA 7,594 Total | 7,380 | 51% | " |
| 03/01/75-06/30/75 10/23/76-02/28/76 | 2,550 SH 925 CA | 14,974 | 4,137 SH 3,946 CA 8,083 Total | 6,891 | 54% | " |
| 03/01/76-06/30/76 10/26/76-02/28/77 | 2,475 SH 1,045 CA | 14,974 | 4,410 SH 4,438 CA 8,848 Total | 6,126 | 59% | " |
| 03/01/77-06/22/77 10/30/77-02/28/78 | 2,800 SH 461 CA | 14,974 | 4,035 SH 2,637 CA 6,672 Total | 8,302 | 45% | " |
| 03/01/78-06/30/78 10/28/78-02/28/79 | 3,106 SH 373 CA | 14,974 | 4,522 SH 2,643 CA 7,165 Total | 7,809 | 48% | " |
| 03/01/79-07/06/79 11/01/79-02/28/80 | 2,990 SH 486 CA | 14,503 Act. 135 Susp. | 4,594 SH 2,635 CA 7,229 Total | 7,279 | 50% | " |
| 03/01/80-06/30/80 11/09/80-02/28/81 | 2,539 SH 604 CA | 14,508 | 3,645 SH 3,166 CA 6,811 Total | 7,697 | 47% | " |
| 03/01/81-05/31/81 11/02/81-02/28/82 | 2,700 SH 250 CA | 14,508 | 2,736 SH 1,792 CA 4,528 Total | 9,980 | 31% | " |

HISTORICAL USE
SORENSEN/JONES (Continued)
1973-1983

| <u>Dates</u> | <u>Maximum Numbers (winter use)</u> | <u>Total Available AUMS</u> | <u>Active Use AUMS</u> | <u>Non-Use AUMS</u> | <u>% Active Use</u> | <u>Remarks</u> |
|-------------------|---|-------------------------------------|----------------------------|-------------------------|-----------------------------|--|
| 03/01/82-07/03/82 | 1,216 CA | 14,508 | 2,093 SH | 7,871 | 46% | - No sheep on permit for winter of 82-83 - sheep use is carryover from winter of 81-82 - Portion of permit transferred to Von Sorensen. - 631 CA 12/1-2/28 are V. & M. Sorensen Lic. on Sor./Jones permit (1922 AUMs) - |
| 11/16/82-02/28/83 | | | 4,544 CA | | | |
| | | | 6,637 Total | | | |

HISTORICAL USE
KENNETH JONES
1983-1986

| <u>Dates</u> | <u>Maximum Numbers (winter use)</u> | <u>Total Available AUMS</u> | <u>Active Use AUMS</u> | <u>Non-Use AUMS</u> | <u>% Active Use</u> | <u>Remarks</u> |
|--|---|-------------------------------------|----------------------------|-------------------------|-----------------------------|---|
| 03/01/83-05/30/83 11/28/83-02/28/84 | 345 CA | 13,437 Act. 125 Susp. | 2,000 CA | 11,437 | 15% | - Cattle use licensed as temp. pending comple- tion of EA for change in kind. |
| 03/01/84-06/03/84 11/21/84-02/28/85 | 355 CA | 13,437 | 2,253 CA | 11,184 | 17% | " |
| 03/01/85-05/31/85 11/23/86-02/28/86 | 370 CA | 13,437 | 2,274 | 11,163 | 17% | " |
| 03/01/86-05/09/86 11/20/86-02/28/87 | 415 CA | 13,437 | 2,248 | 11,189 | 17% | " |

HISTORICAL USE SUMMARY
 SPRUCE ALLOTMENT
 ACTIVE USE BY KIND OF LIVESTOCK (AUMs)
 1968 - 1986

Table 8 - Spruce AMP
 Pg. 1 of 1

| | ROBISON/ SORENSEN | LOYD SORENSEN | V. & M. SORENSEN | SORENSEN/ JONES | KENNETH JONES | TOTAL |
|------|--|---|-------------------------------------|---|-------------------------------------|--|
| 1968 | 30225AV 19228SH OCA 19228TOT | | 6083AV OSH 7827CA 7827TOT | | | 36308AV 19228SH 7827CA 27065TOT |
| 1969 | 30225AV 23647SH 161H 23808TOT | | 6083AV OSH 7750CA 7750TOT | | | 36308AV 23647SH 7911CA&H 31558TOT |
| 1970 | 30225AV 16498SH OCA 16498TOT | | 6083AV OSH 6069CA 6069TOT | | | 36308AV 16498SH 6069CA 22567TOT |
| 1971 | 29948AV 16271SH OCA 16271TOT | | 6083AV OSH 3438CA 3438TOT | | | 36031AV 16271SH 3438CA 19709TOT |
| 1972 | 29948AV 14589SH OCA 14589TOT | | 6083AV OSH 6065CA 6065TOT | | | 36031AV 14589SH 6065CA 20654TOT |
| 1973 | | 14974AV 3146SH 817CA 3963TOT | 6083AV OSH 4600CA 4600TOT | 14974AV 3268SH 3283CA 6551TOT | | 36031AV 6414SH 8700CA 15114TOT |
| 1974 | | 14974AV 4766SH 1350CA 6116TOT | 6083AV OSH 5626CA 5626TOT | 14974AV 4476SH 3118CA 7594TOT | | 36031AV 9242SH 10094CA 19336TOT |
| 1975 | | 14974TOT 4115SH 1690CA 5805TOT | 6083TOT OSH 5580CA 5580TOT | 14974TOT 4137SH 3946CA 8083TOT | | 36031TOT 8252SH 11216CA 19468TOT |
| 1976 | | 14974AV 2072SH 1488CA 3560TOT | 6083AV OSH 6074CA 6074TOT | 14974AV 4410SH 4438CA 8848TOT | | 36031AV 6482SH 12000CA 18482TOT |
| 1977 | | 14974AV 2628SH 1831CA 4459TOT | 6083AV OSH 6082CA 6082TOT | 14974AV 4935SH 2637CA 6672TOT | | 36031AV 6663SH 10550CA 17213TOT |
| 1978 | | 14974AV 3164SH 1734CA 4898TOT | 6083AV OSH 6082CA 6082TOT | 14974AV 4522SH 2643CA 7165TOT | | 36031AV 7686SH 10459CA 18145TOT |
| 1979 | | 14974AV 2134SH 1800CA 3984TOT | 6083AV OSH 6012CA 6012TOT | 14508AV 4594SH 2635CA 7229TOT | | 35565AV 6778SH 10447CA 17225TOT |
| 1980 | | 14974AV 2508SH 1944CA 4452TOT | 6083AV OSH 5393CA 5393TOT | 14508AV 3645SH 3166CA 6811TOT | | 35565AV 6133SH 10503CA 16636TOT |
| 1981 | | 14974AV 1846SH 1880CA 3726TOT | 6083AV OSH 6733CA 6733TOT | 14508AV 2736SH 1792CA 4528TOT | | 35565AV 4582SH 10405CA 14987TOT |
| 1982 | | 14974AV 4301SH 900CA 5201TOT | 6083AV OSH 5326CA 5326TOT | 14508AV 2093SH 4544CA 6637TOT | | 35565AV 6394SH 10770CA 17164TOT |
| 1983 | | 14974AV 6126SH 3806CA 9932TOT | 7154AV OSH 5598CA 5598TOT | | 13437AV OSH 2000CA 2000CA | 35565AV 6126SH 11404CA 17530TOT |
| 1984 | | 14974AV 5318SH 4225CA 9543TOT | 7154AV OSH 6725CA 6725TOT | | 13437AV OSH 2253CA 2253TOT | 35565AV 5318SH 13203CA 18521TOT |
| 1985 | | 14974AV 2490SH 3080CA 5570TOT | 7154AV OSH 6953CA 6953TOT | | 13437AV OSH 2274CA 2274TOT | 35565AV 2490SH 12307CA 14797TOT |
| 1986 | | 14794AV 3832SH 2548CA 6380TOT | 7154AV OSH 6686CA 6686TOT | | 13437AV OSH 2248CA 2248TOT | 35565AV 3832SH 11482CA 15214TOT |

AV = available Active Grazing Privileges (AUMs)
 SH = Active sheep use (AUMs)
 CA = Active cattle use (AUMs)
 TOT = Total Active Use (AUMs)

ACTIVE USE SUMMARY
 SPRUCE ALLOTMENT
 1968 - 1986

Table 9 - Spruce AMP
 Pg. 1 of 1

| DATES | TOTAL AVAILABLE AUMs | TOTAL AVE. ACTIVE USE (AUMs) | % OF TOTAL AVAILABLE AUMs | AVERAGE ACTIVE SHEEP USE (AUMs) | % OF TOTAL AVERAGE ACTIVE USE | AVERAGE ACTIVE CATTLE USE (AUMs) | % OF TOTAL AVERAGE ACTIVE USE |
|-----------|----------------------|------------------------------|---------------------------|---------------------------------|-------------------------------|----------------------------------|-------------------------------|
| 1968 - 70 | 36,308 | 27,063 | 75% | 19,794 | 73% | 7,269 | 27% |
| 1971 - 78 | 36,031 | 18,515 | 51% | 9,450 | 51% | 9,065 | 49% |
| 1979 - 86 | 35,565 | 16,524 | 47% | 5,209 | 32% | 11,315 | 68% |

SUMMARY OF ACREAGES BY
VEGETATIVE TYPES
AND SUBUNITS
FOR THE SPRUCE ALLOTMENT

UNIT - A

| SWA NUMBER | VEGETATIVE ASPECT TYPE | ACRES | | |
|------------|------------------------|--------|---------|--------|
| | | BLM | PRIVATE | TOTAL |
| D056 | ARAR8-ORHY-CHVI8 | 11,954 | 119 | 12,073 |
| D057 | EULA5-ORHY | 211 | - | 211 |
| D059 | ARAR8-EULA5-CHVI8 | 1,592 | - | 1,592 |
| D055 | ARTR2-SAVE4 | 2,503 | 42 | 2,545 |
| D058 | EULA5-ARTR2 | 1,266 | 16 | 1,282 |
| D060 | SAVE4-ATCO | 3,172 | - | 3,172 |
| D041 | ATCO-ARTR2 | 3,494 | 11 | 3,505 |
| D042 | CHVI8-EULA5-ARTR2 | 1,378 | 12 | 1,390 |
| E058 | ATCO-ORHY-EULA5 | 663 | - | 663 |
| D040 | ATCO-ATNU2 | 405 | - | 405 |
| D050 | ATNU2 | 754 | - | 754 |
| D048 | ARTR2-ORHY-CHVI8 | 466 | - | 466 |
| D046 | ARTR2-ARAR8 | 2,496 | - | 2,496 |
| D045 | CHVI8-EULA5-ATCO | 5,572 | - | 5,572 |
| D052 | CHVI8-EULA5-ARAR8 | 859 | - | 859 |
| D051 | ARAR8-EULA5-CHVI8 | 3,164 | - | 3,164 |
| D049 | EULA5-ORHY-ATNU2 | 413 | - | 413 |
| D047 | EULA5-ATCO | 452 | - | 452 |
| E054 | ARTR2-EULA5-CHVI8 | 1,347 | - | 1,347 |
| E056 | ARTR2-ARAR8 | 1,222 | - | 1,222 |
| E057 | ARTR2-ORHY-CHVI8 | 629 | - | 629 |
| D054 | ARTR2-CHVI8 | 717 | - | 717 |
| D043 | EULA5-CHVI8 | 895 | - | 895 |
| E062 | BARREN | 139 | - | 139 |
| E053 | EULA5-ORHY-CHVI8 | 3,214 | - | 3,214 |
| E044 | EULA5-ARTR2-ORHY | 509 | - | 509 |
| E064 | ARTR2-CHVI8 | 1,335 | - | 1,335 |
| E061 | ARTR2-ATCO | 1,965 | - | 1,965 |
| E060 | EULA5-ATCO | 382 | - | 382 |
| E037 | CHVI8-ORHY-ATCO | 16,211 | 481 | 16,692 |
| E039 | ARTR2-ORHY-ATCO | 1,716 | - | 1,716 |
| E047 | ATCO-ORHY-ATNU2 | 2,749 | - | 2,749 |
| E041 | EULA5-ORHY-ATCO | 459 | - | 459 |
| E042 | EULA5-CHVI8 | 411 | - | 411 |
| E063 | ARAR8-CHVI8 | 611 | - | 611 |
| E043 | EULA5-ARTR2 | 345 | - | 345 |
| E055 | ARAR8-CHVI8 | 877 | - | 877 |
| E048 | ATCO-EULA5-CHVI8 | 2,215 | - | 2,215 |
| E045 | EULA5 | 189 | - | 189 |
| E046 | BARREN | 231 | - | 231 |
| E040 | EULA5-ATCO | 696 | - | 696 |
| E031 | CHVI8-ORHY-ARAR8 | 1,674 | - | 1,674 |
| E030 | CHVI8-ORHY-ARAR8 | 3,019 | - | 3,019 |
| E038 | EULA5-ATNU2 | 277 | - | 277 |
| E033 | ARAR8-POSE-JUOS | 3,304 | - | 3,304 |
| E035 | EULA5-ORHY-CHVI8 | 1,269 | - | 1,269 |
| E034 | ARAR8-ORHY-CHVI8 | 892 | - | 892 |
| E036 | EULA5-ATNU2 | 169 | - | 169 |
| C059 | EULA5-ORHY-ARAR8 | 649 | - | 649 |
| E032 | ARTR2-CHVI8 | 1,645 | - | 1,645 |

UNIT -A (continued)

| SWA NUMBER | VEGETATIVE ASPECT TYPE | ACRES | | |
|------------|------------------------|---------|---------|---------|
| | | BLM | PRIVATE | TOTAL |
| E029 | SAVE4-SIHY-ATNU2 | 9,370 | - | 9,370 |
| E050 | EULA5-ORHY-CHVI8 | 765 | - | 765 |
| E051 | EULA5 | 1,180 | - | 1,180 |
| E025 | EULA5-ORHY-CHVI8 | 6,238 | - | 6,238 |
| C058 | ARTR2-ORHY-EULA5 | 3,382 | - | 3,382 |
| E049 | EULA5-ORHY-ARTR2 | 1,023 | - | 1,023 |
| E028 | EULA5-ORHY-ARTR2 | 216 | - | 216 |
| E027 | ARTR2-ORHY-EULA5 | 5,109 | - | 5,109 |
| E026 | ATCO | 142 | - | 142 |
| E052 | ATCO-ORHY-ATNU2 | 1,013 | - | 1,013 |
| C049 | ARTR2-EULA5-ARAR8 | 4,894 | - | 4,894 |
| C053 | ARTR2-ATCO-SAVE4 | 5,310 | - | 5,310 |
| C057 | EULA5-ORHY-ARTR2 | 878 | - | 878 |
| C054 | ARTR2-ORHY-JUOS | 2,933 | - | 2,933 |
| C050 | ATCO-ORHY-ARTR2 | 936 | - | 936 |
| C051 | EULA5 | 729 | - | 729 |
| C052 | ARTR2-ORHY-EULA5 | 1,511 | - | 1,511 |
| C055 | JUOS-POSE-PIMO | 1,264 | - | 1,264 |
| C056 | ARAR8-ORHY-CHVI8 | 1,759 | 61 | 1,820 |
| | | 141,428 | 742 | 142,170 |

UNIT - B

| SWA NUMBER | VEGETATIVE ASPECT TYPE | ACRES | | |
|------------|----------------------------------|--------|---------|--------|
| | | BLM | PRIVATE | TOTAL |
| K201 | ARTR2-POSE-ARARN (part 20%) | 988 | - | 988 |
| K048 | ATNU2-HAGL-EULA5 (part 10%) | 39 | - | 39 |
| K046 | ARTR2-SIHY (part 80%) | 1,221 | 33 | 1,254 |
| E071 | ARAR8-ORHY-CHVI8 (part 1/3) | 837 | - | 837 |
| A081 | ARAR8-SIHY-ARTR2 | 1,094 | - | 1,094 |
| D097 | ARAR8-CHVI8-ORHY-ATCO (part 70%) | 22,854 | 49 | 22,903 |
| D093 | ARAR8-ORHY-CHVI8 (part 10%) | 301 | - | 301 |
| D097 | ATCO-ORHY-EULA5 | 737 | - | 737 |
| D098 | EULA5-ORHY-ARTR2 | 40 | - | 40 |
| A092 | ATNU2-ATCO | 611 | - | 611 |
| A094 | CHVI8-EULA5-ORHY | 512 | - | 512 |
| A095 | CHVI8-EULA5-ORHY (part 10%) | 825 | - | 825 |
| A091 | ATCO-ORHY-CHVI8 (part 50%) | 3,293 | - | 3,293 |
| A090 | ATNU2 | 171 | - | 171 |

UNIT-B (continued)

| SWA NUMBER | VEGETATIVE ASPECT TYPE | ACRES | | |
|------------|----------------------------|--------|---------|--------|
| | | BLM | PRIVATE | TOTAL |
| A089 | ATNU2 (part 10%) | 62 | - | 62 |
| A093 | EULA5-CHVI8-AGSM | 1,288 | - | 1,288 |
| I023 | ATNU2-ATCO | 572 | - | 572 |
| I022 | EULA5-CHVI8-ORHY | 203 | - | 203 |
| I012 | ATCO (part 80%) | 1,886 | - | 1,886 |
| I021 | CHVI8-ORHY-EULA5 | 7,274 | - | 7,274 |
| A082 | EULA5-ORHY-ARTR2 (part 5%) | 93 | - | 93 |
| I020 | ATNU2-HAGL | 208 | - | 208 |
| I019 | EULA5-HAGL | 433 | - | 433 |
| K044 | ARAR8-CHVI8-ORHY | 2,448 | - | 2,448 |
| K045 | ARAR8-POSE-ATCO | 261 | - | 261 |
| I029 | ARAR8-ORHY-CHVI8 | 513 | - | 513 |
| I009 | ARTR2-SIHY-GRSP | 6,915 | 46 | 6,961 |
| I015 | ATCO-ORHY-CHVI8 (part 90%) | 2,993 | - | 2,993 |
| I018 | ATNU2-HAGL | 817 | - | 817 |
| I016 | HAGL-ATCO | 191 | - | 191 |
| I017 | HAGL-ATCO | 178 | - | 178 |
| C095 | ARTR2-HAGL | 311 | 1 | 312 |
| | | 60,169 | 129 | 60,298 |

UNIT-C

| | | | | |
|------|-----------------------------|--------|---|--------|
| E073 | ARTR2-ORHY-CHVI8 | 2,328 | - | 2,328 |
| E071 | ARAR8-ORHY-CHVI8 (part 2/3) | 1,626 | - | 1,626 |
| E072 | ARAR8-ORHY-CHVI8 | 1,283 | - | 1,283 |
| D097 | ARAR8-CHVI8-ORHY-ATCO (30%) | 9,816 | - | 9,816 |
| D093 | ARAR8-ORHY-CHVI8 (part 90%) | 2,707 | - | 2,707 |
| A085 | ARTR2-ORHY-ARAR8 | 590 | - | 590 |
| A099 | ARAR8-JUOS-ORHY | 14,161 | - | 14,161 |
| A095 | CHVI8-EULA5-ORHY (part 90%) | 7,422 | - | 7,422 |
| A091 | ATCO-ORHY-CHVI8 (part 50%) | 3,293 | - | 3,293 |
| A088 | ATNU2 | 53 | - | 53 |
| A087 | ATNU2-HAGL | 188 | - | 188 |
| A086 | ATNU2 | 49 | - | 49 |
| I012 | ATCO (part 20%) | 471 | - | 471 |
| I015 | ATCO-ORHY-CHVI8 (part 10%) | 333 | - | 333 |
| K048 | ATNU2-HAGL-EULA5 (part 90%) | 347 | - | 347 |
| K046 | ARTR2-SIHY (part 20%) | 313 | - | 313 |
| K047 | CHVI8-ATCO-ORHY | 114 | - | 114 |
| K021 | ARTR2-POSE-ARARN (part 80%) | 3,954 | - | 3,954 |
| C076 | ATCO-ORHY-ATNU2 | 3,969 | - | 3,969 |
| I013 | CHVI8-EULA5 | 908 | - | 908 |
| D100 | ATNU2 | 363 | - | 363 |
| I026 | SAVE4-ATCO | 574 | - | 574 |

UNIT-C (continued)

| SWA NUMBER | VEGETATIVE ASPECT TYPE | ACRES | | |
|------------|-------------------------|--------|---------|--------|
| | | BLM | PRIVATE | TOTAL |
| I027 | CHNA2-AGSM | 411 | - | 411 |
| I014 | SAVE4-ATNU2-ARTR2 | 331 | - | 331 |
| I025 | HAGL-ATCO | 336 | - | 336 |
| I024 | CHVI8-ATCA2 | 517 | - | 517 |
| J033 | ATCO-SAVE4 | 855 | - | 855 |
| J035 | HAGL | 503 | - | 503 |
| J036 | CHVI8- EULA5 | 612 | - | 612 |
| C096 | ARAR8-POSE-CHVI8 | 582 | - | 582 |
| J034 | ARTR2-CHRYS9-AGSM | 5,311 | - | 5,311 |
| J032 | SAVE4-ATCO | 1,113 | 6 | 1,119 |
| J002 | ATCO-HAGL | 144 | - | 144 |
| C097 | CHVI8-EULA5-ARTR2 | 418 | - | 418 |
| K023 | ARARN-ORHY-CHVI8 | 2,730 | - | 2,730 |
| I006 | ARARN-CHVI8-ORHY | 4,434 | - | 4,434 |
| O004 | GRSP-ORHY-CHVI8 | 129 | - | 129 |
| I011 | GRSP-ORHY-ARTR2 | 308 | - | 308 |
| I001 | CHVI8-ORHY | 5,130 | - | 5,130 |
| J001 | EULA5-HAGL | 176 | - | 176 |
| J003 | CHVI8-ATCO | 1,047 | - | 1,047 |
| K002 | EULA5-CHVI8 | 690 | - | 690 |
| J004 | ATNU2 | 223 | - | 223 |
| C079 | ATNU2 | 288 | 52 | 340 |
| Y064 | SAVE4-ARTR2-ELCI2-CHNA2 | 9,479 | 1,168 | 10,647 |
| C077 | EULA5-ORHY | 213 | 9 | 222 |
| C078 | ATCO-ORHY-CHVI8 | 2,060 | 98 | 2,158 |
| A096 | EULA5-ARTR2-ORHY | 1,471 | - | 1,471 |
| A097 | ATNU2-ORHY | 165 | - | 165 |
| F061 | ATCO-ARTR2-ORHY-CHVI8 | 3,248 | 965 | 4,213 |
| Y061 | ARARN-AGSP-CHVI8 | 417 | 757 | 1,174 |
| F057 | AGCR-ARTRW-ORHY-ARARN | - | 512 | 512 |
| Y050 | ARTR2-SIHY-CHVI8 | 1,747 | 1,030 | 2,777 |
| F056 | AGCR-ARTR2 | 77 | 761 | 838 |
| Y060 | ELCI2-AGROP2 | 276 | 1,052 | 1,328 |
| Y058 | SAVE4-AGCR | - | 177 | 177 |
| F058 | CHNA2-ELCI2-SAVE4 | - | 240 | 240 |
| F054 | SAVE4-ATCO-ARTR2 | - | 378 | 378 |
| F060 | SAVE4-ATCO | 1,065 | 1,130 | 2,195 |
| Y057 | ARTR2-ELCI2-CHNA2 | - | 359 | 359 |
| Y054 | SAVE4-AGCR-ARTR2 | - | 139 | 139 |
| Y055 | ELCI2-AGCR-ARTRW | - | 656 | 656 |
| F055 | CHNA2-AGCR-SAVE4 | - | 371 | 371 |
| Y053 | SAVE4-ATCO | 1,085 | 4 | 1,089 |
| Y052 | ARTR2-SAVE4-ELCI2-CHNA2 | 487 | 126 | 613 |
| F059 | ATNU2 | 72 | 12 | 84 |
| Y056 | ATCO-SAVE4-SIHY | 489 | 56 | 545 |
| J038 | ATCO-ATNU2 | 658 | - | 658 |
| J037 | ATNU2 | 1,072 | - | 1,072 |
| O003 | SAVE4-ATCO-ARTR2 | 51,754 | 525 | 52,279 |
| O001 | ATCO-ORHY-SAVE4 | 6,677 | - | 6,677 |
| J030 | EULA5-ATCO | 306 | - | 306 |
| I030 | CHVI8-EULA5-ARSP5 | 218 | - | 218 |
| J041 | ATCO-ATNU2-HAGL | 1,816 | - | 1,816 |

UNIT-C (continued)

| SWA NUMBER | VEGETATIVE ASPECT TYPE | ACRES | | |
|------------|------------------------|-------|---------|-------|
| | | BLM | PRIVATE | TOTAL |
| K001 | ATCO-EULA5-SAVE4 | 4,438 | - | 4,438 |
| K037 | ATNU2-EULA5 | 629 | - | 629 |
| K038 | ATNU2-EULA5 | 260 | - | 260 |
| R002 | SAVE4-ATCO | 3,284 | - | 3,284 |
| O002 | CHNA2-ATCO-ATNU2 | 6,526 | - | 6,526 |
| K031 | ATCO-HAGL | 518 | - | 518 |
| K029 | EULA5 | 241 | - | 241 |
| I004 | CHVI8-ORHY-EULA5 | 2,089 | - | 2,089 |
| K028 | CHVI8-ATCO-ORHY | 298 | - | 298 |
| I005 | GRSP-CHVI8-SAVE4 | 429 | - | 429 |
| I008 | ATCO-CHVI8-ORHY | 4,169 | - | 4,169 |
| K007 | EULA5-HAGL | 153 | - | 153 |
| K008 | ATNU2-EULA5 | 66 | - | 66 |
| K005 | HAGL-EULA5 | 144 | - | 144 |
| K006 | ATNU2 | 73 | - | 73 |
| K003 | EULA5-ORHY-HAGL | 372 | - | 372 |
| K004 | ARTR2-GRSP | 169 | - | 169 |
| O005 | CHVI8-EULA5-ORHY | 555 | - | 555 |
| K040 | EULA5-ORHY-HAGL | 177 | - | 177 |
| K009 | ATNU2 | 118 | - | 118 |
| I007 | SAVE4-ATCO-HAGL | 2,763 | - | 2,763 |
| J006 | ATNU2-ATCO | 141 | - | 141 |
| J005 | ATCO-ATNU2-HAGL | 5,222 | - | 5,222 |
| K027 | ARARN-ORHY-ATCO | 199 | - | 199 |
| I010 | CHVI8-EULA5-ORHY | 3,596 | - | 3,596 |
| K026 | CHVI8-ATCO-ORHY | 877 | - | 877 |
| K025 | EULA5-ATCO-ATNU2 | 429 | - | 429 |
| K024 | CHRYS9-GRSP-ATCO | 551 | - | 551 |
| K030 | ARTR2-GRSP-CHVI8 | 440 | - | 440 |
| K032 | ATNU2 | 160 | - | 160 |
| R003 | ATCO | 2,272 | - | 2,272 |
| K039 | ATNU2 | 114 | - | 114 |
| H001 | ARAR8-POSE-EULA5 | 3,786 | - | 3,786 |
| K033 | ATNU2-CHVI8-EULA5 | 1,156 | - | 1,156 |
| I003 | EULA5 | 2,133 | - | 2,133 |
| H005 | BRTE-STCO4-EULA5 | 240 | - | 240 |
| K034 | ATCO-EULA5 | 1,174 | - | 1,174 |
| K035 | ATNU2-EULA5 | 1,779 | - | 1,779 |
| H006 | ATCO-ORHY-AAFF | 519 | - | 519 |
| H004 | ARAR8-BRTE-ARARN | 3,997 | - | 3,997 |
| H007 | HAGL-ATNU2 | 215 | - | 215 |
| B107 | EULA5-ORHY-CHVI8 | 171 | - | 171 |
| B106 | ATNU2 | 341 | - | 341 |
| B105 | ATCO-ORHY | 441 | - | 441 |
| B104 | EULA5-ORHY | 600 | - | 600 |

UNIT-C (continued)

| SWA NUMBER | VEGETATIVE ASPECT TYPE | ACRES | | |
|------------|-----------------------------|---------|---------|---------|
| | | BLM | PRIVATE | TOTAL |
| H008 | CHVI8-ARARN-ORHY-EULA5 | 1,558 | - | 1,558 |
| H002 | ATNU2-HAGL | 69 | - | 69 |
| H003 | ARTR2-SAVE4 | 424 | - | 424 |
| Y059 | ARTR2-ELCI2-SAVE4 | 168 | 308 | 476 |
| A082 | EULA5-ORHY-ARTR2 (part 95%) | 595 | - | 595 |
| C080 | SAVE4-ATCO | 565 | 391 | 956 |
| C081 | ATCO-SAVE4 | 643 | 536 | 1,179 |
| J040 | ATCO-HAGL | 412 | - | 412 |
| K036 | ATNU2 | 121 | - | 121 |
| A089 | ATNU2 | 555 | - | 555 |
| | | 229,136 | 11,818 | 240,954 |

UNIT-D

| | | | | |
|------|-------------------|--------|----|--------|
| B077 | AGCR-ARTR2 | 2,605 | - | 2,605 |
| B079 | ARTR2-ORHY-SAVE4 | 615 | 13 | 618 |
| B078 | CHVI8-ELCI2-SAVE4 | 473 | 10 | 483 |
| Y051 | ARTRW-POSE-CHVI8 | 1,630 | - | 1,630 |
| B081 | ATCO-CHVI8-ORHY | 847 | - | 847 |
| B080 | ATNU2-EULA5 | 109 | - | 109 |
| F062 | SAVE4-ARTR2-CHNA2 | 6,473 | - | 6,473 |
| F050 | ATCO-ORHY-EULA5 | 1,204 | - | 1,204 |
| F048 | ARAR8-ORHY-ARTR2 | 716 | - | 716 |
| Y049 | AGCR-ORHY-ARTRW | 2,734 | - | 2,734 |
| F052 | AGCR-ORHY-ARTR2 | 342 | - | 342 |
| F053 | ARTR2-AGCR-ATCO | 1,558 | - | 1,558 |
| F046 | ARTR2-POSE-HAGL | 4,343 | - | 4,343 |
| F049 | ARTR2-POSE-EULA5 | 288 | - | 288 |
| Y048 | EULA5-SIHY-HAGL | 497 | - | 497 |
| Y047 | HAGL-EULA5-ARTR2 | 1,238 | - | 1,238 |
| F047 | ATCO-ORHY-HAGL | 144 | - | 144 |
| Y062 | SAVE4-SIHY-ATCO | 7,758 | - | 7,758 |
| Y065 | SAVE4-ATNU2-SUAED | 3,802 | - | 3,802 |
| F063 | BARREN | 1,090 | - | 1,090 |
| F045 | ATCO-ORHY | 101 | - | 101 |
| Y045 | ARTR2-HAGL-ORHY | 1,140 | - | 1,140 |
| | | 39,697 | 23 | 39,720 |

UNIT-E

| SWA NUMBER | VEGETATIVE ASPECT TYPE | ACRES | | |
|------------|------------------------|---------|---------|---------|
| | | BLM | PRIVATE | TOTAL |
| D071 | JUOS-PIMO-AGSP | 21,557 | 421 | 21,998 |
| D070 | ARAR8-POSE-JUOS | 9,345 | - | 9,345 |
| A098 | ARAR8-JUOS-AGSP | 5,565 | 53 | 5,618 |
| D072 | ARTR2-AGSP-ARARN | 10,816 | 471 | 11,287 |
| A083 | ARAR8-AGSP-PIMO | 300 | - | 300 |
| D094 | JUOS-STCO4-PIMO | 797 | - | 797 |
| D095 | JUOS-AGSP-ARAR8 | 3,853 | 41 | 3,894 |
| D096 | ARAR8-AGSP-CHGR6 | 2,288 | 78 | 2,366 |
| C082 | JUOS-PIMO-AGSP-ARTR2 | 43,600 | 486 | 44,086 |
| A100 | ARAR8-AGSP-ARTR2 | 8,742 | 64 | 8,806 |
| Y046 | ARARN-ORHY-JUOS | 8,287 | - | 8,287 |
| F051 | ARARN-AGSP-JUOS | 3,936 | 1,296 | 5,232 |
| Y063 | JUOS-POSE-PIMO | 760 | - | 760 |
| A084 | JUOS-ARAR8-ORHY | 184 | - | 184 |
| | | 120,050 | 2,910 | 122,960 |

UNIT-F1

| | | | | |
|------|---------------------------------|--------|---|--------|
| K043 | JUOS-ARTR2-ORHY | 4,432 | - | 4,432 |
| I028 | PIMO-JUOS-ARAR8-ORHY | 4,359 | - | 4,359 |
| K042 | ARAR8-SIHY | 363 | - | 363 |
| K041 | JUOS-ORHY-CHVI8 (part 90%) | 3,894 | - | 3,894 |
| K020 | PIMO-JUOS-POSE-ARTR2 (part 90%) | 5,009 | - | 5,009 |
| K018 | ARTR2-AGSP-ARARN (part 90%) | 605 | - | 605 |
| K017 | PIMO-JUOS-POSE-ARARN (part 10%) | 1,909 | - | 1,909 |
| | | 20,567 | - | 20,567 |

UNIT-F2

| | | | | |
|------|---------------------------------|--------|-----|--------|
| K041 | JUOS-ORHY-CHVI8 (part 10%) | 433 | - | 433 |
| K017 | PIMO-JUOS-POSE-ARARN (part 90%) | 17,079 | 101 | 17,180 |
| K019 | ARTR2-AGSP-PIMO-JUOS | 1,943 | - | 1,943 |
| K018 | ARTR2-AGSP-ARARN (part 10%) | 67 | - | 67 |
| K020 | PIMO-JUOS-POSE-ARTR2 (part 10%) | 556 | - | 556 |
| K022 | PIMO-JUOS-POSE-ARARN | 2,086 | - | 2,086 |
| | | 22,164 | 101 | 22,265 |

UNIT-G

| SWA NUMBER | VEGETATIVE ASPECT TYPE | ACRES | | |
|------------|------------------------|--------|---------|--------|
| | | BLM | PRIVATE | TOTAL |
| E059 | JUOS-ARAR8-ORHY | 27,729 | 222 | 27,951 |
| E065 | ARAR8-AGSP-SYAL | 4,574 | - | 4,574 |
| D044 | ARAR8-ORHY-JUOS | 5,878 | 12 | 5,890 |
| | | 38,181 | 234 | 38,415 |

UNIT-H

| | | | | |
|------|-------------------|--------|----|--------|
| D081 | ARAR8-JUOS-SIHY | 754 | - | 754 |
| D091 | ARAR8-AGSP-ARTR2 | 653 | - | 653 |
| D053 | ARTR2-ORHY-ARAR8 | 2,302 | 7 | 2,309 |
| D061 | ARTR2-SIHY | 4,202 | - | 4,202 |
| D063 | ARAR8 | 378 | - | 378 |
| D085 | ATCO | 1,982 | - | 1,982 |
| D087 | ARTR2-ARAR8 | 5,847 | - | 5,847 |
| D064 | ARTR2-CHVI8 | 426 | - | 426 |
| D067 | ARAR8-ARTR2 | 2,738 | - | 2,738 |
| D084 | SAVE4-DIST-ATCO | 2,644 | - | 2,644 |
| D065 | ATCO-ORHY-CHVI8 | 1,226 | - | 1,226 |
| D083 | ATCO-CHVI8 | 3,859 | - | 3,859 |
| D089 | ARTR2-ARAR8 | 2,194 | - | 2,194 |
| D080 | ARTR2-ORHY-ARAR8 | 4,896 | - | 4,896 |
| D090 | ARAR8-POSE-JUOS | 5,915 | - | 5,915 |
| D092 | JUOS-POSE-PIMO | 697 | - | 697 |
| D073 | ARAR8-ORHY-JUOS | 1,874 | 3 | 1,877 |
| D074 | ARTR2-POSE-ARAR8 | 1,566 | - | 1,566 |
| D075 | ARTR2-ATCO-POSE | 2,611 | - | 2,611 |
| D082 | ARAR8-SIHY-ARTR2 | 3,448 | - | 3,448 |
| D079 | ATCO-EULA5-SAVE4 | 5,260 | - | 5,260 |
| D066 | ARTR2-AAFF | 1,642 | - | 1,642 |
| D077 | ARTR2-EULA5 | 2,067 | - | 2,067 |
| D078 | ATNU2-ORHY | 63 | - | 63 |
| D088 | BARREN | 84 | - | 84 |
| D062 | ARTR2 | 2,935 | - | 2,935 |
| D068 | ARTR2-CHVI8-ARAR8 | 4,641 | - | 4,641 |
| D086 | HAGL-ARTR2 | 238 | - | 238 |
| D069 | ATNU2-EULA5 | 196 | - | 196 |
| D076 | ARAR8-POSE | 1,118 | - | 1,118 |
| | | 68,456 | 10 | 68,466 |

UNIT-I

| SWA NUMBER | VEGETATIVE ASPECT TYPE | ACRES | | |
|------------|------------------------|--------|---------|--------|
| | | BLM | PRIVATE | TOTAL |
| F020 | ARTR2-ARAR8 | 5,513 | - | 5,513 |
| F019 | ARAR8-ORHY-CHVI8 | 3,442 | 26 | 3,468 |
| F021 | ARAR8-POSE-JUOS | 3,383 | 132 | 3,515 |
| F022 | JUOS-POSE-ARAR8 | 272 | - | 272 |
| | | 12,610 | 158 | 12,768 |

UNIT-J

| | | | | |
|------|---------------------------|--------|---|--------|
| K016 | PIMO-JUOS-ARARN-AGSP-POSE | 25,998 | - | 25,998 |
|------|---------------------------|--------|---|--------|

UNIT-K

| | | | | |
|------|------------------|--------|---|--------|
| C046 | ARAR8-ORHY-JUOS | 16,031 | - | 16,031 |
| C047 | ARTR2-ORHY | 248 | - | 248 |
| C045 | ARAR8-ORHY-ARTR2 | 2,044 | - | 2,044 |
| C048 | ARAR8-ORHY-ARTR2 | 363 | - | 363 |
| | | 18,686 | - | 18,686 |

| | | | | |
|-----------------|--|---------|--------|---------|
| ALLOTMENT TOTAL | | 797,142 | 16,125 | 813,267 |
|-----------------|--|---------|--------|---------|

Table 11 - Initial Stocking Rates Under the Interim AMP

**PLEASE REFER TO PAGE 19
OF THE NARRATIVE TEXT**

Table 12
Grazing schedule for the 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.

Table 13
Grazing schedule for the 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.

Table 14

**Estimated Seeding Requirements To Defer Spring
Livestock Grazing In Spruce Allotment**

| Herd | Number of Livestock | Use Period | Forage Demand (AUMs) | Required Area of Seedings* (Ac.) | Total Seeded Area Required to Rest Half (Ac) | Existing Seeding (Ac) | Estimated Area Required for Seedings (Ac) |
|--------------|---------------------|-------------|----------------------|----------------------------------|--|-----------------------|---|
| Spruce Mtn | 700 | 5/1 - 6/30 | 1,400 | 4,200 | 8,400 | 7,562 | 838 |
| Secret Pass | 675 | 3/15 - 5/31 | 1,688 | 5,063 | 10,125 | 0 | 10,125 |
| TOTAL | | | 3,088 | | | | 10,963 |

* Estimated area for seedings is based on an assumed carrying capacity for the seedings of 3 acres per AUM.

HISTORICAL SUPPLEMENTAL ACTIVE USE
 SPRUCE ALLOTMENT
 1968-1986

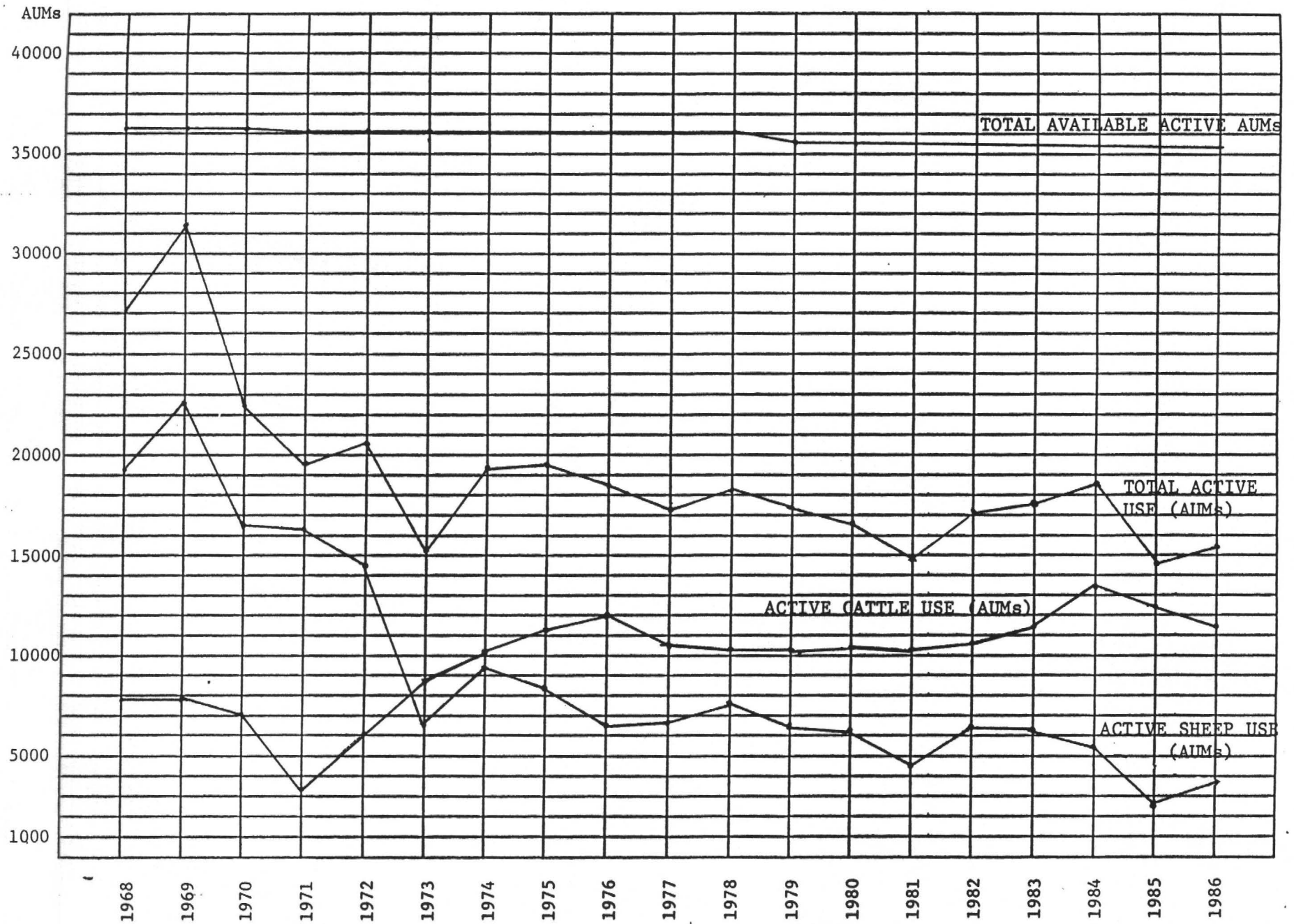


Figure 1 - Spruce AMP

**SPRUCE AMP
APPENDICES INDEX**

| <u>APPENDIX</u> | <u>DESCRIPTION</u> |
|-----------------|---|
| A | Memo - Case History of Loyd Sorensen Grazing Privileges on the Spruce Allotment |
| B | Memo - Case History of Von and Marian Sorensen Grazing Privileges on the Spruce Allotment |
| C | Memo - Case History of Kenneth Jones Grazing Privileges on the Spruce Allotment |
| D | Existing Range Improvement Projects |
| E | Proposed Range Improvement Projects - Spruce AMP |
| F | Key Areas and Key Species - Spruce AMP |

memorandum

DATE: 4-17-87

LY TO
ATTN OF: Ray Lister, Range Conservationist, Wells Resource Area

SUBJECT: Case History of Loyd Sorensen Grazing Privileges on the Spruce Allotment

TO: Case Files

- 1935 - What is currently the Loyd Sorensen grazing privileges in the Spruce Allotment originated with the Griswold Livestock Co. who established the "priority" use in the Spruce Unit with:
- 8,200 sheep 4/1 to 5/31
 - 1,500 sheep 6/1 to 10/31
 - 1,500 sheep 9/1 to 1/31
- 1942 - The Griswold Lvstk. Co. purchased certain railroad properties to be used as base.
- 1943 - Griswold Lvstk. Co. acquired the Andrew Turreil base properties which had winter privileges near Currie.
- 1946 - K. C. Barlow (Steptoe Lvstk. Co.) transferred 2695 AUMs in the Currie Unit to the Griswold Lvstk. Co.
- 1946 - E. C. Murphy transferred 1600 AUMs in the Currie Unit to the Griswold Lvstk. Co.
- 1946 - U. C. Land & Lvstk. transferred 3451 AUMs in the Spruce Unit to the Griswold Lvstk. Co.
- 1946 - The Griswold Lvstk. Co. purchased an additional 49 AUMs in the Spruce Unit from U. C. Land and Lvstk. (Flowery Lake lands with 49 AUMs attached).
- 1946 - 283 AUMs were transferred from the Griswold Lvstk. Co. N-4 base to their N-1 base.
- 1947 - All Griswold N-4 winter privileges were transferred to Whipple (this freed 6662 Aums from their N-1 base).
- 1947 - Griswold Lvstk. Co. purchased Fred West base properties and the 752 AUMs in the Currie Unit which were attached were transferred to Griswold.
- 1947 - Griswold Lvstk. Co. purchased 4248 AUMs in the Currie Unit from West.
- 1948 - Griswold Lvstk. Co. transferred 1087 AUMs in the Jiggs Unit to Pete Elia.
- 1948 - Griswold Livestock Co. Analysis:

| | |
|-----------------------------|-------------------------------|
| Original Permit (1943-1953) | 9419 AUMs Spruce Unit |
| Barlow Purchase | 2965 AUMs Currie Unit |
| Murphy Transfer | 1600 AUMs Currie Unit |
| U. C. Cattle Co. transfer | 3451 AUMs Spruce Unit |
| U. C. Cattle Co. purchase | 49 AUMs Spruce Unit |
| West transfer | 752 AUMs Currie Unit |
| West purchase | 4248 AUMs Currie Unit |
| | <hr/> |
| | 22,484 AUMs Total Federal Use |
| | 3,330 AUMs Unfenced Pvt. |
| | 82% Federal Range |

OPTIONAL FORM NO. 10
(REV. 1-80)
GSA FPMR (41 CFR) 101-11.6
5010-114

- 1950 - The Robison/Sorensen Partnership purchased the entire Griswold Lvstk. Co. operation (22,484 AUMs federal privileges).
- 1951 - J. E. Bues transferred 2250 AUMs in the Utah-Idaho Unit to Robison/Sorensen. Robison/Sorensen did not have enough base property qualifications to support these 2250 AUMs. Therefore, they took non-use in the Spruce Unit for 2250 AUMs to allow the transfer. The 2250 AUMs in the Utah-Idaho Unit were subject to a 33% reduction.

Robison/Sorensen privileges:

| | <u>Spruce</u> | <u>Currie</u> | <u>Utah-Idaho</u> | |
|-----------------------------------|---------------|---------------|-------------------|------------------|
| Original Griswold Base(9419-2250) | 7169 | | | |
| West purch. | | 4248 | | |
| West trans. | | 752 | | |
| Barlow trans. | | 2965 | | |
| Murphy trans. | | 1600 | | |
| U.C. trans. | 3451 | | | |
| U.C. purch. | 49 | | | |
| Bues trans. | | | 1508 (2250X.67%) | |
| | <u>10,669</u> | <u>9,565</u> | <u>1,508</u> | 21,742 Total |
| | | | | 3406 unfcd. pct. |
| | | | | 82% fed. rg. |

1955 - 270 AUMs transferred from Barton base to Robison/Sorensen base to be used north and west of Highway 50 in the Utah-Idaho Unit during the month of March.

957 - Robison/Sorensen purchased 1744 AUMs in the Currie Unit and 2996 AUMs in the Medicine Butte Unit (4740 AUMs total) from Murphy.

1957 - 467 AUMs in the Medicine Butte Unit and 273 AUMs in the Currie Unit (740 AUMs total) were transferred from Murphy to Robison/Sorensen.

Robison/Sorensen current privileges:

| | |
|-------------------|--------------|
| Spruce Unit | 10,669 |
| Currie Unit | 11,582 |
| Med. Butte Unit | 3,436 |
| <u>Ut-Id Unit</u> | <u>1,778</u> |
| Total | 27,492 AUMs |

1957 - Robison/Sorensen purchased the Medicine Springs lands with 27 AUMs attached (Medicine Butte Unit).

1961 - Robison/Sorensen transferred 635 AUMs in the Medicine-Butte Unit to R. Gardner.

1961 - Itcaina Lvstk. Co. transferred 900 AUMs in the Currie Unit to Robison/Sorensen.

1962 - Robison/Sorensen transferred 98 AUMs in the Currie Unit to J. Wright.

1962 - Beers and Sons transferred 1994 AUMs in the Ut-Id Unit and 1206 AUMs in the Currie Unit (3200 AUMs total) to Robison/Sorensen.

962 - Robison/Sorensen purchased the Dolly Varden Spring lands from Beers and Sons which had 32 AUMs in the Ut-Id Unit and 22 AUMs in the Currie Unit attached (54 AUMs total).

1962 - Robison/Sorensen privileges to date:

| | |
|-----------------|--------------|
| Spruce Unit | 10,669 |
| Currie Unit | 13,612 |
| Med. Butte Unit | 2,855 |
| Ut-Id Unit | <u>3,804</u> |
| Total | 30,940 AUMs |

1963 - Michaelson/Pritchett transferred 73 AUMs in the Currie Unit to Robison/Sorensen.

1963 - Robison/Sorensen purchased the Crane properties from Michaelson/Pritchett which had 49 AUMs in the Currie Unit attached to it.

1963 - Robison/Sorensen transferred 441 AUMs in the Currie Unit and 324 AUMs in the Med. Butte Unit (765 AUMs total) to W. Gardner.

1964 - A Section 8 Land Exchange for lands in Lamoille was completed and 90 AUMs in the Lamoille Unit (included as part of the Spruce Unit operation) was transferred to private ownership.

1964 - Robison/Sorensen privileges to date:

| | |
|------------------|-------------|
| Spruce Unit | 10,579 |
| Currie | 13,293 |
| Med. Butte | 2,531 |
| Ut-Id | 3,534 |
| N-4 use in Ut-Id | <u>270</u> |
| Total | 30,207 AUMs |

1965 - The Clover Lvstk. Co. transferred 288 AUMs of trail use in the Currie Unit to Robison/Sorensen.

1966 - Robison/Sorensen transferred 270 AUMs of N-4 use in the Utah-Idaho Unit to the Steptoe Lvstk. Co.

1970 - 277 AUMs in the Utah-Idaho Unit were identified as trail AUMs in a District Manager's Decision and therefore, were placed in suspended non-use.

1970 - Robison/Sorensen privileges to date:

| | |
|-------------|---|
| Spruce Unit | 10,579 |
| Currie | 13,581 |
| Med. Butte | 12,531 |
| Utah-Idaho | <u>3,257 Active & 277 Suspended</u> |
| Total | 29,948 AUMs |

1973 - Robison/Sorensen made application to redescribe their base property, attaching the Robison/Sorensen qualifications to the "North Unit" and the "South Unit" (See memo to the files from Oscar Anderson dated 10/25/73).

1973 - All of the Robison/Sorensen base property was conveyed to Loyd Sorensen. The "South Unit" was subsequently sold to Von Sorensen and Kenneth Jones with 14,974 AUMs Active and 139 AUMs Suspended attached. Loyd Sorensen retained the "North Unit" with 14,974 Active AUMs and 138 AUMs Suspended attached (see memos to the file from Oscar Anderson dated 10/25/73 and Bill Baker dated 4/1/77).

memorandum

DATE: 4-17-87

COPIES TO:
ATTN OF: Ray Lister , Range Conservationist; Wells Resource Area

SUBJECT: Case History of Von and Marian Sorensen grazing privileges on the Spruce Allotment

TO: Case Files

The current Von and Marian Sorensen grazing privileges originated from the 1961 purchase from the Itcaina Livestock Co. as follows:

1961 - Loyd Sorensen and Von Sorensen (dba Sorensen/Sorensen) purchased 5,325 AUMs in ~~the Currie and Medicine Butte Units and 1,675 AUMs in the Utah-Idaho Unit~~ (7,000 AUMs total) from the Itcaina Livestock Co.

1964 - Marguerite Carter Rich (the old Beers and Sons permit) transferred 1772 AUMs in the Currie and Medicine Butte Units and 1157 AUMs in the Utah-Idaho Unit and 654 AUMs trail use in the Utah-Idaho Unit (3583 AUMs total) to Sorensen/Sorensen. Sorensen/Sorensen grazing privileges to date:

| | |
|---------------------------------|--------------------------|
| Currie and Medicine Butte Units | 7097 |
| Utah-Idaho Unit | 2832 |
| Utah-Idaho Trail | 654 |
| | <u>10,583 AUMs total</u> |

1965 - Sorensen/Sorensen transferred 639 AUMs in Currie and Medicine Butte to Robison.

1965 - Sorensen/Sorensen transferred 1256 AUMs in Currie and Medicine Butte and 105 AUMs in Utah-Idaho Unit to Robison.

1971 - Sorensen/Sorensen transferred 354 AUMs in Currie and Medicine Butte and 1899 AUMs in Utah-Idaho to Robison.

1971 - 247 AUMs in Utah-Idaho Unit acquired in the 1964 Beers and Sons transfer were identified as trail AUMs and therefore placed in suspended non-use by District Manager's Decision.

Sorensen/Sorensen grazing privileges to date:

| | |
|---------------------------------|--|
| Currie and Medicine Butte Units | 4848 |
| Utah-Idaho Unit | 1482 Active and 247 Suspended |
| Total | <u>6083 AUMs Act. and 247 AUMs Susp.</u> |

1983 - Von Sorensen and Kenneth Jones transferred 1071 AUMs Active and 10 AUMs Suspended (1081 AUMs Total) to Von and Marian Sorensen (see memo to file from Ray Lister dated 1-28-83). The adjudication of allotments had replaced the old range units. Therefore, total use was for the Spruce Allotment as follows:

| |
|----------------------|
| 7154 Active |
| <u>257 Suspended</u> |
| 7411 Total AUMs |

OPTIONAL FORM NO. 10
(REV. 1-80)
GSA FPMR (41 CFR) 101-11.6
5010-114

memorandum

DATE: 4-17-87

REPLY TO
ATTN OF: Ray Lister, Range Conservationist, Wells Resource Area

SUBJECT: Case History of Kenneth Jones grazing privileges in the Spruce Allotment

TO: Case Files

1973 - Loyd Sorensen sold the "South Unit" base property to Von Sorensen and Kenneth Jones with 14,974 AUMs Active and 139 AUMs Suspended attached (see memo to file from Oscar Anderson dated 10-25-73). A case history of these AUMs can be found in the memo to the Loyd Sorensen file from Ray Lister dated 4-17-87.

1979 - A District Manager's Proposed Decision was issued on 4-9-79, reducing the Von Sorensen and Kenneth Jones grazing privileges in the Spruce Allotment by 466 AUMs Active and 4 AUMs Suspended because of the sale of 189.5 acres of Lamaille base property to Hooper. There was no protest to this proposed decision. Therefore, the Sorensen/Jones privileges were reduced to:

| |
|----------------------|
| 14,508 Active |
| <u>135 Suspended</u> |
| 14,643 AUMs Total |

1983 - The "South Unit" base was conveyed to Kenneth Jones. Sorensen/Jones applied to transfer 13,437 AUMs Active and 125 AUMs Suspended to Kenneth Jones. Kenneth Jones offered all but 802 acres of the "South Unit" base.

Sorensen/Jones also made application to transfer the remaining 1071 AUMs Active and 10 AUMs Suspended to Von and Marian Sorensen. The Sorensen/Jones case file was thereby closed (see memo to case file from Ray Lister dated 1-28-83).

APPENDIX D
Existing Range Improvements
Spruce Alltoment

| <u>JOB NO.</u> | <u>NAME</u> | <u>LOCATION</u> | <u>PERMIT TYPE</u> | <u>MAINTENANCE RESPONSIBILITY</u> |
|----------------|-------------------------|--|--------------------|---|
| 0014 | Cordano Well | T. 29 N., R. 65 E., Sec. 9, NE $\frac{1}{2}$ SE $\frac{1}{2}$ | S-4 | Kenneth Jones |
| 0318 | Frenchy Well | T. 29 N., R. 61 E., Sec. 5, SE $\frac{1}{2}$ NW $\frac{1}{2}$ | S-4 | Kenneth Jones |
| 0327 | Itcaina Well | T. 30 N., R. 63 E., Sec. 31, NE $\frac{1}{2}$ NW $\frac{1}{2}$ | S-4 | Kenneth Jones |
| 0535 | Christiansen Well | T. 30 N., R. 62 E., Sec. 33, SW $\frac{1}{2}$ NW $\frac{1}{2}$ | S-4 | Kenneth Jones |
| 0427 | Murphy Well | T. 30 N., R. 61 E., Sec. 7, SE $\frac{1}{2}$ SE $\frac{1}{2}$ | S-4 | Kenneth Jones |
| 4409 | Curtis Spring Corral | T. 32 N., R. 61 E., Sec. 9 | S-4 | Kenneth Jones |
| 5493 | South Spruce Well | T. 29 N., R. 64 E., Sec. 29, NW $\frac{1}{2}$ NE $\frac{1}{2}$ | S-4 | Kenneth Jones |
| 5494 | Gulf Well | T. 29 N., R. 65 E., Sec. 8, NE $\frac{1}{2}$ SW $\frac{1}{2}$ | S-4 | Kenneth Jones |
| 0066 | Liza Jane Well | T. 31 N., R. 62 E., Sec. 34, NW $\frac{1}{2}$ SW $\frac{1}{2}$ | Coop | Kenneth Jones |
| 0574 | Ruby Wash Well | T. 27 N., R. 59 E., Sec. 2, SE $\frac{1}{2}$ SE $\frac{1}{2}$ | Coop | Kenneth Jones |
| 0321 | Dry Lake Well | T. 30 N., R. 62 E., Sec. 18, NE $\frac{1}{2}$ SW $\frac{1}{2}$ | Coop | Kenneth Jones |
| 4250 | Basque Well No. 2 | T. 29 N., R. 60 E., Sec. 16 | Coop | Kenneth Jones |
| 4343 | Bennett Field Fence | T. 30 N., R. 60 E. | Coop | Kenneth Jones & Smith Bros. |
| 4402 | East Walker Well | T. 29 N., R. 65 E., Sec. 32, SW $\frac{1}{2}$ NE $\frac{1}{2}$ | Coop | Kenneth Jones |
| 4074 | East Wash Fence | T. 27 & 28 N., R. 59 & 60 E. | Coop | Kenneth Jones & 7H Ranch |
| 4200 | Valley Mtn. Fence | T. 31 N., R. 61 E., Secs. 32-36 | Coop | Kenneth Jones |
| 0131 | Ruby Wash Fence | T. 28 N., R. 58 & 59 E. | Coop | Kenneth Jones & Others |
| 0130 | Murphy Fence | T. 30 & 31 N., R. 60 & 61 E. | Coop | Kenneth Jones & Others |
| 4059 | Sorensen-Lear Fence | T. 27-29 N., R. 63-65 E. | Coop | Kenneth Jones & Lear Ranches |
| 1120 | Gardner-Sorensen Guards | T. 28 & 29 N., R. 62 E., Secs. 1 & 5 | Coop | Kenneth Jones & W. Dickinson |
| 1098 | Sorensen-Gardner Fence | T. 28 & 29 N., R. 62 & 63 E. | Coop | Kenneth Jones & W. Dickinson |
| 4976 | Ruby 8-Spruce Fence | T. 28 & 29 N., R. 59 & 60 E. | Coop | Kenneth Jones |
| 5237 | High Bald Peak Fence | T. 28 N., R. 61 E. | Coop | Kenneth Jones & TeMoak Lvstck Assoc. |
| 5793 | West Buttes Fence Ext. | T. 28 N., R. 62 E., Sec. 5 | Coop | Kenneth Jones & W. Dickinson |
| 4944 | Ridge Fence | T. 29 N., R. 62 E. | Coop | Dickinson |
| 5080 | Ruby Seeding Fence | T. 28 N., R. 59 E., Sec. 16 | Coop | UX Lvstck/ L. Wines |
| 0758 | Curtis Spring | T. 32 N., R. 61 E., Sec. 9, SE $\frac{1}{2}$ SE $\frac{1}{2}$ | None | ----- |
| 0878 | Gov't Spring | T. 33 N., R. 61 E., Sec. 23, NE $\frac{1}{2}$ SE $\frac{1}{2}$ | None | ----- |
| ---- | NDOT Fence | T. 29 & 30 N., R. 63 & 64 E. | None | NDOT |
| 1086 | Gov't Spg. Corral | T. 33 N., R. 61 E., Sec. 23, NE $\frac{1}{2}$ SE $\frac{1}{2}$ | None | ----- |
| 4223 | Basque Well | T. 31 N., R. 67 E., Sec. 14 | Coop | Loyd Sorensen/Von & Marian Sorensen |
| 4401 | Black Point Wells | T. 30 N., R. 67 E., Secs. 10 & 15 | Coop | Loyd Sorensen/Von & Marian Sorensen |
| 4403 | Spruce Pipeline | T. 31 N., R. 63 & 64 E. | Coop | Loyd Sorensen/Von & Marian Sorensen |

APPENDIX D (Continued)

Existing Range Improvements
Spruce Alltoment

| <u>JOB NO.</u> | <u>NAME</u> | <u>LOCATION</u> | <u>PERMIT TYPE</u> | <u>MAINTENANCE RESPONSIBILITY</u> |
|----------------|-----------------------------|----------------------------------|--------------------|---|
| 1295 | Dolly Varden Well | T. 29 N., R. 67 E., Sec. 17 | Coop | Loyd Sorensen/Von & Marian Sorensen |
| 0836 | Spruce-Shafter Fence | T. 32-34 N., R. 66-68 E. | Coop | L. Sorensen/Von & Marian Sorensen/Flyin S Land & Cattle |
| 0517 | Mound Springs Fence Ext. | T. 34 N., R. 64 E. | Coop | L. Sorensen/Von & Marian Sorensen/B. Johns |
| 0634 | Bob Cat Seeding | T. 32-33 N., R. 63-64 E. | Coop | BLM |
| 0867 | Westwood Cattleguard | T. 33 N., R. 64 E., Sec. 29 | Coop | L. Sorensen/Von & Marian Sorensen/B. Johns |
| 0746 | Mound Springs Fence | T. 34 N., R. 64 E. | Coop | L. Sorensen/Von & Marian Sorensen/B. Johns |
| 0533 | Spruce Mtn. Seeding | T. 33 N., R. 63 & 64 E. | Coop | BLM |
| 0429 | Independence Valley Seeding | T. 31 & 32 N., R. 64 & 65 E. | Coop | BLM |
| 4668 | Snow Water Fence Ext. | T. 33 N., R. 61-62 E. | Coop | L. Sorensen/Von & Marian Sorensen/Wright |
| 4977 | Spruce North Fence | T. 33 N., R. 63 & 64 E. | Coop | L. Sorensen/Von & Marian Sorensen/B. Johns |
| 0992 | White Horse Fence | T. 29 N., R. 67 & 68 E. | Coop | L. Sorensen/Von & Marian Sorensen/Peterson |
| 4978 | Highway 50 Fence | T. 28 & 29 N., R. 67 & 68 E. | Coop | L. Sorensen/Von & Marian Sorensen |
| 5370 | Rockland Fence | T. 34 & 35 N., R. 64, 65 & 66 E. | Coop | L. Sorensen/Von & Marian Sorensen/Flyin S Land & Cattle |
| 0665 | Spruce Chaining-West | T. 31 N., R. 63 E. | Coop | BLM |
| 0665 | Spruce Chaining-South | T. 30 N., R. 63 & 64 E. | Coop | BLM |
| 4108 | Honeymoon Chaining | T. 31 N., R. 64 E. | Coop | BLM |

APPENDIX D (Continued)
Existing Range Improvements
Spruce Alltoment

| <u>JOB NO.</u> | <u>NAME</u> | <u>LOCATION</u> | <u>PERMIT TYPE</u> | <u>MAINTENANCE RESPONSIBILITY</u> |
|----------------|----------------------------------|--|--------------------|-------------------------------------|
| N1-4-174 | Unnamed Spring | T. 30 N., R. 63 E., Sec. 2, SW $\frac{1}{2}$ NW $\frac{1}{2}$ | S-4 | Loyd Sorensen/Von & Marian Sorensen |
| 4993 | Basco Spring | T. 30 N., R. 63 E., Sec. 2, SE $\frac{1}{2}$ NE $\frac{1}{2}$ | S-4 | Loyd Sorensen/Von & Marian Sorensen |
| N1-4-174 | Unnamed Spring | T. 31 N., R. 63 E., Sec. 35, SE $\frac{1}{2}$ SW $\frac{1}{2}$ | S-4 | Loyd Sorensen/Von & Marian Sorensen |
| N1-4-174 | Unnamed Spring | T. 31 N., R. 63 E., Sec. 1, SW $\frac{1}{2}$ SW $\frac{1}{2}$ | S-4 | Loyd Sorensen/Von & Marian Sorensen |
| N1-4-174 | Latham Spring | T. 31 N., R. 63 E., Sec. 12, NW $\frac{1}{2}$ NW $\frac{1}{2}$ | S-4 | Loyd Sorensen/Von & Marian Sorensen |
| N1-4-174 | Townsite Spring | T. 31 N., R. 63 E., Sec. 27, NE $\frac{1}{2}$ SE $\frac{1}{2}$ | S-4 | Loyd Sorensen/Von & Marian Sorensen |
| N1-4-174 | Unnamed Spring | T. 31 N., R. 63 E., Sec. 25, SE $\frac{1}{2}$ SE $\frac{1}{2}$ | S-4 | Loyd Sorensen/Von & Marian Sorensen |
| N1-4-174 | Unnamed Spring | T. 31 N., R. 63 E., Sec. 36, SE $\frac{1}{2}$ NW $\frac{1}{2}$ | S-4 | Loyd Sorensen/Von & Marian Sorensen |
| N1-4-174 | Unnamed Spring | T. 31 N., R. 65 E., Sec. 19, SE $\frac{1}{2}$ SE $\frac{1}{2}$ | S-4 | Loyd Sorensen/Von & Marian Sorensen |
| N1-4-174 | Lower Boone Spring | T. 31 N., R. 65 E., Sec. 20, NE $\frac{1}{2}$ SW $\frac{1}{2}$ | S-4 | Loyd Sorensen/Von & Marian Sorensen |
| N1-4-173 | Well | T. 33 N., R. 65 E., Sec. 10, SW $\frac{1}{2}$ SW $\frac{1}{2}$ | S-4 | Loyd Sorensen/Von & Marian Sorensen |
| 0322 | Itcaina Mizpah Well | T. 30 N., R. 66 E., Sec. 28, NW $\frac{1}{2}$ SW $\frac{1}{2}$ | S-4 | Loyd Sorensen/Von & Marian Sorensen |
| 0324 | Itcaina Black Point Well | T. 29 N., R. 68 E., Sec. 6, SW $\frac{1}{2}$ SW $\frac{1}{2}$ | S-4 | Loyd Sorensen/Von & Marian Sorensen |
| 0328 | Itcaina Spruce Well | T. 31 N., R. 62 E., Sec. 3, SE $\frac{1}{2}$ NE $\frac{1}{2}$ | S-4 | Loyd Sorensen/Von & Marian Sorensen |
| 0418 | Spruce Well | T. 30 N., R. 65 E., Sec. 16, NW $\frac{1}{2}$ SE $\frac{1}{2}$ | S-4 | Loyd Sorensen/Von & Marian Sorensen |
| 0421 | Sorensen Deep Well (Spruce Well) | T. 32 N., R. 63 E., Sec. 20, NW $\frac{1}{2}$ SW $\frac{1}{2}$ | S-4 | Loyd Sorensen/Von & Marian Sorensen |
| 0423 | Nine Mile Well | T. 32 N., R. 64 E., Sec. 1, SE $\frac{1}{2}$ SE $\frac{1}{2}$ | S-4 | Loyd Sorensen/Von & Marian Sorensen |
| 0425 | Jasper Well | T. 33 N., R. 65 E., Sec. 10, SW $\frac{1}{2}$ SE $\frac{1}{2}$ | S-4 | Loyd Sorensen/Von & Marian Sorensen |
| 0430 | Shafter Well No.3 | T. 32 N., R. 67 E., Sec. 36, SE $\frac{1}{2}$ NW $\frac{1}{2}$ | S-4 | Loyd Sorensen/Von & Marian Sorensen |
| 0432 | Sorensen Well No.4 | T. 32 N., R. 64 E., Sec. 26, SW $\frac{1}{2}$ NW $\frac{1}{2}$ | S-4 | Loyd Sorensen/Von & Marian Sorensen |
| 0435 | Sorensen Well No.5 | T. 32 N., R. 64 E., Sec. 17, SE $\frac{1}{2}$ NW $\frac{1}{2}$ | S-4 | Loyd Sorensen/Von & Marian Sorensen |
| 0437 | Sorensen Well No.6 | T. 33 N., R. 63 E., Sec. 28, NE $\frac{1}{2}$ SE $\frac{1}{2}$ | S-4 | Loyd Sorensen/Von & Marian Sorensen |

APPENDIX D (Continued)

Existing Range Improvements
Spruce Alltoment

| <u>JOB NO.</u> | <u>NAME</u> | <u>LOCATION</u> | <u>PERMIT TYPE</u> | <u>MAINTENANCE RESPONSIBILITY</u> |
|----------------|-------------------------------|--|--------------------|--|
| 0439 | Warehouse Well | T. 31 N., R. 66 E., Sec. 7, SE $\frac{1}{4}$ SE $\frac{1}{4}$ | S-4 | Loyd Sorensen/Von & Marian Sorensen |
| 0441 | Shafter Well No. 4 | T. 31 N., R. 67 E., Sec. 35, SE $\frac{1}{4}$ SW $\frac{1}{4}$ | S-4 | Loyd Sorensen/Von & Marian Sorensen |
| 0442 | Lower Spruce Well | T. 31 N., R. 65 E., Sec. 36, NE $\frac{1}{4}$ NW $\frac{1}{4}$ | S-4 | Loyd Sorensen/Von & Marian Sorensen |
| 4415 | Cole Creek Tank | T. 31 N., R. 64 E., Sec. 18 | S-4 | Loyd Sorensen/Von & Marian Sorensen |
| 4413 | Cole Creek Corrals | T. 31 N., R. 64 E., Sec. 18 | S-4 | Loyd Sorensen/Von & Marian Sorensen |
| 4414 | Cole Creek Cabins | T. 31 N., R. 64 E., Sec. 18 | S-4 | Loyd Sorensen/Von & Marian Sorensen |
| 4412 | Sprucemont Corral | T. 31 N., R. 63 E., Sec. 21 | S-4 | Loyd Sorensen/Von & Marian Sorensen |
| N1-4-276 | Spruce Shearing Corral & Well | T. 32 N., R. 64 E., Sec. 5 | S-4 | Loyd Sorensen/Von & Marian Sorensen |
| N1-4-175 | Spruce Corral | T. 32 N., R. 64 E., Sec. 5 | S-4 | Loyd Sorensen/Von & Marian Sorensen |
| 5341 | Spruce-93 Drift Fence | T. 30 N., R. 63 E., Sec. 7 & 8 | S-4 | Loyd Sorensen/Von & Marian Sorensen/K. Jones |
| 5504 | Gravel Pits Well | T. 30 N., R. 63 E., Sec. 21, SE $\frac{1}{4}$ NW $\frac{1}{4}$ | S-4 | Loyd Sorensen/Von & Marian Sorensen |
| 5560 | Basco Spring Pipeline | T. 30 N., R. 63 E., Sec. 1, 2, & 12 | S-4 | Loyd Sorensen/Von & Marian Sorensen |
| 5559 | Spruce Spring Pipeline | T. 31 & 32 N., R. 63 & 64 E. | S-4 | Loyd Sorensen/Von & Marian Sorensen |

APPENDIX E

Spruce Interim AMP Proposed Range Improvements (In Priority Order)

| Type of Improvement | Approximate Completion Date | Funding Source |
|---|-----------------------------|-----------------|
| 1. South Spruce Allotment Boundary Fence (approx. 16 miles) | FY 91-93 | BLM & Permittee |
| 2. Highway 93 Seeding Protection Fences | As seedings are implemented | BLM & Permittee |
| 3. 11,000 ac. Crested Wheatgrass Seedings | FY 92-97 | BLM |
| 4. Independence Valley Seeding Fences | FY 94-95 | BLM & Permittee |
| 5. Basco Spring Pipeline Extension | FY 96 | Permittee |
| 6. Spruce Spring Pipeline Extension | FY 97 | Permittee |
| 7. Latham Spring Pipeline Extension | FY 98 | Permittee |

APPENDIX F
KEY AREAS & KEY SPECIES
SPRUCE ALLOTMENT

| <u>KEY AREA</u> | <u>RANGE SITE</u> | <u>KEY SPECIES</u> | <u>ALLOWABLE UTILIZATION</u> |
|-------------------|----------------------------|--------------------|------------------------------|
| SP-01 | Coarse Gravelly Loam 6-10" | EULA5 | 50% |
| | | ORHY | 50% |
| SP-02 | Silty 8-12" | EULA5 | 50% |
| | | ORHY | 50% |
| SP-03 | Silty 8-12" | EULA5 | 50% |
| | | ORHY | 50% |
| SP-04 | Silty 8-12" | EULA5 | 50% |
| | | ORHY | 50% |
| SP-05 | Coarse Gravelly Loam 6-10" | EULA5 | 50% |
| | | ORHY | 50% |
| SP-06 | Silty 8-12" | EULA5 | 50% |
| | | ORHY | 50% |
| SP-07 | Silty 8-12" | EULA5 | 50% |
| | | ORHY | 50% |
| SP-08 | Silty 8-12" | EULA5 | 50% |
| | | ORHY | 50% |
| SP-09 | Saline Terrace 5-8" | ATNU2 | 50% |
| SP-10 | Silty 8-12" | EULA5 | 50% |
| | | ORHY | 50% |
| SP-11 | Silty 8-12" | EULA5 | 50% |
| | | ORHY | 50% |
| SP-13 | Silty 8-12" | EULA5 | 50% |
| | | ORHY | 50% |
| | | ARSP5 | 25% |
| SP-14 | Coarse Gravelly Loam 6-10" | EULA5 | 50% |
| | | ORHY | 50% |
| SP-15 | Silty 8-12" | EULA5 | 50% |
| SP-16 | Coarse Gravelly Loam 6-10" | EULA5 | 50% |
| | | ORHY | 50% |
| SP-17 | Coarse Gravelly Loam 6-10" | EULA5 | 50% |
| | | ORHY | 50% |
| SP-18 | Silty 8-12" | EULA5 | 50% |
| | | ORHY | 50% |
| SP-19 | Silty 8-12" | EULA5 | 50% |
| SP-20 | Silty 8-12" | EULA5 | 50% |
| | | ORHY | 50% |
| SP-21 | Silty 8-12" | EULA5 | 50% |
| SP-22 | Silty 8-12" | EULA5 | 50% |
| SP-23 | Silty 8-12" | EULA5 | 50% |
| | | ORHY | 50% |
| SP-24 (DW-2-T-01) | * | AGSP | 50% |
| | | PUTR2 | 25% |
| SP-25 | * | AGSP | 50% |
| | | PUTR2 | 25% |
| SP-26 | * | AGSP | 50% |
| | | PUTR2 | 25% |
| | | POA++ | 50% |
| SP-27 (DW-2-T-04) | * | AGSP | 50% |
| | | PUTR2 | 25% |
| SP-28 | * | AGSP | 50% |
| SP-29 | * | AGSP | 50% |

*Production data and ecological condition currently being tabulated



**COMMISSION FOR THE
PRESERVATION OF WILD HORSES**

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

COMMISSIONERS

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Dawn Lappin
Reno, Nevada

July 7, 1993

Bill Baker, Manager
Wells Resource Area
BLM-Elko District Office
3900 E. Idaho St.
Box 831
Elko, Nevada 89801

Dear Mr. Baker,

We are in receipt of the interim AMP that was signed on April 13, 1993. We received this document on the 7th of June, therefore we are within our legal framework to appeal this document within the 30 day time frame from receipt of such work.

We formally appeal your decision to sign this plan. We formally request that this appeal stop this action on the basis that you are in violation of BLM regulations, policy, as well as wild horse and burro policy.

We have severe concerns that you have a special interest dictating management that affects all users without those users having their legal right recognized. According to 40 CFR 1502.3, 1501.4 (a)(b), an EIS or EA must be completed before approval of the Spruce AMP. In addition you have violated the entire consultation process according FLPMA and NEPA.

There are too many violations and arguments to list at this time. Surely it does not require 29 years to produce an environmental assessment for the change-in-kind of livestock taking this allotment from sheep in 1964 to livestock. However, now the urgency appears to be approval of an interim AMP to support an expenditure for a fence and seedings that may or may not have impacts on other users.

We have worked very hard and long with the BLM in Nevada to affect good range management and a trusting relationship. This is

Bill Baker, Manager
July 7, 1993
Page 2

a blatant example of the BLM intentionally shutting affected interests out of the process due them by law.

Sincerely,

Catherine Barcomb

CATHERINE BARCOMB
Executive Director

TYPE-ERASE
55% COTTON FIBER USA