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7/2/81

ANTELOPE MOUNTAIN
Allotment Management Plan

Revised 1981

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ANTELOPE MOUNTAIN

Allotment Management Plan

I. General Information

A. Map

An allotment map (1'=1 mile, topographic) is attached (Attachment No. 1). The land status and existing improvements are accurate to September, 1980.

B. Location and Area

The Antelope Mountain Allotment contains 62,540 acres of land lying adjacent to the Nevada-California state line, eleven (11) to twenty-five (25) miles north of Reno, Nevada.

The allotment is bounded on the west by Petersen Mountain, a rough, north-south trending ridge ranging in elevation from 5,200 feet to 7,850 feet above sea level. Seven Lakes Mountain, an east-west extension of the northern end of Petersen Mountain, forms a portion of the northern boundary. The remainder of the boundary is established by fence.

Topography in the balance of the allotment consists of rolling hills interspersed with flat valleys. Elevations range generally from 5,000 feet to 6,000 feet above sea level, with Fred's Mountain rising to 7,189 feet above sea level.

Access to the allotment is provided by U.S. Highway 395 between Reno, Nevada, and Doyle, California, a route that parallels the western flank of Petersen Mountain. The Red Rock Road, maintained by Washoe County, traverses the southern and western portions of the allotments. It intersects U.S. 395, approximately eight (8) miles northwest of Reno, Nevada, and again approximately nine (9) miles south of Doyle, California. Several miles of roads maintained by BLM and unimproved desert trails provide good access to the rest of the allotment.

A total of 62,540 acres of land is contained in this allotment. The ownership pattern may be seen on the attached allotment base map.

The acreages by ownership are tabulated as follows:

Public Land by Pastures

Pasture I	6,095	
Pasture 1	16,750	
Pasture 2	16,910	
Pasture 3	13,325	
Total Public Land		53,080 acres
Rancho Haven and Sierra Ranchos		8,240 acres
Other Private Land		<u>1,220</u> acres
Combining Total		62,540 acres

The private lands listed above are mentioned due to their locations within the allotment, but are not in any way used in conjunction with the federal lands.

C. Resource Data

1. Soils

The valley soils are generally a coarse, porous, sandy-loam, derived from decomposed granite. These alluvial deposits are fairly productive, though potential is limited by low precipitation. The soils of the higher elevations are of the same parent material, but are residual and generally less well developed. Rocky outcrops of the parent material are common. These soils, of themselves, are less productive than the valley soils, but receive more effective moisture. For this reason, there is little variation in forage production by elevation.

2. Climate

Long winters, with moderate snow in the valleys (10 inches precipitation) and significant accumulations of snow in the mountains (20 inches precipitation) are characteristic. The growing season is approximately one hundred (100) days with warm days and cold nights. Most of the annual precipitation occurs as winter snow. Occasional summer thunderstorms provide some moisture, particularly in the valleys.

3. Vegetation

Utah juniper (Juniperus osteosperma), aspen (Populus tremuloides) and mountain mahogany (Cercocarpus ledifolius) occur in scattered stands at the higher elevations. These stands are not generally so dense as to appreciably affect forage production.

All vegetative communities in the allotment are dominated by shrubs. Big sagebrush (Artemisia tridentata), Mormon tea or Nevada joint fir (Ephedra nevadensis), bitterbrush (Purshia tridentata), desert peach (Prunus andersonii), spiny hopsage (Grayia spinosa), and shortspine horsebrush (Tetradymia spinosa), are found throughout the allotment. Big sage dominates the lowlands, while bitterbrush and Mormon tea are more abundant at higher elevations and in the lighter soils.

Typical understory plants are cheatgrass or downy chess (Bromus tectorum), needle and thread (Stipa comata), Indian ricegrass (Orzopsis hymenoides), squirreltail (Sitanion hystrix), and Nevada bluegrass (Poa nevadensis).

Approximately 3,500 acres of land, denuded by fire, have been seeded to crested or desert wheatgrass (Agropyron desertorum). These native and introduced perennial grasses are the key forage species for livestock.

4. Condition

Data obtained prior to the installation of pasture fences indicated conditions ranging from poor to good. This variance was accounted for primarily as a result of poor livestock distribution due primarily to a lack of an adequate water distribution system.

Since the building of pasture fences and installation of new water systems, the condition has changed very little, still ranging from poor to good.

Failure of the present improvements, both pipelines and fences, is one reason for the failure of the grazing system. Recurrent change in operators has also lent to failure of the grazing system.

5. Other

Watershed condition is good because of low precipitation and porous soils.

✓ THIS STATEMENT DOESN'T MAKE MUCH SENSE. JJA/88

Fire is a serious problem and generally is caused by summer lightning storms. Fire occurrence within Antelope Mountain Allotment in the last 15 years is as follows:

<u>Year</u>	<u>Number of Fires</u>
1961-65	12
1966-70	4
1970-75	11
1975-79	

The most notable of these fires were:

<u>Name of Fire</u>	<u>Federal Acres Burned</u>
Bird Spring Fire	1,400
Gobbler Fire	2,650
Hallelujah Junction Fire	5,990

The burned areas if not rehabilitated tend to be invaded by cheatgrass, rabbitbrush and desert peach.

D. Existing Improvements

1. Fences, Enclosures

<u>Job. No.</u>	<u>Name</u>	<u>Date Completed</u>	<u>Maintenance Responsibility</u>	<u>Units</u>
0100	Evans-Dickinson Fence Cattleguards & Fence Ext.	1958	Evans-LH ^{1/} CG-Washoe Co.	3 mi. 1 ea.
0113	Antelope-Dogskin Fence	1945	LH	10 mi.
0179	Red Rock-Dry Valley Fence	1950	LH, LaRue	2 mi.
0220	Sand Hills Seeding Fence	1955	BLM	3.1 mi.
0228	Madell Flat Seeding Fence	1957	BLM	1.7 mi.
0235	Sand Hills Buring Seeding Fence	1958	BLM	6 mi.
4045	Seven Lakes Fence	1969	LH	3.4 mi.
4069	Crest Fence and Cattleguard		LH	6.2 mi.
4072	East Red Rock Fence and Cattleguard	1962	LH	2.5 mi.

^{1/} Lucky Hereford Ranch.

4073	Air Base Fence		LH	5 mi.
4075	W. Dogskin Mtn. Fence	1963	LH	7 mi.
4127	Granite Peak Fence	1971	LH	3.3 mi.
4128	Fred's Mtn. Fence	1980	LH	3.5 mi.
4284	Summit Fence	1973	LH	7.6 mi.
4306	Hillside Fence		LH	4 mi.
4333	U of N Enclosure	1972	ARS	1 ac.
4356	Summit Fence CG	1973	LH	1 ea.
5017	Hill-Dickensen Fence	1964	LH	1.2 mi.
4462	Petersen Mt. Fence	1976	LH	1.3 mi.
5170	Petersen Mt. Fence	1976	LH	6.5 mi.
6112	Fred's Mtn. Cattleguard	1980	BLM	1 ea.

2. Water Developments

0258	Madell Flat Well	1960	LH	1 ea.
0356	Whitney Sp. P/L and Bird Ladders	1967	LH	7.5 mi.
4036	Petersen Mtn. Pipeline	1959	LH	4 mi.
4037 ¹⁹⁷⁹	Granite Mountain Reaper	1969	BLM	1 ea.
4472	Madell Well Storage	1975	LH	3,000 gal.
4477	Bedell Sp. Pipeline		LH	1.5 mi.
5013	Hillside Pipeline & Ext.	1960	LH	7 mi.
5061	Bird Sp. Pipeline Ext.	1976	LH	1.3 mi.

3. Study Plots

0375	Madell Pychloram	1968	BLM	1 ac.
4049	Madell Flat Rabbitbrush Study	1969	BLM	1 ac.

4146	Sand Hills Little Rabbitbrush Control Study			
5011	Sand Hills Deer Exclosure 1950	BLM		1 ea.
4. <u>Vegetative Manipulations and Seedings</u>				
0229	Tunnel Sp. Brush Control	1957	BLM	120 ac.
0368	West Dogskin Spraying	1968	BLM	3,830 ac.
4264	Petersen Mtn. Reseed	1954	BLM	4,500 ac.
4273	Sand Hills Burn Reseed	1955	BLM	279 ac.
4288	Hillside Hand Seeding	1971	BLM	450 ac.
4359	Bird Sp. Fire Rehab.	1973	BLM	1,060 ac.
4419	Hallelujah Fire Rehab.	1974	BLM	24,000 ac.
5012	'66 Madel Flat Seed	1967	BLM	1,500 ac.
5014	Sand Hills Seeding	1958	BLM	1,900 ac.

Section 4 Permits

Harry's Spring
 Lake Sp. Cottonwood
 Petersen Mtn. Drift Fence
 Sagebrush Pasture Drift Fence
 Bird Spring Pasture Fence
 Juniper Spring

E. Qualifications

The grazing capacity by the 1962 Range Survey totaled 8,447 Animal Unit Mounths (AUMs) on the federal range. Normal season of use is from April 15 to December 31.

Lucky Hereford Ranch controls 100% of the privileges:

<u>Priority Operation</u>	<u>Licensed Active</u>	<u>Non-Use</u>	<u>SNU</u>	<u>Total</u>	<u>F.R.</u>
Lucky Hereford	* 3257	5190	0	8,447	100%

*Based on one year's actual use.

Lucky Hereford Ranch normally operates 6½ months on federal range, beginning April 15 and ending October 31. The number of livestock turned out will be staggered, beginning April 15 additional animals will be turned out at intervals until desired stocking rates are met. Actual numbers will be determined after consultation between the area specialists and the operator.

F. Correlation with Other Uses

Coordination with other activities does not appear to be a problem except with wildlife. Deer use in the AMP area is extensive. Approximately one-half of the allotment is deer winter range. Petersen Mountain and the Sand Hills (shown as Granite Peak on the map) are designated as critical winter range and migration area for the Lassen-Washoe Interstate Deer Herd. (Refer to Lassen-Washoe Habitat Management Plan.) A small resident herd also utilizes the Sand Hills and Petersen Mountain.

Reasonable Deer Numbers^{2/} in the AMP area are:

1200 Winter Resident - Lassen Washoe Interstate
Deer Herd

200 Yearlong Resident Deer Herd

1400 Total

660 Lassen-Washoe movement through AMP area to
Dogskin Mountain

The population is exhibiting a slight upward trend due to a quota system initiated by the Nevada Fish and Game (HMP, N3-WHA-T3). The grazing system (Section III) has been designed to provide additional seed production and vigor for bitterbrush--one of the most important forage species for deer.

A relict sage grouse strutting and nesting area is near the Madell Flat Well (T. 23 N., R. 19 E., Section 27). The strutting ground was fenced to prevent ORV use in the area.^{3/} Also centered around this well is an important mourning dove nesting area. Both species will benefit from the grazing system by the additional food and cover which will be realized. Waters provided in the system have already benefited these species.

^{2/} Fifteen-year average of the years 1961 to 1975--information supplied from the Nevada Department of Wildlife.

^{3/} Gaps in fence to allow for livestock use of the area.

At the present time, a wild horse population of approximately 22 animals exists within the Antelope Mountain Allotment. Recommendations for total wild horse numbers will be made after the MFP is completed. The grazing system would benefit the wild horses by providing enough forage on a continuing basis to meet their nutritional needs.

Petersen Mountain is the only area within the allotment meeting sufficient wilderness criteria to be classified as an Intensive Wilderness Inventory Unit (NV-030-610). However, further review showed the area lacked sufficient wilderness characteristics to be considered further and therefore was dropped from the Intensive Wilderness Inventory.

Due to accelerated subdividing of private parcels within the allotment, an increase in lands actions, such as rights-of-way, easements, etc., is anticipated. Conflicts between lands actions and grazing are expected to be minimal.

The Warm Springs ORV area adjoins the allotment on the east side. ORV use in this area has little or no impact on the AMP area. Due to easy access and increased population in the Reno-Sparks area, ORV use, other than organized events in the Antelope Mountain Allotment, has increased considerably. Along with this increase, substantial vandalism, i.e., fence cutting, shooting troughs, theft, etc., has become a major problem.

Uranium exploration has taken place on the west side of Petersen Mountain outside the AMP area. Uranium claims are present in the Bedell Flat area.

II. Objectives

A. General

Management of Antelope Mountain Allotment on sustained yield basis to best meet the needs of the range users, while using grazing systems to improve the vegetative composition, forage production, watershed condition and wildlife habitat.

B. Specific

1. Livestock Forage

Improve the overall condition of the entire allotment from fair to good by increasing vigor and reproduction of the existing bunchgrasses (ricegrass, needle-and-thread grass and Thurber's needlegrass) by allowing

adequate periods of rest. (Condition classes are determined by comparing actual vegetative conditions to climax conditions, as outlined in SCS Technical Guide SIIE.)

2. Wildlife Habitat

Improve the condition of deer winter range through (a) restoring vigor to existing bitterbrush stands by allowing them adequate rest; (b) improving bitterbrush reproduction from virtually nothing to 10% of all bitterbrush by 1995; and (c) change vegetative composition in critical deer areas to 40% bitterbrush, 30% sagebrush and 30% other species.

3. Watershed

Increase cover (vegetation and litter) from the present 60% (average) to 70% (average). This will reduce surface runoff and add to the groundwater supply.

4. Recreation

Provide additional big game hunting opportunities by improving deer habitat to support reasonable deer population.

5. ORV

Since portions of the allotment will be rested during each season, it should be easier to correlate non-compatible uses, such as motorcycle races and off-road vehicle rallies.

6. Wild Horses

Produce an adequate amount of usable forage to satisfy the nutritional requirements of the horses on a continuing basis.

III. Grazing Management

A. Main Allotment (Pastures 1, 2 and 3)

The main portion of the allotment has been under a four-pasture, rest-rotation grazing system since July of 1969. Due to loss of the fourth pasture and failure of the present grazing system, a revision of the AMP is required.

At the present time, it is felt there is not enough available forage to enable complete rest of one pasture each year. For this reason, a three-pasture deferred system will be initiated. The Petersen Mountain and Sand Hills area will be treated separately (see Sec. B).

1. Pastures

All three of the pastures are currently fenced which provides for immediate implementation of the new system. The three pastures to be used are primarily public lands.

2. Key Species

The key grass species are needle-and-thread grass (Stipa comata) and Indian ricegrass (Oryzopsis hymenoides). Both grasses are native and highly preferred by livestock. The key shrub is bitterbursh (Purshia tridentata). Bitterbrush is the most important browse species due to its preference by both deer and cattle.

3. Phenology

See Attachment No. 3.

4. Grazing Capacity

The Antelope Mountain Allotment was adjudicated in 1962 and the use established at 8447 AUMs.

5. Grazing Treatments Main Allotment

A series of three grazing treatments have been developed which provides adequate period of rest to restore vigor, produce seed and establish seedlings.

These treatments may be graphically shown as follows:

Treatment	A	M	J	J	A	S	O	N	D
A									
B									
C									

Treatment "A" is simply season-long grazing use beginning April 15 and terminating October 31.

Treatment "B" calls for rest until after seed ripe, July 15, for the production of seed. It will then be grazed until the end of the grazing season. This grazing will shatter the seed heads and cover the seed by trampling. The July 15 date is based on the phenology of bitterbrush. Due to its late bloom, if growth requirements are met for bitterbrush, all other key species will also be satisfied.

The pasture receiving Treatment "C" will be rested until approximately June 1 to allow additional rest during the growing season to build food reserves and allow seedling establishment. It will then be grazed concurrently with the pasture receiving Treatment "A" until the end of the grazing season--approximately the end of October.

6. Operation (Three-Pasture Deferred)

On approximately June 1, the gates between pastures receiving Treatments "A" and "C" will be opened. The cattle will be pushed into the "C" Treatment pasture and all gates will remain open. It is advantageous to push cattle onto the pasture receiving treatment "C" to prevent over-utilization of the vegetation in the pasture receiving Treatment "A."

The gates to the pasture receiving Treatment "B" will be opened about July 15, allowing movement of livestock into this pasture. The cattle will be herded into this pasture because of the reasons stated above. After July 15, grazing will occur in all three pastures simultaneously. Grazing will occur until the end of October, at which time all cattle will be pulled off the allotment. No livestock will be allowed on the allotment prior to April 15 (refer to Flexibility - Section 7).

7. Grazing Schedule

The grazing schedule for the three treatments is as follows:

<u>Year</u>	<u>Pasture No. 1</u>	<u>Pasture No. 2</u>	<u>Pasture No. 3</u>
1	A	B	C
2	B	C	A
3	C	A	B

The above grazing formula will be repeated on a three-year basis.

The grazing pattern to be followed in this schedule may be seen in Attachment No. 2.

8. Seedings

Of the seedings used (see Existing Improvement, Section I.D. (4)), only the Sand Hills Reseeding is still successful and fenced. However, continued yearlong use has caused a substantial deterioration in both condition and trend.

To reverse the downward shift, season-long use will be eliminated until such time that studies show the seeding can be incorporated into the grazing system without continuing damage.

At the present time, the seeding may be used for a gathering and holding pen late in the season, i.e., after October 1. Cattle may be held in the seeding just long enough to facilitate gathering and shipping, normally several days. Grazing at this time would have little or no detrimental effect on the plants, as crested wheatgrass (Agropyron cristatum) is normally dormant during this period.

B. Petersen Mountain and the Sand Hills Pastures

Petersen Mountain area is isolated from the bulk of the allotment by the location of fenced private lands, and elevational and climatic characteristics. Because of the high elevations and winter conditions, only summer use can be considered in this area.

The Sand Hills area is centrally located in the AMP area. It is a small portion of Pastures 1 and 2, and divided by the existing pasture fence.

Petersen Mountain and the Sand Hills are unique in that both have large stands of bitterbrush, while Petersen Mountain has stands of mountain mahogany (Cercocarpus ledifolius) and aspen (Populus tremuloides) which are also important to deer.

The Petersen Mountain grazing will be controlled by existing fences, while the Sand Hills grazing can be controlled by shutting the water system off and on.

1. Petersen Mountain Pasture

a. Pastures

One pasture.

b. Key Species

Bitterbrush.

c. Phenology

See Attachment 3.

d. Grazing Capacity

Refer to Grazing Capacity, Section 4 of Main Allotment.

e. Grazing Treatment

A series of two grazing treatments has been developed which provides adequate periods of rest to restore vigor, produce and establish seedlings for bitterbrush.

These treatments may be shown as follows:

	J	J	A	S	O	N	D
A	////	//	//	//	//		
B	REST YEARLONG						

///=Graze

Treatment "A" is season-long grazing beginning June 1 (taking into account the higher elevations and later growing season) and ending October 31.

Treatment "B" is yearlong rest.

Treatment "B" will provide rest for vigor and reproduction of bitterbrush. Bitterbrush requires two seasons' rest. The first season allows for twig growth. The second season allows the twigs, produced the previous year, to flower and reach seed ripe. The second season's rest also allows for seeding establishment, prior to Treatment "A."

f. Operation

The Petersen Mountain pasture will be grazed from June 1 to October 31. Beginning June 1, the gates will be opened to the Petersen Mountain pasture and the cattle may drift or be pushed and distributed over the mountain until their removal by October 31. (Close-out of the entire allotment.)

g. Grazing Schedule

The grazing schedule for the Petersen Mountain pasture is as follows:

<u>Year</u>	<u>Petersen Mountain Pasture Treatment</u>
1	A
2	B
3	B

The above grazing formula will be repeated on a three-year cycle. The grazing pattern to be followed in this schedule may be seen in Attachment No. 2 (Livestock Movement).

2. Sand Hills - Treatment and Operation

The Sand Hills will be grazed as a part of the Main Allotment using the deferred system discussed earlier; however, utilization will be determined through tagged twig studies each year (see Section LV-Studies). When 30% utilization of bitterbrush is reached by livestock (leaving 20% for other animals), the water will be shut off in the Sand Hills water system (a part of the Hillside Pipeline) and the cattle pushed out. A shut-off valve will be required before the trough north of the Sand Hills Seeding (T. 23 N., R. 18 E., Section 36, SE). This will provide additional water for the Whitney Spring Pipeline (via the Whitney Pipeline Tie-In to be completed in 1981) later in the grazing season when it is needed.

Leaving 50% (combined animal use equals 50%) of the twigs growth will allow for flowering and seed ripe the following year using the deferred system discussed earlier.

IV. Satisfaction of Objectives

The specific objectives of the plan, as listed in Part II of this plan, will be accomplished by this grazing system.

Forage for domestic livestock will improve both in quality and quantity. The system is designed to restore vigor in the key species by allowing maximum storage of food reserves on a regular basis. The early spring rest (Treatments "B" and "C") will help to restore plant vigor and allow for seedling establishment. This is accomplished to varying degrees during each of the rest periods.

Forage production will increase because of the grazing system. This is accomplished by providing a rest period to produce seed (Treatment "B"), followed by grazing to trample and cover the seed.

Improved deer winter range conditions will result primarily from the rest periods in the system, and the concentration of cattle use. This concentration of use will hedge the bitterbrush plants to growth forms conducive to increased leader growth. This increased leader growth will be available to winter deer because of the rest periods in the grazing system.

Watershed conditions will be improved because of the increased root growth, added density of plant cover, and the accumulation of plant litter on soil surface.

V. Range Studies

The studies to be conducted within the allotment upon initiation of this plan are necessary to enable evaluation of the effectiveness of the grazing systems. The range user will be encouraged to participate in analyzing these studies, as well as pointing out problems in livestock handling. Studies will include:

A. Actual Use

The licensee will maintain accurate actual use records and submit this information to the BLM district office by March 15 each year.

B. Utilization

The Key Forage Plant Method, as outlined in BLM Manual 4412.227c, will be used to collect utilization data. This method will supply the desired information with the least investment of manpower, and is readily interpreted by the layman.

C. Trend

The photographic method detailed in BLM Manual 4412.22c will be used to record vegetative trend. Again, this method provides detailed information while providing visual evidence readily interpreted by the layman.

D. Climate

Temperature and precipitation data will be collected at the nearest weather stations for allotment evaluation.

E. Range Inventory

A modified version of SVIM (BLM Manual 4412.14) and weight estimate (4412.11b) was used to estimate the current grazing capacity for livestock and wildlife. The inventory was completed in the spring of 1981.

F. Tagged Twig Study

Six tagged twig studies will be established in the Sand Hills to monitor utilization of bitterbrush by livestock and deer. The tag twig studies will be read two months after the turn-in dates of Pastures 1 and 2 (the Sand Hills are a part of these pastures). When 30% utilization is reached by livestock, the livestock will be moved out of the area (see Section III.B.2.).

The studies will then be read after the winter deer migrate out of the area and prior to the cattle turn-in for the new season. Cattle utilization will be adjusted so that the combined cattle and deer use will be approximately 50% utilization.

VI. Needed Range Improvements (Also see Costs on Job Documentation Reports)

The Antelope Mountain Allotment Management Plan has been implemented for six years. A list of existing improvements is attached (see Section I.D.).

At the present time, the Whitney Spring Pipeline does not supply adequate water to fill the last three troughs in the line. This makes the eastern portion of Pasture 1 unusable.

Additional water will be diverted from Hillside Spring (via Whitney Pipeline Tie-In--see III.B.2) which would help alleviate this problem. A section of pipeline (approximately one mile), T. 22 N., Rs. 18 and 19 E., Sections 1 and 6, could be built connecting the Hillside Spring Pipeline (Job No. 5013) with the Bird Spring Pipeline (Job No. 5061).^{4/} A valve will be installed at the junction to insure enough water would remain in the Hillside Spring Pipeline to service the troughs along its entire length.

A section of Whitney Spring Pipeline is in need of replacement (T. 23 N., R. 19 E., Sections 23 and 26). Continual maintenance with no alleviation of the problem has continued for two years. Replacement of 2½ miles would be the best and overall cheapest method to keep the whole water system functional.

At the present time, the north end of Petersen Mountain is unusable due to a lack of available water. Development of North Chokecherry Spring (NW¼SW¼, Section 16, T. 23 N., R. 18 E.) would help rectify this problem and make the area usable.

VII. Modification

This plan may be modified if data from range studies and experience gained in plan operation indicate that changes are desirable. Modification will be made after consultation of the parties concerned and will be based on the results of range studies, inspections and/or livestock operational problems.

Modification may also be initiated in conjunction with the Environmental Impact Statement scheduled to be completed in 1982.

VIII. Flexibility

Grazing use will be based on the operation described in this plan.

The operator may make a deviation of 10% in numbers at any point without prior approval of the area manager.

^{4/} Bird Spring Ext. Pipeline connects to the Whitney Spring Pipeline.

The dates utilized in the grazing system may vary by ten days, more or less, but this deviation must be based on the growth stage of the key species as described in the plan. Periodic compliance checks will be made by BLM.

Advance billing will be based on 8447 AUMs active use; final billing will be made at the end of the grazing year, December, and will be based on actual use (43 CFR 4115.2-1(k)(2)(i)(a)). It is incumbent on the operator to keep detailed actual use records, including numbers, periods of use, dates pastures were opened, etc. These records must be made available to the District Office by November 31, so the billing may be made.

IX. Agreement

We, the undersigned parties, concur in the management objectives set forth in this plan and will, to the best of our abilities, control the livestock grazing as provided herein to meet these objectives.

All provisions of the Grazing Regulations for the Public Lands (43 CFR) apply to this plan.

Reviewed by District Specialists	
<u>WAS</u>	Wildlife
<u>WAS</u>	Range
<u>JR</u>	Wild Horse(s) and Burro (s)
<u>CR</u>	Lands
<u>DLW</u>	Minerals
<u>DLW</u>	Watershed
<u>DLA</u>	Forestry
<u>F.A.</u>	Recreation
<u>DL</u>	Cultural
<u>F.A.</u>	Visual
	Fire Management
<u>SW</u>	Area Manager
	Support (Chief of Operations)
Reviewed of draft by Chief, Resource Management	
<u>JFK</u>	Wilderness

X. Signatures

Prepared by:

James M. Gianola 9-22-80
James M. Gianola Date
Range Conservationist

Pardee Bardwell 9/22/80
Pardee Bardwell Date
Wildlife Biologist

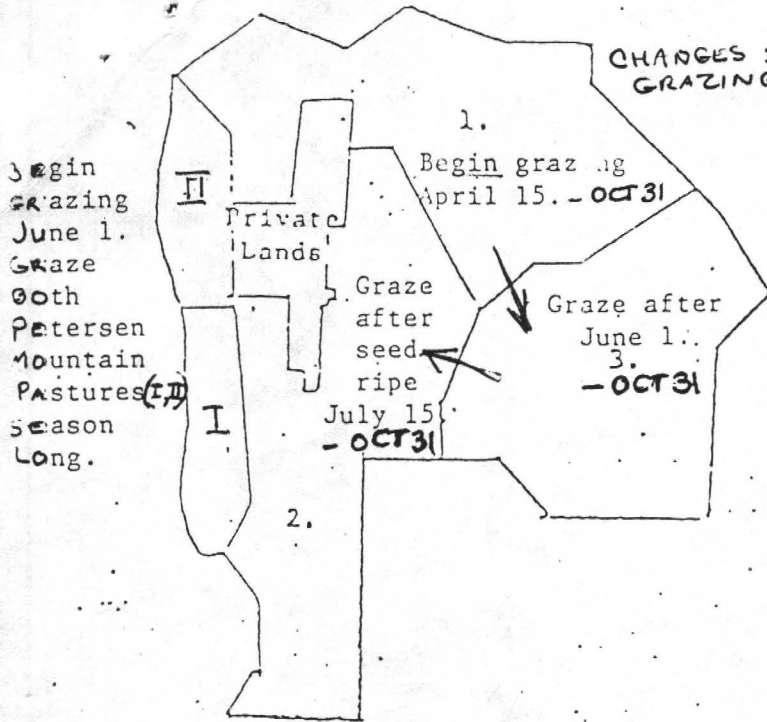
Concurred by:

Keith Cameron 6/1/81
Keith Cameron Date
Lucky Hereford

Approved by;

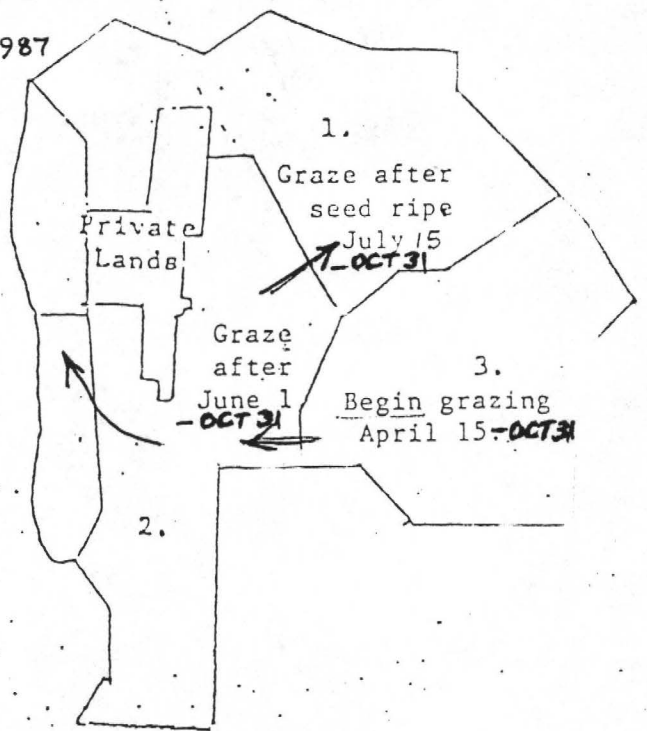
Kenneth G. Walker 7-2-81
Kenneth G. Walker Date
Lahontan Area Manager

Thomas J. Owen 7-2-81
Thomas J. Owen Date
District Manager



Begin grazing June 1. Graze both Petersen Mountain Pastures (I, II) season long.

Rest both pastures.

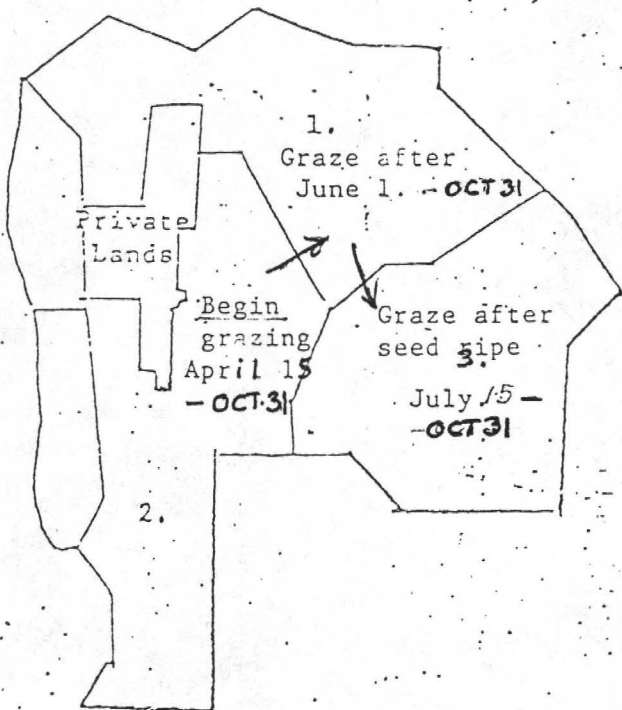


1981 Grazing Season
Repeat every 3 years (i.e., 1984)
1987
1990

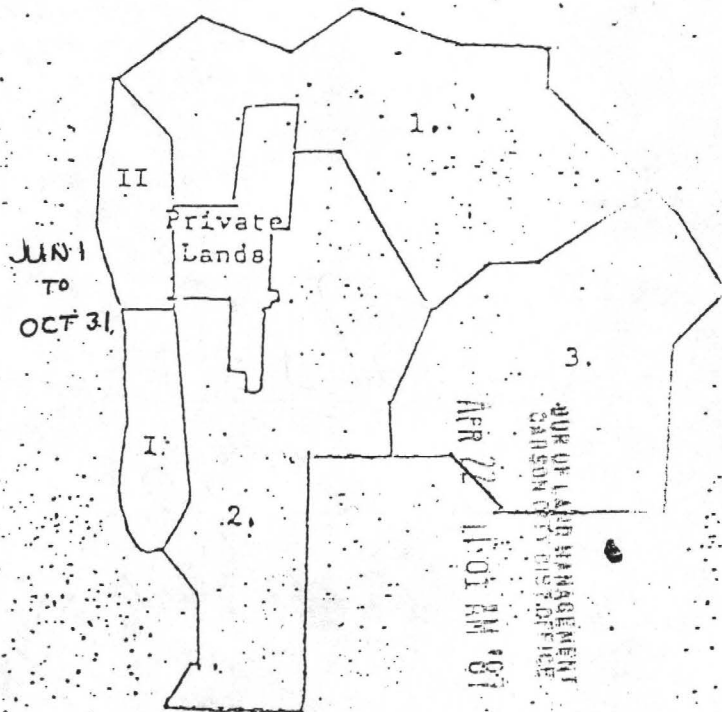
1982 Grazing Season
Repeat every 3 years (i.e., 1985)
1988
1991

PETERSEN Mtn. GRAZE:

1988 (REST 1989)
1991 (REST 1990)



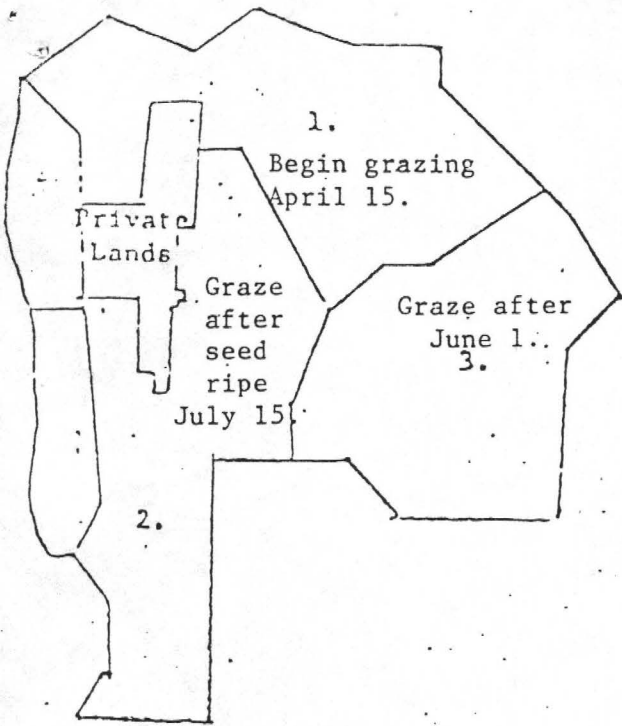
1983 Grazing Season
Repeat every 3 years (i.e., 1986)
1989
1992



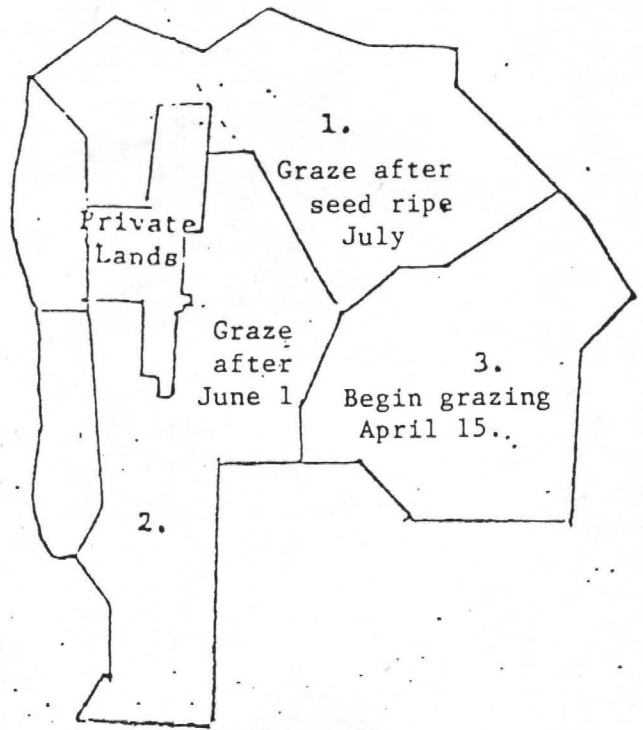
JUN 1 TO OCT 31

Handwritten signature

Begin grazing
June 1.
Graze
both
pastures
mountain
pastures
season
long.

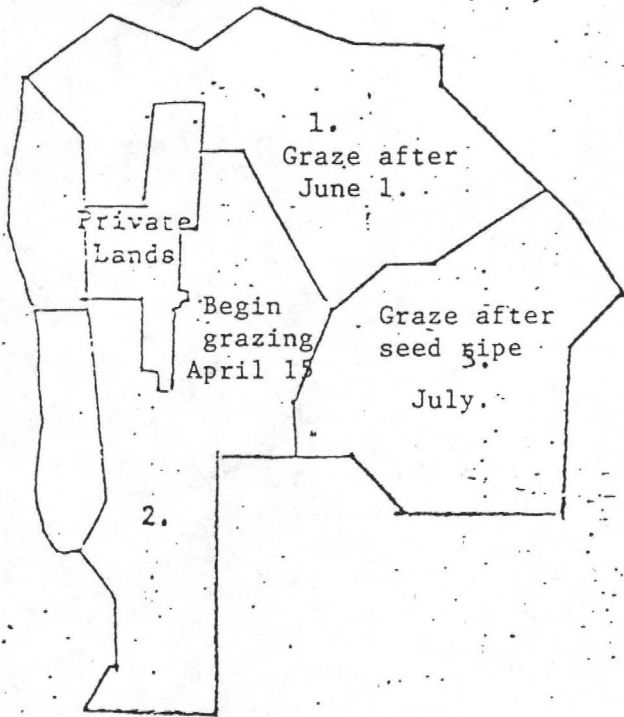


Rest both pastures.



1981 Grazing Season
Repeat every 3 years (i.e., 1984)

1982 Grazing Season
Repeat every 3 years (i.e., 1985)



1983 Grazing Season
Repeat every 3 years (i.e., 1986)

