Nevada Elko 11450 acres

ZAGA ALLOTMENT MANAGEMENT PLAN

SECTION I - General Information

This allotment is approximately 11,000 acres in size located in T. 28 and 29 N., R. 56 E. in the Huntington Creek Drainage, a tributary of the South Fork of the Humboldt River.

This allotment is fenced and for the individual use of Zaga Ranches.

Topography is very gently sloping from east to west with moderate rolling hills in the northwest portion. Elevation ranges from 6000 feet on the east side to 5500 feet on the west side.

The vegetation of the unit is primarily crested wheatgrass (Agropyron cristatum) as approximately 5600 acres are seeded to this species. The remainder is big sagebrush (Artimisia tridentata), squirreltail (Sitanion hystrix), Sandberg bluegrass (Poa secunda), needle and thread grass (Stipa comata), rabbitbrush (Chrysothamnus spp.), cheatgrass (Bromus tectorum), Western wheatgrass (Agropyron smithii) and assorted forbs.

The precipitation throughout the allotment is fairly uniform with about 10-12" annually. The bulk of this precipitation comes from winter snow and spring rains from April through June. Summer and fall are generally very dry and contribute little precipitation.

Soils within the allotment vary from an alluvial, gravelly texture in the west central portion (Corral Seeding), a sandy loam over a hardpan in the southwest portion of the allotment, volcanic tuff intermingled with clay loams in the northwest portion, and a

very deep fertile loam in the northeast portion.

Historical use: Until 1965 this allotment was two separate allotments. The Sestanovich Allotment in the south which was originally sheep use until the early 1940's, and the Zaga Allotment in the north. In 1965 Fred Zaga purchased the Sestanovich operation and combined it with his own to make the present allotment.

This allotment, which is part of the Jiggs Unit, was adjudicated in 1963. It was determined at this time that no reduction in grazing privileges was needed due to the large amount of seeding. The present allotment grew like Topsy with a series of seedings which were given to Sestanovich and Zaga for their exclusive use. At the time of adjudication these two operations were completely under fence operating as two individual allotments.

The Class I demand of the two operations was as follows:

Sestanovich	901 AUM's
Zaga	914 AUM's
	1825 AUM's

When the two operations were combined in 1965 to form the resultant allotment, it consisted of six separate fenced pastures:

1. Zaga Seeding
2. Jiggs Flat Field
3. Corral Seeding
4. Frost Canyon Seeding
5. Brown Cr. Seeding
6. Riley Seeding

The following is a description of the six pastures (also see allotment map):

1. Zaga Seeding Field

This field is 3660 acres in size, of which approximately 1000 acres is crested wheatgrass and 2660 acres native range. This field at the present time is watered in the northwest corner, the southwest corner and the southeast corner. It is planned to drill a well in 1966 in the northeast corner to service both this field and the Jiggs Flat Field.

2-3. Jiggs Flat - Corral Seeding

This field at the present time is two District fields consisting of the Jiggs Flat Field, 2500 acres native range and the Corral Seeding, 960 acres of crested wheatgrass.

There is presently water at the south end of the Jiggs Flat Field and the north end of the Corral Seeding. The well mentioned in the Zaga Seeding description will service the north end of the Jiggs Flat. A pipeline is planned for 1967 which will service the east side.

4. Brown Creek Field

This field is 1280 acres in size with 1000 acres crested wheatgrass and 280 acres native range. This field is presently fairly well watered with two springs in the center of the field and running water on the west side. It is planned to put a well in 1968 on the north end of this field to service both it and the Riley field.

5. Riley Field

This field is 1520 acres in size, of which 1020 acres are crested wheatgrass and 500 acres native range. This field is well watered with running water through the middle and water on the northeast and southwest corners. The well mentioned in the Brown Creek Field will service the southeast part of this field.

6. Frost Canyon Field

This pasture is 1530 acres in size, of which 1320 acres is crested wheatgrass and 210 acres native range (sagebrush, poa, squirreltail and forbs). State Highway 46 runs north and south through the middle of the field. There is stock water in the northwest corner, the northeast corner and the south end.

1965 was the first year that this allotment was used as one unit by Zaga Ranches. The allotment was used by 195 cattle from 5/1 to 5/30 which then went to a Forest allotment and 330 cattle which stayed in the allotment from 4/16 to 10/30. These 330 cattle were split up among the six fields and made season-long use in each field. Total use in the allotment in 1965 was ~~1873~~ 3818 AUM's. Listed below was Zaga's actual use in 1965 and condition of each pasture at the end of the season.

Brown Cr. Field: (1,080 acres)

Use:	April 16, 1965 to June 2, 1965	75 C	118 AUM's
	June 3, 1965 to Sept. 10, 1965	105 C	343 AUM's
	Sept. 11, 1965 to Oct. 31, 1965	83 C	139 AUM's
		Total	600 AUM's

Actual Use: 1.8 acres per AUM

Condition After Use: The vegetation was severely used around the water; but, feed was still standing in unwatered areas.

Riley Field: (1,197 acres)

Use:	July 27, 1965 to Sept. 10, 1965	145 C	218 AUM's
	Sept. 11, 1965 to Oct. 31, 1965	114 C	190 AUM's
		Total	408 AUM's

Actual Use: 2.9 acres per AUM

Condition After Use: The vegetation was well used around the water but overall there was an abundance of unused feed.

Zaga Seeding: (3,800 acres)

Deferred - overall carrying capacity should be approximately 5 acres per animal unit month. The reason for the low carrying on approximately $\frac{1}{2}$ of the area.

Jiggs Flat (2,084 acres)

Use:	April 16, 1965	59 C	2 AUM's
	April 17, 1965 to April 21, 1965	105 C	18 AUM's
	April 22, 1965 to April 30, 1965	203 C	61 AUM's
	May 1, 1965 to May 31, 1965	223 C	223 AUM's
		Total	304 AUM's

Actual Use: 6.8 acres per AUM

Condition After Use: Utilization was fairly uniform and there was some feed still on the ground.

Corral Seeding: (742 acres)

Use:	May 1, 1965 to May 7, 1965	50 C	12 AUM's
	May 8, 1965 to Sept. 10, 1965	65 C	267 AUM's
		Total	279 AUM's

Actual Use: 2.6 acres per AUM

Condition After Use: Feed was abundant away from water.

Frost Canyon Field: (1603 acres)

Use:	April 21, 1965 to May 19, 1965	132 C	128 AUM's
	May 20, 1965 to June 3, 1965	70 C	33 AUM's
	June 3, 1965 to July 27, 1965	145 C	266 AUM's
		Total	427 AUM's

Actual Use: 3.7 acres per AUM

Condition After Use: The vegetation was severely used around the watering facilities, but feed was abundant in unwatered areas.

SECTION II - Game Numbers and Management

This allotment, which is a portion of the Jiggs flat receives very little deer use. There is no resident herd in the allotment and the only known use is an occassional winter drift of deer through the area from the Humboldt Forest to the east. There are a few sage grouse in the area although the Nevada Fish & Game does not include the allotment in any key or intensive use area. There are also moderate amounts of chukar in the area, however, the habitat is not ideal for chukars and it is doubtful that their numbers will ever build up to any significance.

Some hunting for sage grouse and chukar can be expected in the area but due to the small game populations and lack of present or potential game habitat it is doubtful that wildlife will become much of a management factor.

However, it is planned to put guzzlers on all water developments and to include nesting and cover areas in any future vegetive projects.

SECTION III - Resource Development

Present Projects

Name	Type	Units	Costs BLM	Cost User
Zaga Spring	Trough	1 ea		500.00
Sestanovich Fence	Fence	$\frac{1}{3}$ mi		360.00
Sestanovich Fence #2	Fence	$1\frac{1}{4}$ mi		900.00
Porter Fence	Fence	5 mi		1500.00
Frost Cr. Fence	Fence	$1\frac{1}{2}$ mi		1200.00
Zaga Seeding	Seeding	2000 ac	14,400.00	
Zaga Fence	Fence	$2\frac{1}{2}$ mi		2500.00
Barnes-Zaga Fence	Fence	2.5 mi		1600.00
Corral Canyon Fence	Fence	2.5 mi		1000.00
Corta Cattleguard	C. G.	1 ea	280.00	200.00
Brown Cr. Fence	Fence	$1\frac{1}{2}$ mi		1500.00
Corral Spring	Trough	1 ea		500.00
Sestanovich Spring	Trough	1 ea		500.00
Corral Seeding	Seeding	960 ac	5900.00	
Frost Canyon Seeding	Seeding	1320 ac	8500.00	
Brown-Riley Seeding	Seeding	2020 ac	13,500.00	
Total			42,580.00	12,260.00

Proposed Projects

Name	Type	Units	Cost BLM	Cost User
Jiggs Flat Spray Job	2-4-D Spray	1200 ac	1800.00	1200.00
Zaga Well	Well	1 ea	1000.00	1200.00
Brown Spring	Spring	1 ea	100.00	300.00
Pearl Well	Well	1 ea	1000.00	1500.00
Pearl Cr. Pipeline	Pipeline	1.5 mi	600.00	1000.00
Riley Well	Well	1 ea	800.00	1000.00
Huntington Well	Well	1 ea	1000.00	1000.00
Jiggs Flat Truck Trail	Road	4 mi	3500.00	
Total			9800.00	7200.00

Total Cost - End of Development Program

42,580.00	BLM	- Present
12,260.00	Users	- Present
9,800.00	BLM	- Proposed
7,200.00	User	- Proposed
71,840.00		

Cost per acre $6.53

As can be seen the major part of the improvement program has been carried out in this allotment. These projects along with the planned grazing system have increased the productive capacity of this land four or five fold.

It is planned to finish the proposed water developments at the rate of one per year for the next three or four years. The pipeline will also benefit two other allotments and the user cost apportioned among the three users.

The proposed spray project is low priority and will not be initiated until other areas in the district in need of development work are taken care of.

The truck trail has been included into the Elko District Road program and will be done as money is available.

SECTION IV - Grazing System - Rest Rotation

Purpose

The purpose of this grazing system is to graze the allotment in the concept of [redacted] Rest-Rotation system. Where each field is grazed systematically over a period of five years in such a way as to allow for maximum plant vigor, seedling establishment and uniform utilization. The five specific treatments for each field are as follows:

1. Moderate Spring Grazing
2. Moderate Fall Grazing
3. Heavy Spring Grazing
4. Heavy Fall Grazing
5. Rest for Seeding Establishment

It will be noted that this plan does not include a rest period for plant vigor and seed crop. As the bulk of the allotment is planted to crested wheat, adequate plan vigor is obtained and held with the two years of moderate use and one year of rest. Also, the one full year of rest with moderate fall use the second year is sufficient for seedling establishment. In all fields the heavy use after seed ripe for seed trampling is followed by the Rest Treatment.

In working out a system for this particular allotment the following objectives were considered:

1. As the users operation is cow-calf the stock movement each year was held down as much as possible.

2. The cattle going to the Forest are moving while calves are still quite young. For this reason and the convenience to the operator the system was designed so that the cattle moving to the Forest make their BLM spring use in the three fields closest to the Forest Trail (Zaga Seeding, Jiggs Flat, Corral Seeding). This also removes the possibility of having to trail these forest cattle through a field being used by other cattle.

3. As this allotment has a large amount of crested wheat seeding in it, this system was designed in a somewhat different manner than had it been native range. For one thing the stocking rates in the fields being used each year are considerably higher than they would have been in similar native range. Also, the spring use any year is not as critical to the physiology of crested wheatgrass as it would be in native grasses.

Future Use

This operation has 195 cattle which go onto a forest allotment June 1. 130 of these cattle go to one allotment and 65 to another. In order not to cause excessive trailing of these cattle and the chance of them mixing with cattle which stay in the allotment season long, this system is designed so that the 130 forest cattle are always in either the Zaga Seeding, the Jiggs Flat or Corral Seeding for their spring use.

The only time this would cause any conflict with the season long cattle would be one year out of five when heavy spring use is being made in the Jiggs Flat - Corral field. On this year it is understood that all the season long cattle will be held in the Corral Seeding until June 1; and the 130 Forest cattle in Jiggs Flat until June 1. When the forest cattle are moved to the forest some of the season long cattle will be moved into Jiggs Flat. (see 1970)

It is also the operator's customary practice to put all cows and calves into the Frost Canyon Field immediately after branding and before he distributes them to the various fields. This is only for a few days duration. As this practice does not conflict with the planned system it will be continued.

Listed below is the first five years grazing plan.

1966

100 c	4/16	to 4/30	Riley Field
395 c	4/1	to 6/30	Riley Field
100 c	7/1	to 10/30	Jiggs Flat - Corral
230 c	7/1	to 10/30	Frost Canyon
130 c	5/1	to 5/30	Zaga Seeding (Forest Cattle)

1967

100 c	4/16	to 4/30	Brown Creek Field
395 c	5/1	to 6/30	Brown Creek Field
100 c	7/1	to 10/30	Zaga Seeding
230 c	7/1	to 10/30	Jiggs Flat - Corral
130 c	5/1	to 5/30	Jiggs Flat - Corral (Forest Cattle)

(possible winter or light spring use in Riley Field)

1968

100	c	4/16	to 4/30	Zaga Seeding
*395	c	5/1	to 6/30	Zaga Seeding
*100	c	7/1	to 10/30	Brown Creek Field
230	c	7/1	to 10/30	Riley Field
130	c	5/1	to 5/30	Corral Seeding (Forest Cattle)

(Possible winter or light spring use in Frost Canyon)

1969

100	c	4/16	to 4/30	Frost Canyon Field
*395	c	5/1	to 6/30	Frost Canyon Field
*100	c	7/1	to 10/30	Brown Creek Field
230	c	7/1	to 10/30	Zaga Seeding
130	c	5/1	to 5/30	Jiggs Flat (Forest Cattle)

1970

100	c	4/16	to 4/30	Corral Canyon (To be in Corral to 6/1)
*395	c	5/1	to 5/30	Corral Canyon
395	c	6/1	to 6/30	Jiggs Flat & Corral Canyon
*100	c	7/1	to 10/30	Frost Canyon
230	c	7/1	to 10/30	Brown Creek
130	c	5/1	to 5/30	Zaga Seeding (Forest Cattle)

Future Stocking

It is felt that the current level of stocking (330 cattle) is not sufficient to attain the type of utilization needed under this system. At this time it is felt that 500 cattle (not counting the 195 forest cattle) will be somewhere around the number needed to give the proper degree of utilization.

Therefore, it is planned to gradually increase the numbers about the second year until proper utilization is attained. The operator will keep actual use figures for each field yearly. The BLM will run utilization studies on each field yearly. This coupled with a gradual increase in numbers should allow us to accurately arrive at the proper stocking rates.

The estimates now are around 1000 AUM's in the heavy spring and fall use fields and 500-600 AUM's in the moderate spring and fall use fields.

Due to some proposed improvements on the Zaga's forest allotment there is a possibility of some nonuse for two years by some of the 130 forest cattle. If this is done these nonuse cattle will be absorbed into the three areas being used for those two years, as part of the anticipated increase in stocking to 500 cattle. As the forest use is made again, the spring use for these 130 cattle will be in Jiggs Flat, Corral Canyon and Zaga Seeding as described earlier in the plan.

The grazing pattern outlined in this plan will be followed so far as possible. However, for a few years, the user and the range manager will get together to work out any problems that develop in this grazing system and determine next years stocking.

TABLE I

Yearly Treatment

Field	1966	1967	1968	1969	1970
Zaga Seeding	130 c 5/1 to 6/1 (130 AUM's)	100 c 7/1 to 10/30 (400 AUM's)	100c 4/16-5/1 395c 5/1-6/30 (840 AUM's)	230c 7/1-10/30 (920 AUM's)	REST 130c 5/1-5/30 (130 AUM's)
Jiggs-Flat Corral Seeding	100 c 7/1 to 10/30 (400 AUM's)	130c 5/1-5/30 239c 7/1-10/30 (1150 AUM's)	REST 130c 5/1-5/30 in corral seeding (130 AUM's)	130 c 5/1 to 5/30 (130 AUM's)	100c 4/16-4/30 395c 5/1-6/30 All use to be in corral seeding until 6/1 (840 AUM's)
Frost Canyon	230 c 7/1 to 10/30 (920 AUM's)	REST	Supplemental winter use or light spring use	100c 4/16-5/1 395c 5/1-6/30 (840 AUM's)	100 c 7/1 to 10/30 (400 AUM's)
Brown Creek	REST	100c 4/16-51 395c 5/1-6/30 (840 AUM's)	100 c 7/1 to 10/30 (400 AUM's)	100 c 7/1 to 10/30 (400 AUM's)	230 c 7/1 to 10/30 (920 AUM's)
Riley	100c 4/16-5/1 395c 5/1-6/30 (840 AUM's)	Supplemental winter use or light spring use	230 c 7/1 - 10/30 (920 AUM's)	REST	Supplemental winter use or light spring use.

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SECTION V - Other Uses

Recreation

There are no sites in this allotment which are feasible for recreation development. The only recreational use in the allotment will be slight hunting pressure which will be helped somewhat by the planned truck trail.

Forestry Factors

There is 500-600 acres of moderate to lightly stocked juniper stands. It is not of sufficient quantity or quality to provide any large scale post cutting. However, with a truck trail to the area small permits could be issued for posts.

Land Classification & Tenure

The entire allotment is solid blocked Federal land with the exception of the Sestanovich ranch on Frost Creek in the center of the allotment. This ranch has hay producing and pasture capacity.

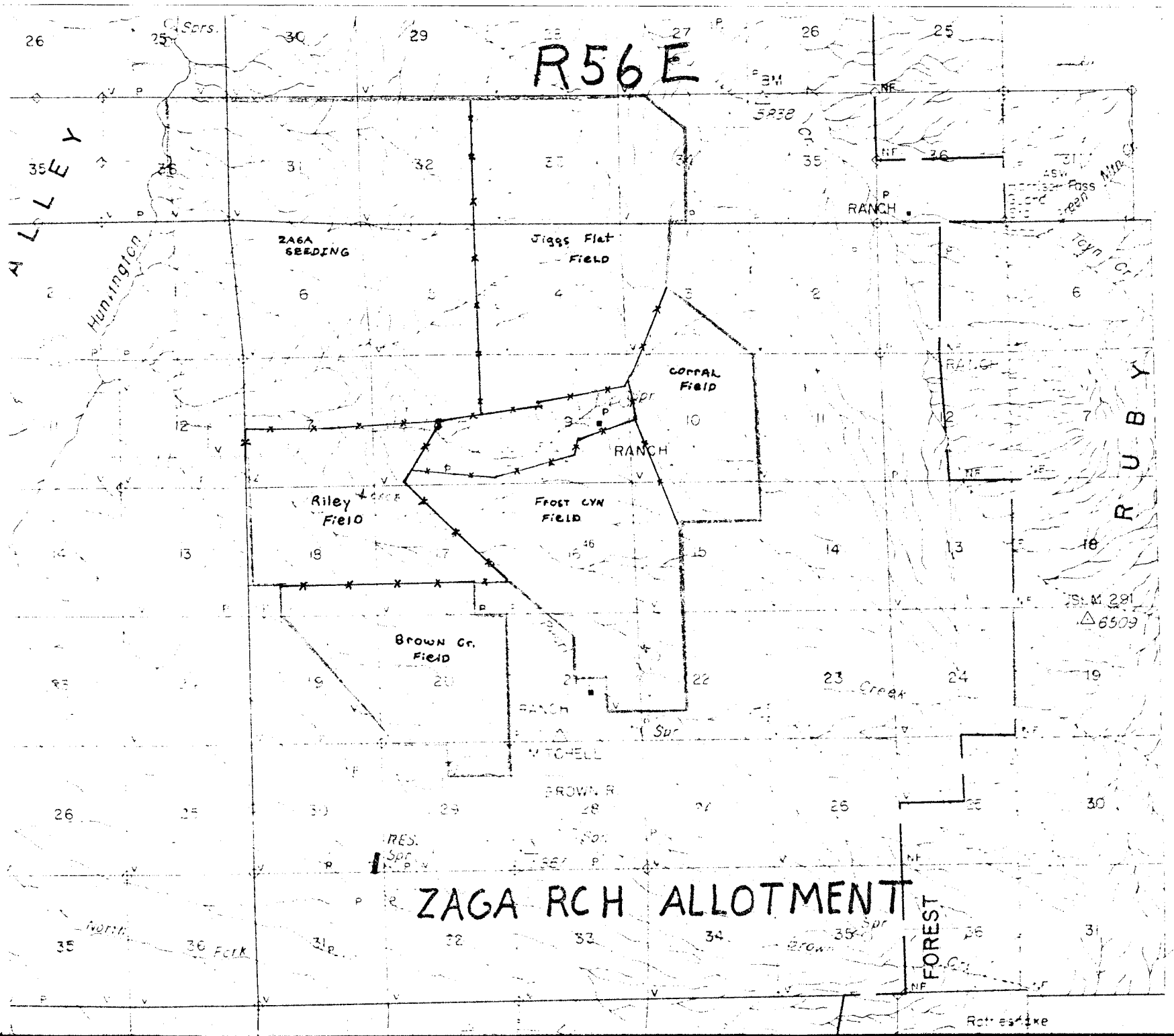
No land pattern adjustments are neccesary in the allotment. As the Federal land in the allotment is non-agricultural in nature and its highest and best use is grazing it should be classified for retention under B. L. M. administration.

Coordinated Planning

The S. C. S. is in the process of making a ranch plan for Zaga Ranches. The Forest Service has completed their allotment analysis on the Forest Allotment that Zaga Ranches uses.

As the S. C. S. ranch plan is completed and the Forest Service Allotment Plan is completed they will be incorporated into this file to make a total ranch and range plan for the Zaga Ranches operation.

Copies of this management plan will be given to Zaga Ranches, S. C. S., and Forest Service for inclusion into their respective plans.


R56E
T. 28 N.
2,040,000
2,020,000
ZAGA RCH ALLOTMENT
ZAGA SEEDING
Jiggs Flat Field
CORRAL Field
Riley Field
FROST CYN Field
Brown Cr. Field
RANCH
Huntington
Sors.
Spr
Creek
FOREST

Zaga Allotment - cattle

Pastures	Acreage ✓			AUMs Use
	Native	Reseeded	Total	1965
Zaga Seeding	2660	1000	3660	Rest
Jiggs Flat	2500		2500	304
Corral Field		960	960	279
Brown Creek	280	1000	1280	600
Riley	500	1020	1520	408
Frost Canyon	210	1320	1530	427
	6150	5300	11,450	2018

1965 Use — 195 AUs May 1-30 Then to national forest
330 AUs April 6 - Oct 30 - in 6 fields

✓ Crested wheat grass