

**Rangeland Health Standards
Assessment**

Alkali Winter Allotment #1001

South Butte Valley Allotment #1073

Standards for Rangeland Health and Guidelines for Livestock Grazing Management (BLM, 1997)

Introduction

The Range Reform '94 Record of Decision (BLM, 1995a) recently amended current grazing administration and management practices. The ROD required that region-specific standards and guidelines be developed and approved by the Secretary of the Interior. In the State of Oregon, several Resource Advisory Councils (RACs) were established to develop these regional standards and guidelines. The RAC established for the part of the state covering the allotments listed above is the Southeastern Oregon RAC. These standards and guidelines for Oregon and Washington were finalized on August 12, 1997 and include:

Standard 1 - Upland Watershed Function

Upland soils exhibit infiltration and permeability rates, moisture storage, and stability that are appropriate to soil, climate, and landform.

Standard 2 - Riparian/Wetland Watershed Function

Riparian-wetland areas are in properly functioning physical condition appropriate to soil, climate, and landform.

Standard 3 - Ecological Processes

Healthy, productive, and diverse plant and animal populations and communities appropriate to soil, climate, and landform are supported by ecological processes of nutrient cycling, energy flow, and the hydrologic cycle.

Standard 4 - Water Quality

Surface water and groundwater quality, influenced by agency actions, complies with State water quality standards.

Standard 5 - Native, T&E, and Locally Important Species

Habitats support healthy, productive, and diverse populations and communities of native plants and animals (including special status species and species of local importance) appropriate to soil, climate, and landform.

Allotment Overview

Alkali Winter Allotment #1001

Location: See Attached Map

7.5 Minute Topographic Maps: Goodrich Well, Locust Butte, Little Juniper Mountain, Venator

Canyon, Alkali Buttes, Poverty Basin North, Poverty Basin South, Alkali Lake, Big Juniper Mtn.

AUMs of Authorized Use: 6,223

Permitted Season: Winter

Grazing System: Winter 11/1-2/28

The Alkali Winter Allotment is located approximately 60 miles north of Lakeview, Oregon. Land status within the allotment is 83,860 acres of public land.

The allotment is categorized as an M= Maintain, based on the **1982** rating form summarized as follows:

- Range condition is satisfactory.
- Forage production potential is moderate to high and present production is near potential and/or low to moderate.
- Limited conflicts or controversy may exist.
- Opportunity may exist for positive economic returns.
- Present management is satisfactory.
- Vegetative trend is affected mostly by climate.

Allotment Overview

South Butte Valley Allotment #1073

Location: See Attached Map

7.5 Minute Topographic Maps: Goodrich Well, Locust Butte

AUMs of Authorized Use: 900

Permitted Season: Spring, Winter

Grazing System: Winter, early Spring 11/1-4/15

The South Butte Valley Allotment is located approximately 70 miles north of Lakeview, Oregon. Land status within the allotment is 3,710 acres of public land.

The allotment is categorized as an M=Maintain, based on the **1982** rating sheet summarized as follows:

- Range condition is satisfactory.
- Forage production potential is moderate to high and present production is near potential.
- Limited conflicts or controversy may exist.
- Opportunity may exist for positive economic returns.
- Present management is satisfactory.

STANDARD 1 - Upland Watershed -Upland soils exhibit infiltration and permeability rates, moisture storage, and stability that are appropriate to soil, climate, and landform.

Standard 1 is being met.

A.) Soil Surface Factor (SSF) is an indicator used to evaluate Standard 1.

SSF documents erosion class and soil susceptibility to accelerated erosion determined by the Ecological Site Inventory (ESI) from 1993, 1995, and 1996. See table below for summary.

Alkali Winter #1001: 33% of the allotment is in the moderate category which indicates some active erosion and evidence of past erosion in this allotment. These are areas with sandy soils which are susceptible to wind and water erosion. Grazing in the #1001 Allotment occurs in the winter with each pasture grazed every year.

South Butte Valley #1073: with 69% of the allotment is in the slight category, wind and water erosion does not seem to be a major factor in this allotment. Grazing in the #1073 Allotment occurs primarily in the winter and early spring with each pasture grazed every year.

The winter grazing systems in #1001 and #1073 are designed to maintain healthy perennial vegetative communities by grazing the vegetation during the dormant period and allowing rest during the plants' growing season. The root systems of perennial vegetation assist in holding soil in place. Perennial vegetation provides protective cover to reduce soil movement, decrease compaction and thus increase infiltration.

ESI EROSION CONDITION CLASSES*					
1993, 1995, 1996					
	Stable	Slight	Moderate	Critical	Unknown**
#1001 Acres	0	26,901	29,293	3,646	27,730
Percent of Allotment	0	31%	33%	4%	32%
#1073 Acres	547	2547	76	108	440
Percent of Allotment	15%	69%	2%	2%	12%

** The erosion condition classes are based on a numeric scoring system which considers soil movement, surface litter, surface rock, pedestalling, flow patterns, rills and gullies.*

*** The SSF scores are derived from actual transects and an actual transect was not done in every Site Write-up Area (SWA) but only in enough SWAs to represent the different vegetation types. Therefore, the unknown acres result from SWAs referred to as "same as", which are areas with similar vegetation, soils, and conditions to a SWA with an actual transect.*

B.) Another indicator used to evaluate Standard 1 is plant composition and community structure. Species composition in the Alkali Winter and South Butte Valley Allotments

(#1001, #1073) includes a variety of native deep rooted species: basin wildrye, Indian ricegrass, and greasewood in sandy soils, large crested wheatgrass seedings throughout the allotments, and bottlebrush squirreltail and bluebunch wheatgrass on steeper slopes. These species provide adequate cover to assist in properly functioning soils. Tables 1 and 2 (attached) give more specific plant communities and acreages within these allotments.

In the Alkali Winter Allotment (#1001), hoary cress or white top is present around the troughs below the Poor Jug Well. Plans to relocate the troughs would minimize disturbance around the well and reduce the risk of further weed spread. This hoary cress site is currently under treatment and confined to the disturbed area around the troughs. No noxious weeds are known to occur in the South Butte Valley Allotment (#1073).

The ESI compares the current plant composition to a defined Potential Natural Plant Community for the identified soil type and precipitation zone. Using the 1993, 1995, and 1996 ESI, the percent of public land in each allotment in each seral stage is summarized in the table below.

Ecological Condition of Alkali Winter and South Butte Valley Allotments (#1001, #1073) as determined by the ESI from 1993, 1995, and 1996:

ESI ECOLOGICAL CONDITION CLASSES				
	Early	Mid	Late	Climax
#1001 Acres	15,881	28,861	13,938	1,160
Percent of Vegetation (59,840 acres)	27%	48%	23%	2%
#1073 Acres	1639	1612	27	0
Percent of Vegetation (3,278 acres)	50%	49%	1%	0

Alkali Winter #1001 and South Butte Valley #1073): The crested wheatgrass seedings and cheatgrass stands mixed with other species are generally in the early seral stage. The sagebrush types with perennial grass understory are generally in the mid and late seral stages, appear stable, and are not impacted significantly by the current grazing management. The remaining acreages in the climax class are crested wheatgrass seedings that are in excellent condition and appear stable.

The current winter and early spring grazing does not impact this sagebrush type and the utilization of the cheatgrass when it is young and green may actually reduce cheatgrass production.

STANDARD 2 - Riparian/Wetland-Riparian-wetland areas are in properly functioning physical condition appropriate to soil, climate, and landform.

Standard 2 does not apply to these allotments (#1001, #1073). There are no intermittent or perennial streams or wetland areas within the allotment boundaries.

STANDARD 3 -Ecological Processes-Healthy, productive, and diverse plant and animal populations and communities appropriate to soil, climate, and landform are supported by ecological processes of nutrient cycling, energy flow, and hydrologic cycle.

Standard 3 is being met. Following are observations from the interdisciplinary team about the current plant communities for the following allotments:

Alkali Winter #1001: There are no obvious signs of livestock overuse or damage and the ground is mostly undisturbed in the areas of the allotment surveyed. There is a lot of shrub cover and forb diversity ranges from low to high depending on soil type and location. There are biological soil crusts in large quantities. See Standard 5 for native species present. The primary shrubs in the ash-sandy soils are *Sarcobatus vermiculatus* and young *Chrysothamnus viscidiflorus*. There are some stands of older *Artemisia tridentata*. The primary grass in one particular area is *Elymus cinereus*, whereas in another area it is made up of sparse *Elymus elymoides*. Hilltops and upper elevation areas possess the greatest plant diversity, including grasses, forbs, and shrubs. Introduced plants include *Agropyron cristatum*, *Bromus tectorum*, *Lepidium perfoliatum*, *Ranunculus testiculatus*, *Sisymbrium altissimum*, *Salsola kali*, and *Cardaria draba*.

South Butte Valley #1073:

The livestock use appears satisfactory. Most of the area is an *Agropyron cristatum* (crested wheat) seeding. The crested wheat plants are healthy but these areas are also full of *Bromus tectorum*. Livestock use when cheatgrass are greening up may be helpful in reducing cheatgrass populations.

The other plant communities appear healthy and productive with a wide variety of plants present. Plant community composition and diversity are listed in Standard 5. Other introduced plants include *Kochia scoparia*, *Lepidium perfoliatum*, *Ranunculus testiculatus*, *Salsola kali*, *Sisymbrium altissimum*, and *Thlaspi arvense*. These occur in disturbed areas.

The Observed Apparent Trend (OAT) for the vegetation communities on public land was determined by the ESI (1993, 1995, & 1996) and is summarized in the table below. The vegetation types making up the portion of the allotments with a downward trend include portions of the cheatgrass and greasewood vegetation types. The large amount of unknown acreage includes rock outcroppings and is the result of the survey procedure, where the actual transect representing a vegetation type was run on a different pasture or allotment and the OAT score can not be accurately transferred.

ESI OBSERVED APPARENT TREND*				
1993, 1995, 1996				
	Downward	Static	Upward	Unknown**
#1001 Acres	14,104	32,217	13,519	27,730
Percent of Allotment	16% See note below	37%	15%	32%
#1073 Acres	1,455	1,276	547	440
Percent of Allotment	39% See note below	34%	15%	12%

* The Observed Apparent Trend (OAT) is a numerical rating which considers vigor, seedlings, surface litter, pedestals and gullies to estimate the trend of a particular site and SWA.

** The OAT is determined from a transect and in the unknown acres the transect for that vegetation type was run on a different allotment and the OAT would not necessary represent this allotment.

The OAT ‘Downward’ column above represents observations by ESI surveyors. It is the professional opinion of the BLM range managers for the #1001 and #1073 allotments that the information gathered in 2000 and 2001 from the permanent BLM trend plot studies presents a more accurate account of the status of the ecological processes:

#1001: Readings from trend plot studies: 13 plots total

5 out of 13 plots =UPWARD

8 out of 13 plots = STATIC

#1073: Readings from trend plot studies: 2 plots total

2 out of 2 plots = STATIC

STANDARD 4 - Water Quality Standards- Surface water and groundwater quality, influenced by agency actions, complies with State water quality standards.

Standard 4 is not applicable to these allotments (#1001, #1073). There are no perennial or intermittent streams in the area.

STANDARD 5 - Biological Diversity-Habitats support healthy, productive, and diverse populations and communities of native plants and animals (including special status species and species of local importance) appropriate to soil, climate, and landform.

Standard 5 is being met for native plant and animal species.

Alkali Winter Allotment (#1001): Native Plant Species: Alyssum alyssoides, Amsinckia sp., Arabis sp., Artemesia arbuscula, Artemesia tridentata, Astragalus sp., Atriplex

canescens, *Atriplex spinosa*, *Carex* sp., *Chaenactis douglasii*, *Chenopodium album*, *Chenopodium* sp., *Chrysothamnus viscidiflorus*, *Crypthantha* sp., *Collinsia parviflora*, *Delphinium* sp., *Descurainia* sp., *Distichlis spicata* var. *stricta*, *Elymus cinereus*, *Elymus elymoides*, *Epilobium* sp., *Eriogonum vimineum*, *Gayophytum* sp., *Holosteum umbellatum*, *Juncus* sp., *Lactuca serriola*, *Lomatium* sp., *Lupinus* sp., *Microsteris gracilis*, *Oryzopsis hymenoides*, *Penstemon* sp., *Poa secunda*, *Poa* sp., *Phlox* sp., *Polygonum* sp., *Rumex crispus*, *Sarcobatus vermiculatus*, *Stellaria* sp., mosses, and biological soil crusts.

Special Status Plants: There are no sensitive plant species in the #1001 allotment.

Locally Important Plant Species: There are no specific cultural plants in the #1001 allotment.

South Butte Valley Allotment (#1001): Native Plant Species: *Alyssum alyssoides*, *Antennaria dimorpha*, *Artemisia spinosa*, *Artemisia tridentata*, *Astragalus* sp., *Atriplex spinosa*, *Brassicaceae* spp. (2), *Chrysothamnus viscidiflorus*, *Crepis* sp., *Crypthana* sp., *Cymopterus corrugatus*, *Descurainia* sp., *Delphinium* sp., *Elymus cinereus*, *Epilobium* sp., *Ericameria nauseosus*, *Eriogonum ovalifolium*, *Eriogonum* sp. (annual), *Fritillaria pudica*, *Leptodactylon pungens*, *Microsteris gracilis*, *Sitanion hystrix*, *Camassonia tanacetifolia*, *Chenopodium* sp., *Cryptantha celosioides*, *Kochia scoparia*, *Lepidium perfoliatum*, *Lupinus* sp., *Mimulus* sp., *Oryzopsis hymenoides*, *Poa bulbosa*, *Poa secunda* (few), *Ranunculus glabberimus* var. *ellipticus*, *Ranunculus testiculatus*, *Sarcobatus vermiculatus*, *Sisymbrium altissimum*, *Sitanion hystrix*, *Stellaria* sp., *Stipa thurberiana*, *Thlaspi arvense*, as well as puffball mushrooms and crustose lichens.

Special Status Plants: No special status species are known in the #1073 allotment.

Locally Important Plant Species: No cultural plants are known in the #1073 allotment.

Special Status Wildlife Species:

Alkali Winter Allotment (#1001): Special status wildlife species or their habitats that are present within the Alkali Winter Allotment (#1001) include the bald eagle (*Haliaeetus leucocephalus*), ferruginous hawk (*Buteo regalis*), peregrine falcon (*Falco peregrinus*), burrowing owl (*Speotyto cunicularia*), and pygmy rabbit (*Brachylagus idahoensis*).

There are also four species with high public interest. These are sage-grouse (*Centrocercus urophasianus*), mule deer (*Odocoileus hemionus*), California bighorn sheep (*Ovis canadensis*) and pronghorn antelope (*Antilocapra americana*).

No nesting habitat exists within this allotment for the bald eagle. It is suspected that they are occasional visitors to the area. Nesting habitat is available for peregrine falcons on the cliff faces to the east. This site was surveyed for peregrine falcon nests in 1999, but none were located. No incidental sightings of peregrines exist within the vicinity of this allotment. There are no good foraging areas within close proximity of this allotment. Bald eagle foraging does occur within the allotment, however it is probably restricted mostly to road killed deer adjacent to the major roadways and occasional carrion scattered through the allotments. There are no resource conflicts for peregrine falcons or

bald eagles.

Habitat is present for ferruginous hawk, burrowing owl and pygmy rabbits, but locations for these species are not known in this allotment. Inventories were conducted for burrowing owls throughout this allotment, but none were located. Occasional sightings occur within the allotment. No specific inventories have been conducted to date for ferruginous hawks and pygmy rabbits within this allotment, however there are sightings within the surrounding area and they are suspected to occur within the allotment. There are no resource conflicts for these species.

Some mule deer winter range occurs along the eastern edge of the allotment. No conflicts exist between mule deer and cattle grazing within this allotment. Bitterbrush is not very abundant and sagebrush browse use appears to be somewhat stable at this time.

Bighorn sheep also inhabit the eastern edge of the allotment. There is little overlap in range between bighorns and cattle within this allotment. No conflicts exist between bighorn sheep and cattle grazing within this allotment.

Pronghorn antelope occur on the western edge and in the extreme southern portion of this allotment. Use for this species is concentrated here due to the lack of tall shrubs. Much of this area was re-seeded to crested wheatgrass after a wildfire. No major conflicts exist between pronghorn and cattle grazing within this area.

There are no known sage-grouse lek sites within the allotment. It is suspected that sage-grouse do use portions of the allotment. Sage-grouse habitats within the allotment contains approximately 4% (3,400 acres) of suitable nesting habitats. Suitable brood rearing habitats make up 18% (15,700 acres) and suitable winter habitats 15% (13,000 acres). The other 63% (54,800 acres) of the allotment contains areas that are considered non-suitable for sage-grouse. This is primarily due to salt desert shrub communities that occur throughout the allotment. No major conflicts exist between cattle grazing and sage-grouse within this allotment at this time.

South Butte Valley Allotment (#1073): Special status wildlife species or their habitats that are present within this allotment include the bald eagle (*Haliaeetus leucocephalus*), ferruginous hawk (*Buteo regalis*), peregrine falcon (*Falco peregrinus*), burrowing owl (*Speotyto cunicularia*), and pygmy rabbit (*Brachylagus idahoensis*). There are also two species with high public interest. These are sage-grouse (*Centrocercus urophasianus*) and pronghorn antelope (*Antilocapra americana*).

No nesting habitat exists within this allotment for the bald eagle or peregrine falcon. It is suspected that they are occasional visitors to the area. No incidental sightings of peregrines exist within the vicinity of this allotment. There are no good foraging areas for peregrines within close proximity of this allotment. Bald eagle foraging may occur within the allotment, however it is probably restricted to occasional carrion scattered through the allotments. There are no resource conflicts for peregrine falcons or bald eagles.

Habitat is present for ferruginous hawk, burrowing owl and pygmy rabbits, but locations for these species are not known in the allotment. Inventories were conducted for burrowing owls throughout this allotment, but none were located. No specific inventories have been conducted to date for ferruginous hawks and pygmy rabbits within this allotment, however there are sightings within the surrounding area and they are suspected to occur within the allotment. There are no resource conflicts for these species.

Pronghorn antelope occur throughout this allotment. Use for this species is concentrated here due to the lack of tall shrubs and because much of this area was re-seeded to crested wheatgrass after the wildfire. No major conflicts exist between pronghorn and cattle grazing within this area.

There are no known sage-grouse lek sites within the allotment. It is suspected that sage-grouse do use portions of the allotment. Sage-grouse habitats within the allotment contains approximately 6% (238 acres) of suitable nesting habitats. Suitable brood rearing habitats make up 21% (866 acres) and suitable winter habitats 14% (545 acres). The other 58% (2325 acres) of the allotment contains areas that are considered non-suitable for sage-grouse. This is primarily due to past wildfires and re-seeding of crested wheatgrass after the burns. No major conflicts exist between cattle grazing and sage-grouse within this allotment at this time.

Standard 5 is being met for wildlife species within the #1001 and #1073 Allotments.

The occurrence of old wildfires and the current crested wheatgrass seedings along with the invasion of exotic plants has made much of the area unuseable for sage grouse. Pronghorn antelope get much use out of this area and will continue to use it as long as big sagebrush or other tall shrubs do not re-establish. Intensive efforts could be undertaken in an attempt to restore sagebrush within these crested wheatgrass seedings, however, the success or failure of this type of project is unknown at this time.

Current Management and Recent Management Changes

Current livestock management described in the allotment overviews and in Standard 1 is satisfactory and changes are not recommended.

Team Members

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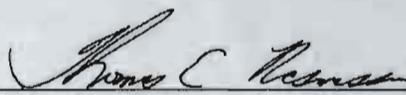
Title

Rangeland Management Specialist
Wildlife Biologist
Botanist
Botanist
Noxious Weeds
Supervisory RMS
Supervisory NRS

Determination

- Existing grazing management practices or levels of grazing use on the Alkali Winter #1001 and South Butte Valley #1073 Allotments promote achievement of significant progress towards the Oregon Standards and Guidelines for Rangeland Health and conform with the Guidelines for Livestock Grazing Management.

- Existing grazing management practices or levels of grazing use on the Alkali Winter #1001 and South Butte Valley #1073 Allotments will require modification or change prior to the next grazing season to promote achievement of the Oregon Standards and Guidelines for Rangeland Health and conform with the Guidelines for Livestock Grazing Management.



Lakeview Resource Area Manager

9/21/03
Date

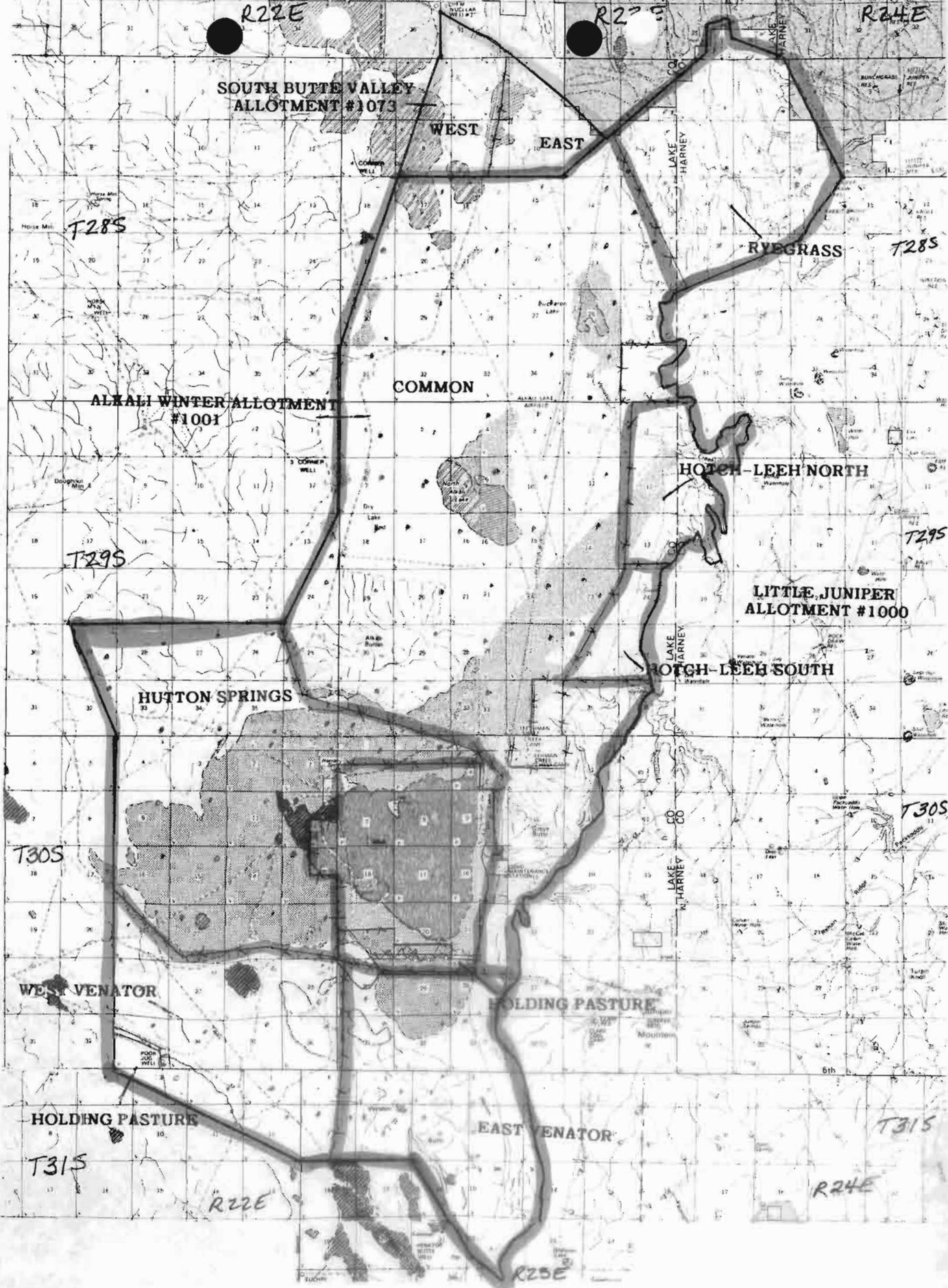
Table 1.
VEGETATION TYPES IN ALKALI WINTER ALLOTMENT #1001

VEGETATION TYPE	ACRES	% of Allot.
Grasses		
AGCR Crested wheatgrass	2,233	3%
AGSP Bluebunch wheatgrass	154	<1%
BRTE Cheatgrass	758	<1%
Grasses TOTAL	3,145	4%
Shrubs		
ARTRT Basin big sagebrush	1,032	1%
ARTRW Wyoming big sagebrush	1,861	2%
SAVE Greasewood	1,005	1%
Shrubs TOTAL	3,898	4%
Shrubs/Grasses		
Sagebrush/Grass mix		
ARAR-AGSP Low sagebrush/bluebunch wheatgrass	173	<1%
ARAR-FEID Low sagebrush/Idaho fescue	28	<1%
ARAR-STTH Low sagebrush/Thurber's needlegrass	15	<1%
Low Sagebrush/grass mix TOTAL	216	<1%
ARTRT-AGCR Basin big sagebrush/crested wheatgrass	78	<1%
ARTRT-AGSP Basin big sagebrush/bluebunch wheatgrass	143	<1%
ARTRT-BRTE Basin big sagebrush/cheatgrass	2,078	2%
ARTRT-ELEL Basin big sagebrush/bottlebrush squirreltail	1,750	2%
ARTRT-LECI Basin big sagebrush/basin wildrye	2,663	3%
ARTRT-LETR Basin big sagebrush/creeping wildrye	129	<1%
ARTRT-POSE Basin big sagebrush/Sandberg's bluegrass	452	<1%
ARTRT-STCO Basin big sagebrush/needle and thread grass	330	<1%
ARTRT-STTH Basin big sagebrush/Thurber's needlegrass	54	<1%
Basin Big Sagebrush/grass mix TOTAL	7,677	9%
ARTRV-AGSP Mountain big sagebrush/bluebunch wheatgrass	160	<1%
ARTRV-FEID Mountain big sagebrush/Idaho fescue	9	<1%
Mountain Big Sagebrush/grass mix TOTAL	169	<1%
ARTRW-AGSP Wyoming big sagebrush/bluebunch wheatgrass	706	<1%
ARTRW-BRTE Wyoming big sagebrush/cheatgrass	1,331	2%
ARTRW-ELEL Wyoming big sagebrush/bottlebrush squirreltail	62	<1%
ARTRW-FEID Wyoming big sagebrush/Idaho fescue	316	<1%
ARTRW-STTH Wyoming big sagebrush/Thurber's needlegrass	490	<1%
ARTRW-STCO Wyoming big sagebrush/needle and thread	68	<1%

grass		
Wyoming Big Sagebrush/grass mix TOTAL	2,973	3%
Sagebrush/Grass mix TOTAL	11,035	13%
Rabbitbrush/Grass mix		
CHNA-AGCR Gray rabbitbrush/crested wheatgrass	3	<1%
CHNA-DISPS Gray rabbitbrush/inland saltgrass	596	<1%
CHNA-LECI Gray rabbitbrush/basin wildrye	1,949	2%
CHNA-STCO Gray rabbitbrush/needle and thread grass	91	<1%
CHNA-STTH Gray rabbitbrush/ Thurber's needlegrass	52	<1%
CHVI-AGCR Green rabbitbrush/crested wheatgrass	137	<1%
CHVI-AGSP Green rabbitbrush/bluebunch wheatgrass	294	<1%
CHVI-BRTE Green rabbitbrush/cheatgrass	1,117	1%
CHVI-LECI Green rabbitbrush/basin wildrye	1,742	2%
CHVI-LETR Green rabbitbrush/creeping wildrye	133	<1%
CHVI-ORHY Green rabbitbrush/Indian ricegrass	764	<1%
CHVI-STCO Green rabbitbrush/needle and thread grass	40	<1%
Rabbitbrush/Grass mix TOTAL	6,918	8%
Greasewood/Grass mix		
SAVE-AGCR Greasewood/crested wheatgrass	11,490	13%
SAVE-BRTE Greasewood/cheatgrass	3,400	4%
SAVE-DISPS Greasewood/inland saltgrass	876	<1%
SAVE-ELEL Greasewood/bottlebrush squirreltail	9,414	11%
SAVE-LECI Greasewood/basin wildrye	9,441	11%
SAVE-ORHY Greasewood/Indian ricegrass	93	<1%
Greasewood/Grass Mix TOTAL	34,714	40%
All Shrub/Grass Mixes TOTAL	52,667	60%
Trees		
JUOC-ARTRT-STCO Western juniper/basin big sagebrush/needle and thread grass	130	<1%
Trees TOTAL	130	<1%
TOTAL VEGETATION	59,840	68%
Unknown	27,730	32%

Table 2.
VEGETATION TYPES IN SOUTH BUTTE VALLEY ALLOTMENT #1073

Vegetation Type	Acres	Percent of Allotment
Grasses		
AGCR-DESCU Crested wheatgrass/tansy mustard	44	1%
Grasses TOTAL	44	1%
Shrubs/Grasses		
Sagebrush/Grass mix		
ARTRT-BRTE Basin big sagebrush/cheatgrass	643	17%
ARTRT-ELEL Basin big sagebrush/bottlebrush squirreltail	601	16%
ARTRT-LETR Basin big sagebrush/creeping wildrye	18	<1%
ARTRT-LECI Basin big sagebrush/basin wildrye	32	<1%
Basin Big Sagebrush/grass mix TOTAL	1,294	34%
Rabbitbrush/Grass mix		
CHNA-ELEL gray rabbitbrush/bottlebrush squirreltail	156	4%
CHNA-LECI gray rabbitbrush/basin wildrye	3	<1%
CHVI-AGCR green rabbitbrush/crested wheatgrass	1299	35%
CHVI-ORHY green rabbitbrush/Indian rice grass	39	<1%
Rabbitbrush/Grass mix TOTAL	1,497	66%
Greasewood/Grass mix		
SAVE-AGCR Greasewood/crested wheatgrass	61	1%
SAVE-BRTE Greasewood/cheatgrass	257	7%
SAVE-ELEL Greasewood/bottlebrush squirreltail	99	3%
SAVE-LETR Greasewood/creeping wildrye	26	<1%
Greasewood/Grass mix TOTAL	443	12%
Shrub/Grasses TOTAL	3,234	87%
TOTAL VEGETATION	3,278	88%
Unknown	432	12%



**SOUTH BUTTE VALLEY
ALLOTMENT #1073**

WEST EAST

T285

RYEGRASS

T285

**ALKALI WINTER ALLOTMENT
#1001**

COMMON

T295

HUTCH-LEECH NORTH

T295

**LITTLE JUNIPER
ALLOTMENT #1000**

HUTTON SPRINGS

HUTCH-LEECH SOUTH

T305

T305

WEST VENATOR

HOLDING PASTURE

HOLDING PASTURE

EAST VENATOR

T315

T315

R22E

R24E

R22E