

## United States Department of the Interior

## BUREAU OF LAND MANAGEMENT RIDGECREST RESOURCE AREA

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(CA-065.32)

C/O Mrs. Dawn Lappin Wild Horse Organized Assistance P.O. Box 535 Reno, NV 89505 AUG 1 9 1991

Dear Mrs. Lappin:

Enclosed is a copy of the Draft Oasis Ranch and White Sage Allotment Management Plan (AMP). Any comments you wish to make concerning this document, please send to our office no later than September 20, 1991.

Please contact Dave Sjaastad, Supervisory Range Conservationist, at this office if you have any questions concerning these matters.

Sincerely,

Ineg Thomsen

Lee Delaney

Acting/Area Manager

Enclosures - 1

1. Draft Oasis Ranch and White Sage AMP.

# OASIS RANCH & WHITE SAGE ALLOTMENT MANAGEMENT PLAN

# DRAFT

U.S. DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT CALIFORNIA DESERT DISTRICT RIDGECREST RESOURCE AREA

U.S. DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT BATTLE MOUNTAIN DISTRICT TONOPAH RESOURCE AREA

AUGUST 16, 1991

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#### I. INTRODUCTION

#### A. General Information

This document is an Allotment Management Plan (AMP) for the Oasis Ranch and White Sage Allotments. The need for the plan is identified in the California Desert Conservation Area (CDCA) Plan and Environmental Impact Statement, Appendix XIII of the CDCA Plan, Esmeralda-Southern Nye Planning Area (RMP/EIS) and Record of Decision for Planning Area A, and the Desert District and Battle Mountain Rangeland Program Summaries. The AMP is intended to be dynamic to accommodate changes. The results of monitoring will be analyzed to determine if adjustments are needed and if the management system is working.

Mr. Alexis has the BLM lease for both the Oasis Ranch and White Sage Allotments. It is the intent of this AMP to coordinate the management of the Oasis Ranch and White Sage Allotments into one grazing management system. The Oasis Ranch and White Sage AMP will be a coordinated management plan which applies to livestock grazing on the public lands. This plan includes a deferred grazing system on the Oasis Ranch Allotment in coordination with a deferred system on the White Sage Allotment. The Oasis Ranch Allotment is in the Ridgecrest Resource Area of the California Desert District. No new range improvements are proposed in the Oasis Ranch Allotment and the grazing preference is proposed to stay at the current level pending periodic monitoring evaluations. The White Sage Allotment is in Nevada's Tonopah Resource Area of the Battle Mountain District. No new range improvements are proposed in the White Sage Allotment and the grazing preference is proposed to stay at the current level pending the White Sage Allotment evaluation to be completed in 1992, in accordance with the Bureau's Rangeland Monitoring and Evaluation process which could change the grazing preference.

#### B. Summary of Issues

#### 1. Vegetation

- a. Livestock distribution and season of use within the two allotments should improve range condition and trend around watering areas and increase the production of vegetation community diversity.
- b. The 1980 CDCA Plan and Esmeralda-Southern Nye RMP rated the Oasis Ranch and White Sage Allotments in mid to late seral (Good Condition). The goals stated within these Plans are to maintain in good condition.

#### 2. Wildlife

#### a. Mule Deer

Approximately 20-30 mule deer reside in the Piper Mountain area. Also, an unknown number of deer migrate to the area from the White Mountains during the winter and spring. Deer water regularly at Cottonwood Creek. Objectives are to maintain key forage species in the area during winter and spring, and to maintain hiding cover in Cottonwood Creek.

#### b. Bighorn Sheep

In the future, BLM and California Department of Fish and Game may reintroduce bighorn sheep into the Soldier Pass area. Sheep could eventually occupy mountainous habitat from the Piper Mountain area to the Inyo Mountains. The objective is to maintain key habitat within potential bighorn range.

#### c. Paiute Cutthroat Trout

Paiute Cutthroat Trout occupy the upper watershed of Cottonwood Creek above the Oasis Ranch Allotment. Although this species is not a major issue for this allotment, the proposed management strategies will considered the needs and potential impacts to the present population of the Paiute Cutthroat Trout.

#### d. Recreational Fishing

Lower Cottonwood Creek is popular for recreational fishing of rainbow trout and other species. Degradation of the riparian zone and water quality would have very direct adverse impacts to the present population of trout. Thereby influencing the recreation experience.

#### 3. Cultural Resources

Facilities including but not limited to corrals and cattle chutes form the focal points of intense surface disturbance caused by hooves; such disturbance is known to cause displacement and damage to cultural material. The objective is to identify the locations of such facilities within the allotment and consider the effect their use may be having on cultural resources.

Frequently, in other parts of the Resource Area, older facilities were unknowingly located on midden deposits which has resulted in adverse effects to cultural resources.

#### 4. Wilderness Study Areas

The Oasis Ranch Allotment extends into Fish Lake Valley WSA, CDCA-102, White Mountain WSA, CDCA-103, Cottonwood Creek WSA, CDCA-104, and Piper Mountain WSA, CDCA-115 (Figure 9). Changes in grazing use and new proposed range improvements for areas within WSAs must comply with the Interim Management Policy (IMP) for Lands Under Wilderness Review and post reclamation policy.

#### · C. Physical Description

#### 1. Oasis Ranch Allotment

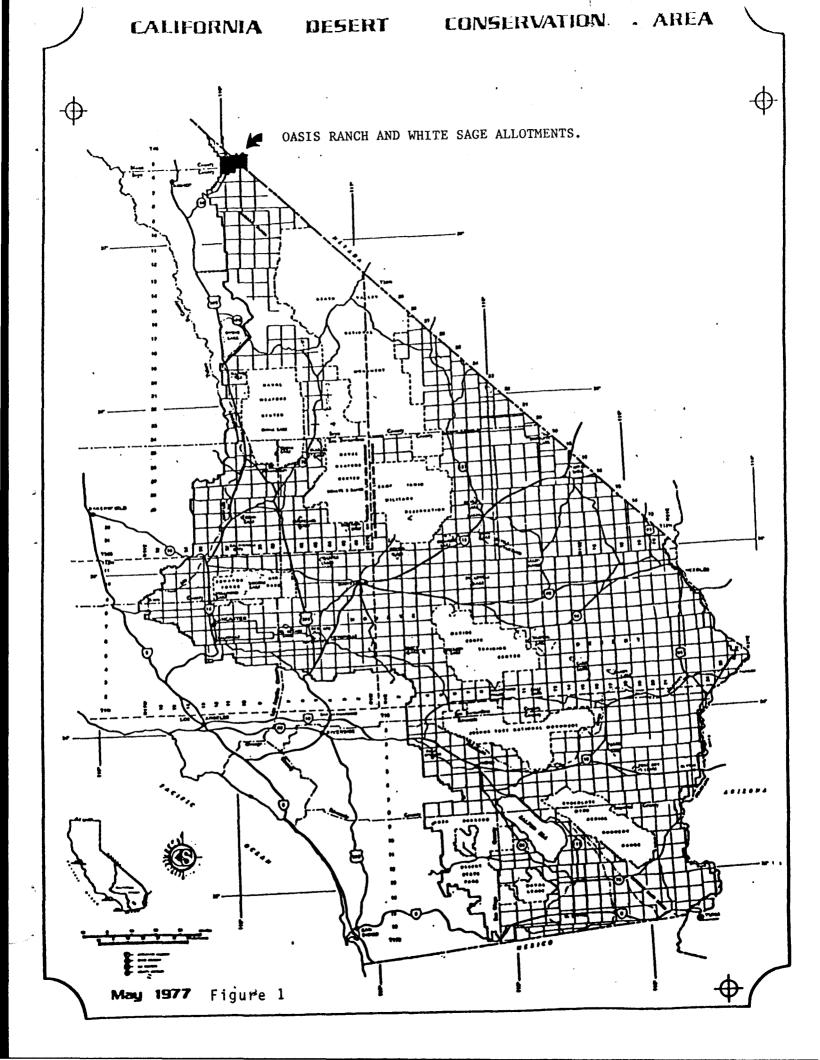
The Oasis Ranch Allotment is located in southeastern Mono County, California, 34 miles northeast of Big Pine (Figures 1 and 2). It is located on the western side of Fish Lake Valley and borders the Inyo National Forest. The eastern boundary of the allotment is the California/Nevada state line. The eastern boundary is unfenced and abuts the White Sage Allotment in the BLM Tonopah Resource Area. Most of the allotment's western boundary is not fenced and includes the eastern edge of the White Mountains. The northern and southern boundaries of the allotment are fenced.

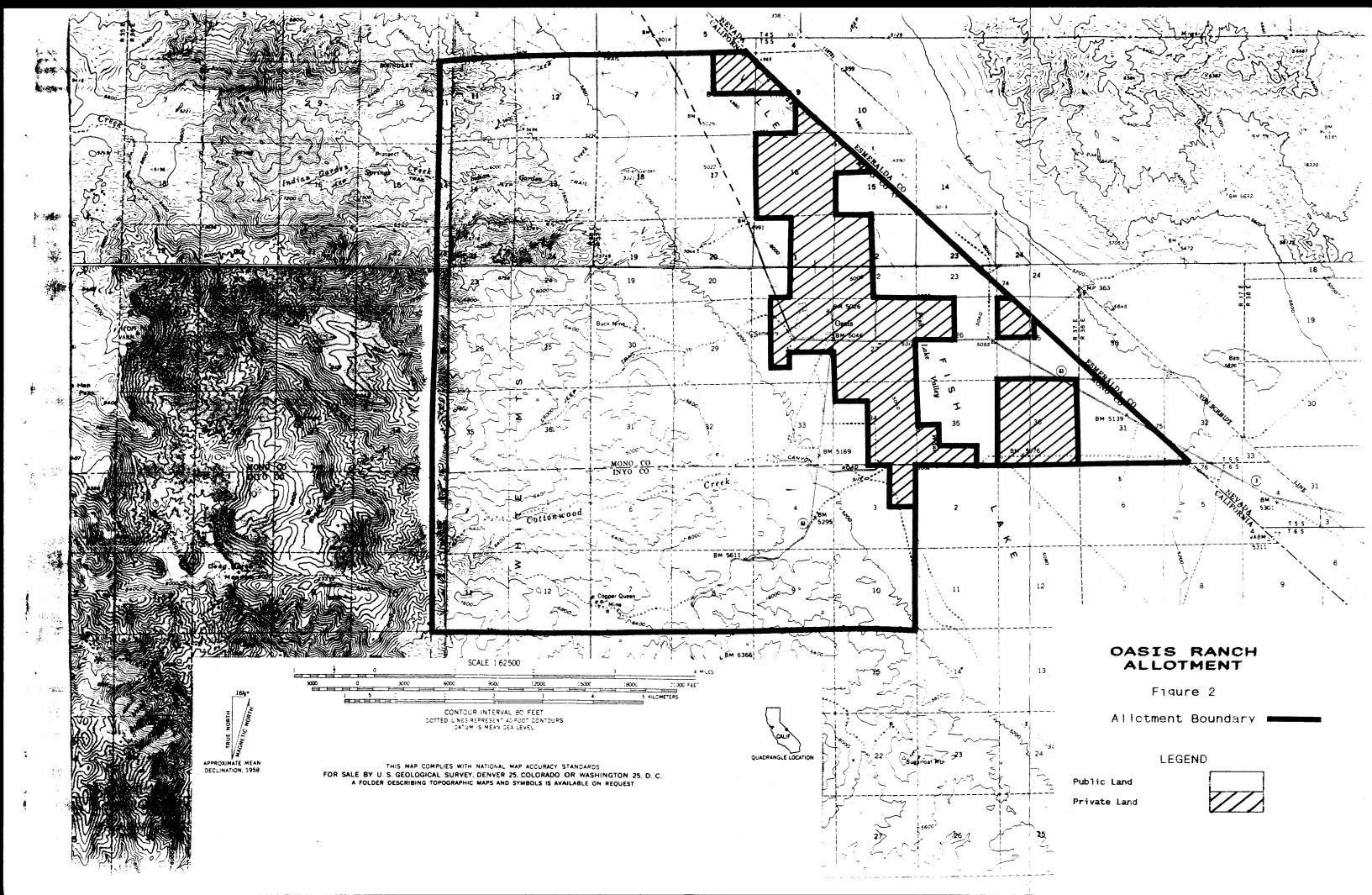
The western half of the allotment is mountainous while the eastern side, in Fish Lake Valley, is composed of alluvial fans and valley bottom. The allotment varies from 4,980 feet elevation in the Greasewood flat in Fish Lake Valley to 7,600 feet elevation just north of Cottonwood Creek. The Oasis Ranch Allotment contains approximately 24,373 acres of public land managed by the Bureau of Land Management (BLM). There are approximately 4,344 acres of private land in the allotment.

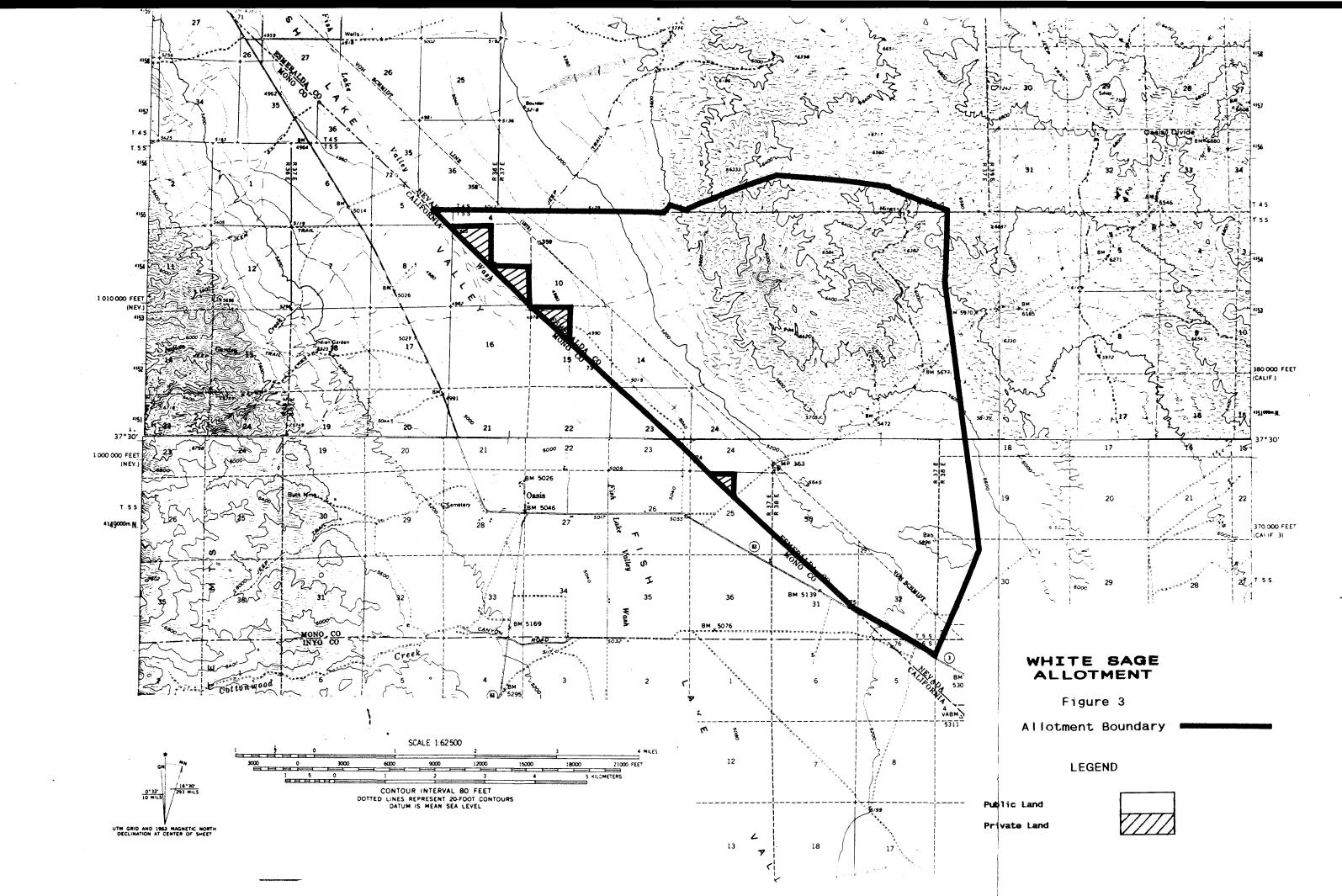
#### 2. White Sage Allotment

The White Sage Allotment is located in southwestern Esmeralda County, Nevada, 35 miles northeast of Big Pine (Figures 1 and 3). It is located on the eastern side of Fish Lake Valley. The western boundary of the allotment is the California/Nevada state line. The western boundary is unfenced and abuts the Oasis Ranch Allotment in the BLM Ridgecrest Resource Area. Most of the allotment's eastern boundary is fenced and includes the western edge of the Silver Peak Range. The northern and southern boundaries of the allotment are fenced.

The eastern half of the allotment is mountainous while the western side, in Fish Lake Valley, is composed of alluvial fans and valley bottom. The allotment varies from 4,990 feet elevation in the Greasewood flat in Fish Lake Valley to 6,584 feet elevation in the northeast. The White Sage Allotment contains approximately 10,315 acres of public land managed by the Bureau of Land Management (BLM). There are approximately 442 acres of private land in the allotment.







#### D. Climate

The closest NOAA weather station is located at Dyer, Nevada at 4,899 feet in elevation, approximately 14 miles north of the allotment. Normal precipitation for this station is 4.71 inches annually. The majority of the precipitation comes in the form of rains during the months of November through March. Part of the precipitation is in the form of snow. Summer thunderstorms are common in the area.

Temperatures generally range from 85 to 90 F. during the summer months to 0 to -20 F. in the winter. The warmest months are from June through September, and it is coolest from December through February. The station averages only 105 frost-free days per year. Winds with velocities of 40 m.p.h., and higher, are not uncommon in the area. Winds are most frequent from October to March but are common throughout the year.

#### II. LIVESTOCK USE

#### A. Historical Use

The Oasis Ranch and White Sage Allotments have been grazed for over 125 years by sheep and cattle. In 1860's, Noah T. Piper, established the Oasis Ranch in the southeastern area of Mono County. His stated purpose in coming to Mono County was to establish a ranch that would provide food for the miners in the area. He shipped his farm products to the western Nevada mining towns of Lida, Candelaria, Palmetto, Gold Point, Belmont and to eastern California mining towns as well. It is not known how many sheep and cattle used the area. When mining in the area diminished after the turn of the century, Piper sold his ranch and retired to Los Angeles (Norwood, 1980).

The lease changed hands a number of times over the years. In the 1940s, Frank and Albert Alexis bought the base property and grazed cattle on the allotment. No records of the historic use have been found. Little information is available to indicate the historic use and stocking rates on the allotment. In 1976, the base property was transferred to Albert and Katherine Alexis, who are the current lessees.

## B. Current Domestic Livestock Use

### 1. Oasis Ranch Allotment

Since Albert and Katherine Alexis acquired the lease, the annual cattle use on the Oasis Ranch Allotment has been authorized based on changes in the period of grazing which has allowed variation in the number of cattle; however, the 660 AUMs of preference have remained the same. Most of the use occurs in the lower flats in the Fish Lake Valley area on the central and eastern side of the allotment. Table 1 shows grazing use during Mr. Alexis' tenure.

Recent Grazing Use Table 1

Year	Number of Head	AUMs
1970	82 cattle	654
1971	82 cattle	654
1972	82 cattle	397
1973	75 cattle	600
1974	82 cattle	656
1975	82 cattle	656
1976	82 cattle	656
1977	82 cattle	656
1978	82 cattle	656
1979	82 cattle	656
1980	82 cattle	656
	82 cattle	656
1981	82 cattle	656
1982	82 cattle	656
1983		660
1984		660
1985	110 cattle	660
1986	110 cattle	
1987	110 cattle	660
1988	110 cattle	660
1989	110 cattle	660
1990	110 cattle	660

The CDCA Plan and the subsequent BLM decisions confirmed the perennial classification and preference of 660 AUMs in 1981 for the Oasis Ranch Allotment.

## 2. White Sage Allotment

Albert and Katherine Alexis have a ten year lease authorizing use with 100 cattle from April 1 to September 30 for a total preference of 600 AUMs. They have run full preference throughout their tenure.

#### Recent Grazing Use Table 2

Year	Number of Head	AUMS
1970	75 cattle	600
1971	75 cattle	600
1972	75 cattle	600
1973	75 cattle	600
1974	75 cattle	600
1975	75 cattle	600
1976	75 cattle	600
1977	75 cattle	600
1978	75 cattle	600
1979	75 cattle	600
1980	75 cattle	600
1981	75 cattle	600
1982	75 cattle	600
1983	75 cattle	600
1984	100 cattle	600
	100 cattle	600
1985	100 cattle	600
1986	100 cattle	600
1987	100 cattle	600
1988		600
1989		600
1990	100 cattle	000

## 3. Cattle Operation

Mr. Alexis runs a cow/calf operation with Brangus bulls and heifers. Before he releases the cattle on the public range in April, he vaccinates, brands and checks the cows for pregnancy. He normally sells his cattle by auction or individual market basis.

## 4. Rancher Long-term Goals

Mr. Alexis long-term goals for the Oasis Ranch and White Sage Allotments are as follows:

- a. Maintain a good livestock operation with a seasonal schedule.
- b. Implement a grazing system which is flexible.
- c. Be allowed to haul and rotate water sites for his operation.
- d. Have annual meetings with the BLM about the grazing schedule.

#### III. RESOURCE INFORMATION

#### A. Vegetation

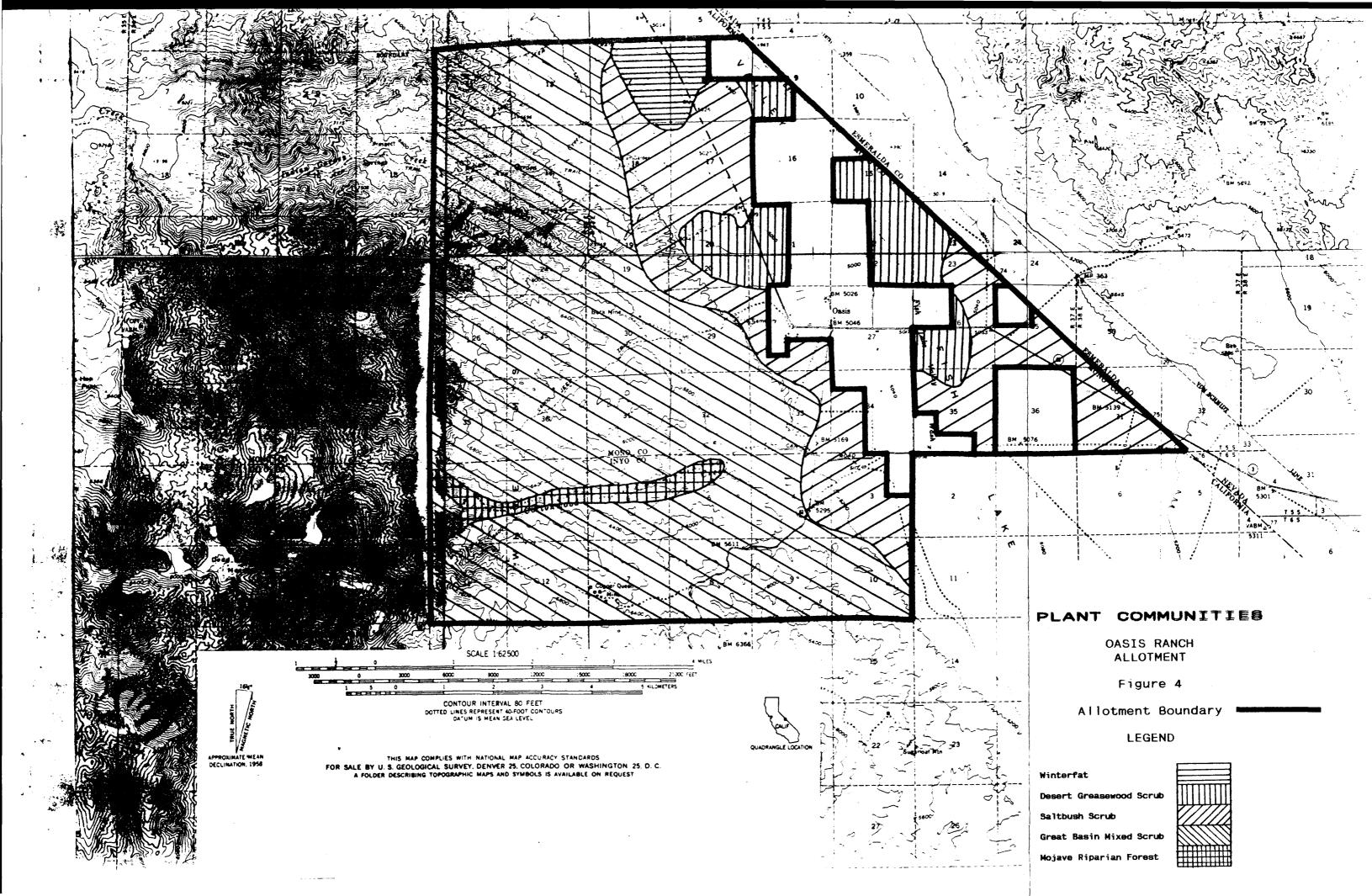
#### 1. Oasis Ranch Allotment

The vegetation in the Oasis Ranch Allotment was analyzed during the preparation of the CDCA Plan in 1980. The analysis used remote sensing data from Landsat and low altitude photography in conjunction with ground data to develop information on plant communities and actual forage production. Five major plant communities (Figure 4) have been identified in the allotment using Robert F. Holland's Preliminary Descriptions of the Terrestrial Natural Communities of California, October 1986. The Mojave Riparian Forest and the Winterfat communities have the most forage production per acre.

The vegetation in the western area of the Oasis Ranch Allotment, which includes the White Mountains, is a Great Basin Mixed Scrub community. Vegetation here includes Big Sagebrush Artemisia tridentata, Antelope Bitterbrush Purshia glandulosa, Spiny Hopsage Grayia spinosa, Four-wing saltbush Atriplex canescens, Spiny Menodora Menodora spinescens, Cooper goldenbush Haplopappus cooperi, Nevada joint Ephedra nevadensis, Indian ricegrass Oryzopsis hymenoides, Desert needlegrass Stipa speciosa and Galleta grass Hilaria jamesii. Some areas include Pinyon Pine Pinus monophylla. This mixed shrub community occupies approximately 65.0% of the allotment and produces 53.4% of the available forage.

In the north central and east, Saltbush Scrub community is the dominant plants with Winterfat Eurotia lanata, Shadscale Atriplex confertifolia, Indian ricegrass Oryzopsis hymenoides, Stickyleaved Rabbit Brush Chrysothamnus viscidiflorus and Russian thistle Salsola iberica. This Saltbush Scrub community occupies approximately 21.9% of the allotment and produces 30.7% of the available forage.

In the central area, the vegetation is dominated by the Desert Greasewood Scrub community including Shadscale Atriplex confertifolia, Four-wing saltbush Atriplex canescens, Bud Sagebrush Artemisia spinesens and Greasewood Sarcobatus vermiculatus. This plant community occupies approximately 8.4% of the allotment and produces 5.7% of the forage.



Along the Cottonwood Creek, the plant community contains a Mojave Riparian Forest. Located on the eastern part of the Oasis Ranch Allotment, it includes Fremont Cottonwood Populus fremontii, Water Birch Betula occidentalis, Willow Salix species, Big Sagebrush Artemisia tridentata, Antelope Bitterbrush Purshia glandulosa, Four-wing saltbush Atriplex canescens, Spiny hop-sage Grayia spinosa, Sticky-leaved Rabbit Brush Chrysothamnus viscidiflorus, Nevada joint Ephedra nevadensis, Indian ricegrass Oryzopsis hymenoides, Squirrel-tail Sitanion hystrix, and Desert Needlegrass Stipa speciosa. This Mojave Riparian Forest community occupies approximately 2.6% of the allotment and produces 7.1% of the available forage.

In the northeast, the vegetation is dominated by Winterfat. The vegetation includes Winterfat <u>Eurotia lanata</u>, Spiny Hopsage <u>Grayia spinosa</u>, Bud Sagebrush <u>Artemisia spinesens</u>, Indian ricegrass <u>Oryzopsis hymenoides</u>, and Desert needlegrass <u>Stipa speciosa</u>. This Winterfat community occupies approximately 2.2% of the allotment and produces 3.2% of the available forage.

Under the CDCA plan, the Oasis Ranch Allotment has a total of 660 AUMs set aside for cattle, 14 AUMs for wild horses and 39 AUMs for burros. The principal and the key forage species for the allotment are shown in Figure 5. Nearly all parts of the allotment contain at least one of the key species. The key species provide forage for livestock, wildlife, wild horses and burros, and the response of the key species to grazing is an indicator of range trend. The critical season for these species is the spring growing period extending through seed set. The timing for this critical period varies with elevation, but it will generally be from mid-March through mid-May.

The CDCA Plan rated the Oasis Ranch Allotment in good condition. This evaluation used the system shown in Figure 6. The condition rating for the allotment referred primarily to the status of the composition, cover, and vigor of the vegetation relative to the natural potential of the area under consideration and, secondarily, to soil stability relative to accelerated erosion.

Figure 5

Principal Forage Species and Proper Use for Oasis Ranch Allotment.

SPECIES NAME	COMMON NAME	PROPER USE *
SHRUBS		
Ambrosia dumosa	Bursage	10%
Artemisia spinescens **	Bud sagebrush	20%
Atriplex canescens **	Four-wing saltbush	40%
Atriplex confertifolia	Shadscale Shadscale	10%
Ephedra nevadensis	Nevada joint	30%
Ephedra viridus	Green tea	20%
Eriogonum fasciculatum	California buckwheat	20%
Eurotia lanata **	Winterfat	40%
Grayia spinosa **	Spiny hop-sage	30%
Lycium andersonii	Anderson thornbush	10%
Menodora spinescens	Spiny menodora	20%
Purshia glandulosa **	Antelope-brush	40%
Salix species ***	Willow	10%
Populus fremontii ***	Fremont Cottonwood	10%
FORBS		
Sphaeralcea ambigua	Desert mallow	40%
GRASSES		
Hilaria jamesii **	Galleta grass	50%
Oryzopsis hymenoides **	Indian ricegrass	50%
Poa scabrella	Pine bluegrass	50%
Sitanion hystrix	Squirrel-tail	40%
Stipa comata	Needle & thread grass	50%
Stipa speciosa **	Desert needlegrass	50%

<sup>\*</sup> These proper use factors are designed to reflect the interrelationships between plant species and cattle preferences for various forages.

\*\*\* Key forage species with proper use of 10% for the seedlings.

Source: California Desert Conservation Area Final Environmental Impact Statement and Proposed Plan, Appendix Volume F, BLM 1980.

<sup>\*\*</sup> Key forage species

#### Figure 6

#### Range Condition

Excellent -Similar to climax condition.

-Decreasers abundant, good vigor.
-Cover good for potential of site.

-No accelerated erosion.

-Production 75 percent or more of potential.

Good -Somewhat similar to climax condition.

-Decreasers still representative of the site and vigor, but are starting to be replaced by

increasers.

-Invaders, though present, are insignificant.

-Cover still good for site.

-Accelerated erosion very minor but present.

-Production is 25-50 percent of potential.

Fair -Decreasers show low vigor with remnant populations occurring in sheltered areas.

-Invaders are common, increasers are expanding.

-Accelerated erosion evident but not common.

-Cover tending to be reduced.

-Production is 25-50 percent of potential.

Poor -Invaders and increasers predominate.

-Decreasers are gone or those left are in

inaccessible areas.

-Accelerated erosion is evident.

Certain forage plants are useful as indicators of condition by their characteristic response to grazing pressure. "Decreasers" reduce in the composition under heavy grazing pressure. "Increasers" multiply in the composition under heavy grazing pressure. When conditions appreciably deteriorate, the less-desirable plants or "invader species" become more abundant (Appendix XIII to the Proposed Plan, October 1980).

Whether plant cover and species composition exhibit amounts and proportions representative of the "climax" for the areas is judged from relic areas, exclosures, fence-line contrasts, and/or historical information.

Source: California Desert Conservation Area Plan, BLM 1980, Page 69.

#### 2. White Sage Allotment

The fan skirts and alluvial flats at the western edge of the allotment is dominated by Four-wing saltbush Atriplex canescens, Winterfat Eurotia lanata, Bud Sagebrush Artemisia spinesens. Spiny hop-sage Grayia spinosa and Nevada Indigo brush Dalea polyadena. This vegetation is associated primarily with soils of fine sandy loam and loamy sand. The adjacent flood plains support Indian ricegrass Oryzopsis hymenoides and Douglas rabbit brush Chrysothamnus viscidiflorus as well as Shadscale Atriplex confertifolia and Bud Sagebrush Artemisia spinesens due primarily to the higher water holding capacity of the Penoyer silt loam. The uplands support vegetation typical of steep slopes and rapid runoff. On the lower and south facing slopes the vegetation consists primarily of Shadscale Atriplex confertifolia, Nevada joint Ephedra nevadensis, Anderson thornberry Lycium andersonii and Douglas rabbit brush Chrysothamnus viscidiflorus. On the higher and north facing slopes vegetation consists primarily of Wyoming big sagebrush Artemisia tridentata wyomingensis, Nevada joint Ephedra nevadensis, Galleta grass Hilaria jamesii and Desert Needlegrass Stipa speciosa. In Table 3, the soil associations and range sites are listed for the White Sage Allotment.

WHITE SAGE ALLOTMENT
Table 3
SOIL ASSOCIATIONS AND RANGE SITES (approximate composition)

Soil Association	Range Sites	Acres	% of Allotment
Pumel - Thike	029X022N	3172	30.7
	029X010N		
Leo - Itme - Izo	029X046N	3043	29.5
	029X016N		
	029X041N		
Downeyville - Pummel	029X022N	889	8.7
Koyen - Stumble	029X046N	809	7.9
Pennoyer	029X012N		
•	029X020N		
Itme sandy	029X017N	529	5.1
Stumble - Leo	029X012N	408	3.9
	029X046N		
Slaw - Cirac	029X024N	378	3.6
Blappert - Pumel	029X037N	315	3.0
• •	029X022N		
Others		772	7.6
TOTAL		10,315	100.0

In Table 4, the acres per range are listed for the White Sage Allotment.

## ACRES PER RANGE SITE (Approximate)

	Table 4		
Site #	Description	Dominant Vegetation	Acres
029X022N 029X046N 029X010N 029X016N 029X041N 029X017N Rock Outcrop 029X012N 029X024N 029X024N 029X020N 029X037N TOTAL CLASSI OTHER	Sandy Sodic Terrace Silty Shallow Stony Slp	ATCO/HIJA - ORHY ATCA2 - EULA5/ORHY ARTRW/ORHY - STCO GRSP - EPNE/ORHY CHNA2 - ATCA2/ORHY ATCO - ARSP5/ORHY ATCA2/ORHY ATCO - SAVE4/ORHY EULA5/ORHY MESP2/HIJA - STIPA	2053 2066 1075 812 910 640 703 323 121 67 407
TOTAL			10,315

#### B. Wildlife

#### 1. Oasis Ranch Allotment

## a. Mule Deer (Odocoileus hemionus)

The general goals of the California Department of Fish and Game (CDFG) for the Inyo-White Mountain Deer Herd are to maintain a population with 25 bucks per 100 does, reasonably high buck harvest, and deer numbers in balance with the capacity of all seasonal ranges (Blankinship 1984). Composition counts of mule deer in the White Mountains (north of Westgard Pass) by the CDFG were conducted in January 1989. In 1989, a total of 91 deer were classified. The buck ratio was 16 bucks/100 does and 27 fawns/100 does were seen.

The mule deer in the Oasis Ranch Allotment are part of the Inyo-White Mountain deer herd. Approximately 20-30 deer use the Piper Mountain area year-round, while other deer migrate from higher elevations in the White and Inyo Mountains to the Piper Mountain area in the winter through spring. Summer use on the allotment occurs mainly at higher elevations and along Cottonwood Creek (Figure 7) (Blankinship 1984).

The possibility of competition, if forage becomes limiting, between deer, cattle, wild horses and burros, especially for succulent vegetation (grasses and forbs), is most critical during the spring when the nutritional needs of deer (particularly pregnant does) are highest. The monitoring data indicates that almost all of the western portion of the Oasis Ranch Allotment was used at the slight (6 to 20%) or light (21 to 40%) class levels. Competition between herbivores, if any, should be minimal. Competition also occurs along Cottonwood Creek, where both deer and livestock tend to concentrate in the summer months.

#### b. Bighorn Sheep (Ovis canadensis nelsoni)

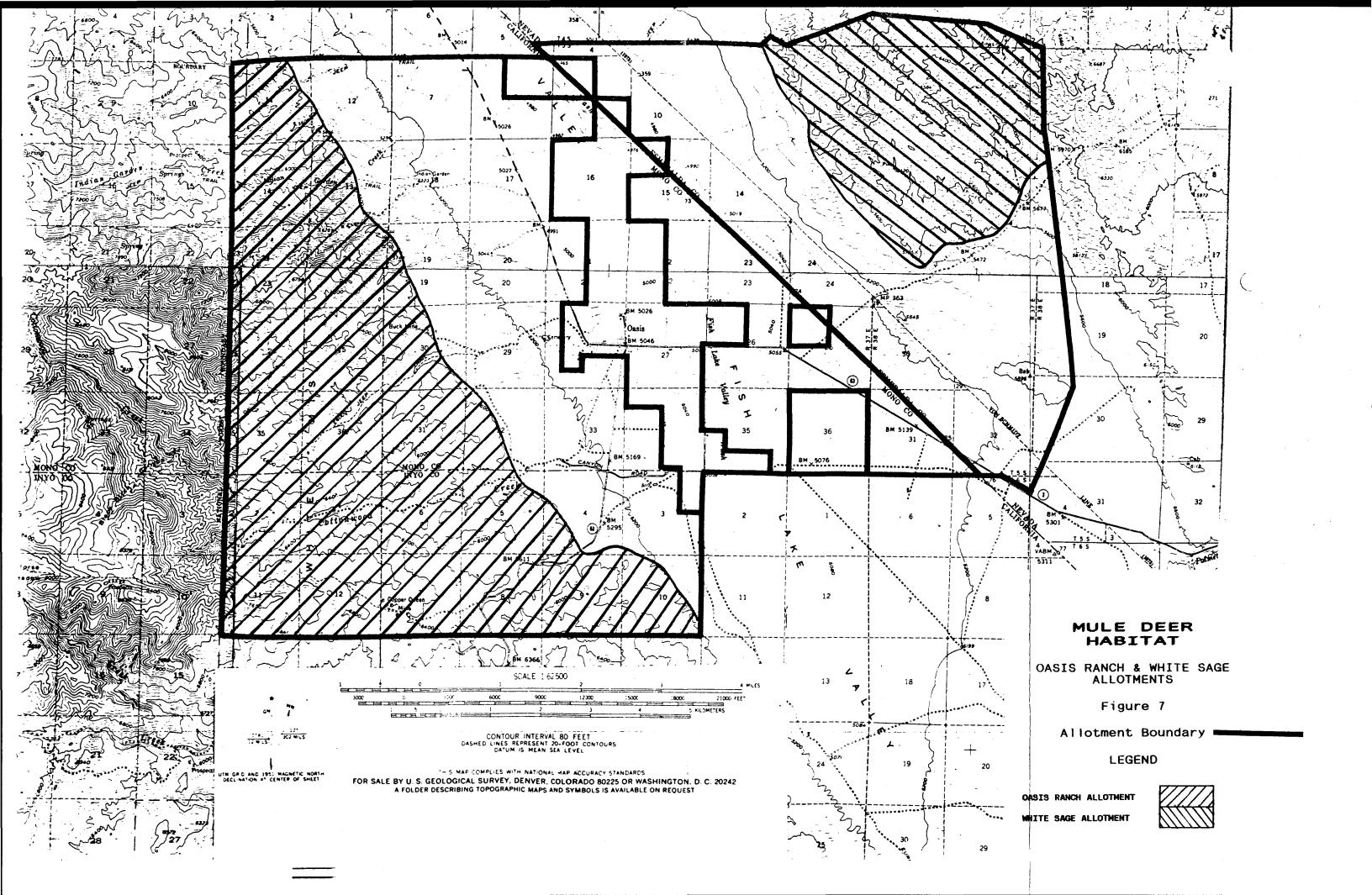
In the future, BLM, in conjunction with CDFG, may consider reintroducing bighorn sheep into the Soldier Pass area. Bighorn sheep could eventually occupy the mountainous habitat from the Piper Mountain area to the Inyo Mountains. At the present time no permanent population of bighorn sheep exists in the Piper Mountain area. Rams may migrate back and forth between the White Mountains and the Last Chance Range. Competition between cattle and bighorn sheep for forage species could occur at lower to mid elevations.

#### c. Aquatic/Riparian Values

On the Oasis Ranch Allotment, Cottonwood Creek currently has stream bank stability and willow/cottonwood riparian vegetation in good condition. It is locally popular for recreational fishing of rainbow trout and other species. Heavy use of this area by cattle could adversely impact stream bank stability and vegetation.

#### 2. White Sage Allotment

The White Sage Allotment contains the southernmost end of the Silver Peak\Palmetto deer range. The deer range contained within the allotment is limited to the Piper Peak range and is an area of limited winter use.



#### C. Wild Horses & Burros.

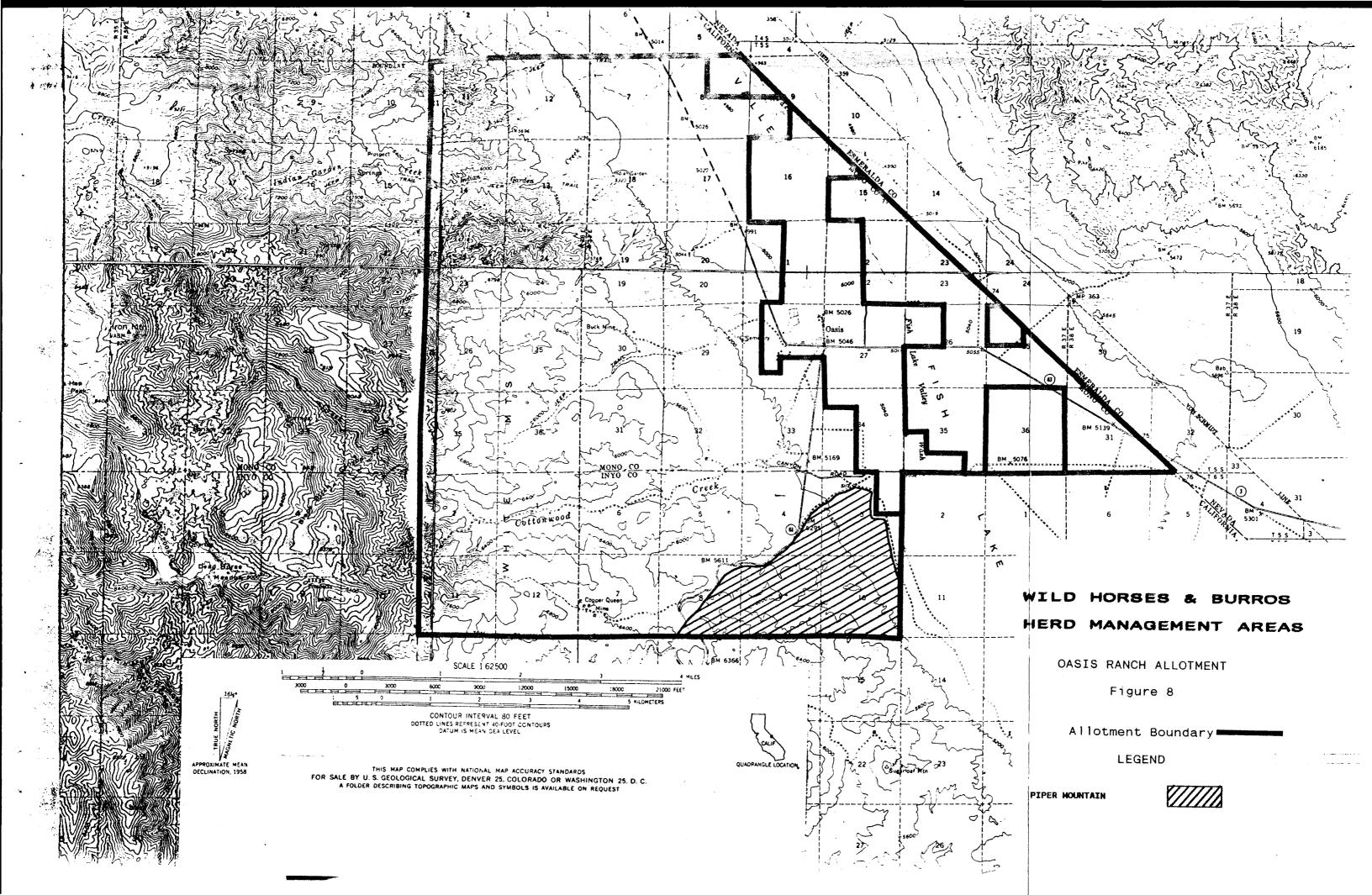
## 1. Oasis Ranch Allotment

The Piper Mountain Herd Management Area (HMA) is located on the southwestern side of the Oasis Ranch Allotment (Figure 8). The Piper Mountain HMA covers approximately 69,000 acres. This area, along with the Sand Spring/Last Chance and Chicago Valley, form the Chicago Valley HMA Plan area. The Chicago Valley HMA Plan is one of the six HMA Plans in the CDCA Plan. Under the CDCA Plan a total of 14 AUMs were set aside in the Oasis Ranch Allotment for wild horses and 39 AUMs for burros (82 burros and 17 horses). Current estimates from the latest aerial survey in 1986 show that less than 20 head of wild horses and 5 head of burros are in the existing area. The HMA Plan has not been written for this area. The goals set in the CDCA Plan are:

- a. Provide for year-long food requirements.
- b. Provide adequate cover.
- c. Provide adequate water to meet the year-round requirements.
- d. Provide adequate living space.
- e. Protect wild horses & burros.

## 2. White Sage Allotment

The Southern boundary of the Silver Peak HMA lies adjacent to but does not cross the northern boundary of the White Sage Allotment as delineated by the White Wolf Drift Fence. There is no Herd Management Area (HMA) within the White Sage Allotment. Therefore, management considerations involving wild horses or burros is not germane to this AMP.



#### D. Cultural Resources.

#### 1. Oasis Ranch Allotment

The Oasis Ranch Allotment consists of approximately 24,373 acres of land in Fish Lake Valley and the adjacent eastern slope of the White Mountains. Of this, approximately 295 acres (or about 1.2% of the allotment) has been examined for cultural resources. Cultural resources identified within the area examined are marginal, consisting of one isolate, one very small flake scatter, and an historic feature. It is anticipated, however, that there are many other undocumented cultural resources located within this allotment, particularly within and tangent to the eastern slope of the White Mountains.

It is anticipated that different areas within the Oasis Ranch Allotment will be grazed with varying degrees of intensity at different times, although, as summarized in Table 2 (Deferred Rotation Grazing System), the long term use of pastures 1 and 2 would occur at similar rates of intensity. Cultural resources located in areas more sensitive to cultural resources (like the White Mountains area or places with naturally occurring water) would be subject to greater impacts from grazing than areas less sensitive to cultural resources (like the valley floor). Most of the existing range improvements have been examined for cultural resources, although the Oasis Ranch Well (5221), East Garden Pipeline & Trough (5246), Oasis Ranch Drift Fence (5494), Oasis Drift Fence (5495), Alexis Fence (5496), and Albert West Corral (5682) were installed many years ago and have not been inventoried. No cultural resources were identified in the areas that were examined and it is anticipated that there are no cultural resources located at these other six range improvement locations.

This AMP calls for no new range improvements. Any changes to this AMP, especially in terms of adding new range improvements, would be subject to further evaluation, on a case by case basis.

#### 2. White Sage Allotment

The following range improvements have been evaluated in terms of impacts to cultural resources, with a finding of no impacts; project numbers 4937, 4938 and 4939 (White Sage Pipeline and Troughs 1, 2 and 3, respectively). Similarly project numbers 4940 (White Sage Gap Fence) and 4941 (White Sage Water Hauls) have been found to pose no significant impacts to cultural resources. Project numbers 3671 (White Wolf Drift Fence) and 3681 (White Sage Allotment Fence) were constructed in 1970 and 1971 respectively and have not been inventoried.

The Esmeralda-Southern Nye RMP\EIS calls for no new range improvements. Furthermore none are called for in the grazing AMP for the White Sage Allotment. This does not however preclude the development of future range improvements if they are deemed necessary to improve livestock management. Any future range improvements should be considered and reviewed by BLM on a case by case basis.

#### E. Wilderness.

#### 1. Oasis Ranch Allotment

The Oasis Ranch Allotment contains parts of four BLM Wilderness Study Areas (WSAs): Fish Lake Valley WSA, CDCA-102, White Mountain WSA, CDCA-103, Cottonwood Creek WSA, CDCA-104 and Piper Mountain WSA, CDCA-115 (Figure 9). There are approximately 16,981 acres of WSA within the allotment which account for 69.7% of the allotment. Cattle grazing is "grandfathered" in the allotment. The grazing use within WSAs will comply with the Interim Management Policy (IMP) for lands under wilderness review and post reclamation policy.

#### 2. White Sage Allotment

There are no Wilderness Study Areas in the White Sage Allotment.

#### F. Sensitive, Rare and Endangered Plant & Animal Species.

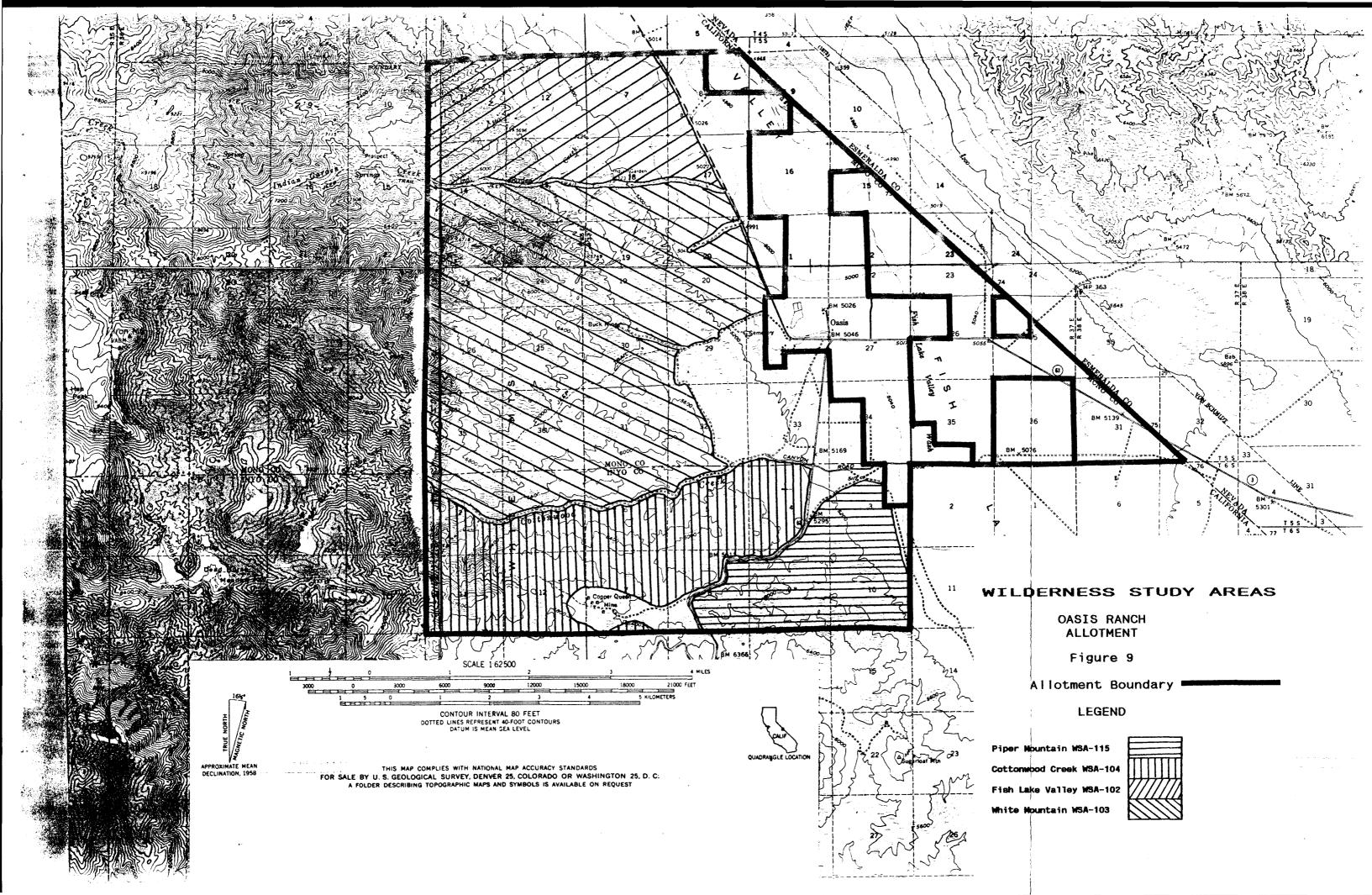
#### 1. Oasis Ranch Allotment

#### a. Paiute Cutthroat Trout (Salmo clarki selenius)

The upper watershed of Cottonwood Creek, in the Inyo National Forest, has been designated as essential habitat for the Paiute Cutthroat Trout, which is listed as threatened by the Untied States Fish and Wildlife Service. A natural fish barrier exists about one-tenth mile below the Inyo National Forest boundary on BLM land. There are no plans to reintroduce Cutthroat Trout below this barrier, onto the Oasis Ranch Allotment. However, they may be reintroduced into Cottonwood Creek above the barrier in the future. Maintaining the downstream portion in good condition would help protect the upstream habitat from the effects of head cutting and erosion.

#### b. Other Species

The California Natural Diversity Database shows no other sensitive, rare and endangered plant or animals species on the Oasis Ranch Allotment.



#### 2. White Sage Allotment

There are no Sensitive, Rare and Endangered Plant & Animal Species identified in the White Sage Allotment.

#### G. Recreation.

#### 1. Oasis Ranch Allotment

The recreation use in the area consist of hunting for upland game and mule deer, fishing, bird watching, site seeing, and camping.

#### 2. White Sage Allotment

The White Sage Allotment is an area of heavy use for bird watchers in late May and early June. The planned change in the grazing use will not effect this or any other potential recreational use.

#### IV. GOAL STATEMENT

The grazing management will be designed to maintain or improve the overall range condition of the Oasis Ranch and White Sage Allotments, while providing additional forage for livestock, wildlife, wild horses and burros.

#### V. OBJECTIVES

#### A. <u>Vegetation Objectives</u>

The following vegetative objectives are designed to be measured by collecting quantifiabe data at permanently located study sites throughout the two allotments (Figure 12).

- 1. At study site 1, increase the sum total of the percent frequency of Four-wing saltbush and Spiny Hopsage from 5% to 6% and Indian ricegrass and Galleta grass from 20% to 22% in 20 years.
  - a. A large degree of success would be considered if, the sum total of the percent frequency of Four-wing saltbush and Spiny Hopsage was maintained at 5% or above and Indian ricegrass and Galleta grass increased from 20% to 21% in 20 years.
  - b. A moderate degree of success would be considered if, the sum total of the percent frequency of Four-wing saltbush and Spiny Hopsage was maintained at or above 5% and Indian ricegrass and Galleta grass was maintained at or above 20% in 20 years.

- 2. Increase the total perennial vegetation cover from 12% to 15% in 20 years on study site 2.
  - a. A increase from 12% to 14% cover in 20 years would be considered a large degree of success.
  - b. A increase from 12% to 13% cover in 20 years would be considered a moderate degree of success.
- 3. Increase the total perennial vegetation cover from 19.3% to 22% in 20 years on study site 3.
  - a. A increase from 19.3% to 21% cover in 20 years would be considered a large degree of success.
  - b. A increase from 19.3% to 20% cover in 20 years would be considered a moderate degree of success.
- 4. Increase the total perennial vegetation cover from 21.8% to 23% in 20 years on study site 4.
  - a. A increase from 21.8% to 22.5% cover in 20 years would be considered a large degree of success.
  - b. A increase from 21.8% to 22% cover in 20 years would be considered a moderate degree of success.
- 5. Increase the total perennial vegetation cover from 12.7% to 15% in 20 years on study site 5.
  - a. A increase from 12.7% to 14% cover in 20 years would be considered a large degree of success.
  - b. A increase from 12.7% to 13% cover in 20 years would be considered a moderate degree of success.
- 6. Increase the total perennial vegetation cover from 17% to 20% in 20 years on study site 6.
  - a. A increase from 17% to 19% cover in 20 years would be considered a large degree of success.
  - b. A increase from 17% to 18% cover in 20 years would be considered a moderate degree of success.
- 7. Increase the total perennial vegetation cover from 30.2% to 31% in 20 years on study site 7.
  - a. A increase from 30.2% to 30.7% cover in 20 years would be considered a large degree of success.

- b. A increase from 30.2% to 30.4% cover in 20 years would be considered a moderate degree of success.
- 8. Increase the total perennial vegetation cover from 29.3% to 30% in 20 years on study site 8.
  - a. A increase from 29.3% to 29.7% cover in 20 years would be considered a large degree of success.
  - b. A increase from 29.3% to 29.5% cover in 20 years would be considered a moderate degree of success.
- 9. Increase the total perennial vegetation cover from 9.2% to 11% in 20 years on study site 9.
  - a. A increase from 9.2% to 10.5% cover in 20 years would be considered a large degree of success.
  - b. A increase from 9.2% to 10% cover in 20 years would be considered a moderate degree of success.
- 10. At study site 2, increase the sum total of the percent frequency of Winterfat and Bud Sagebrush from 30% to 35%, Four-wing saltbush and Spiny Hopsage from 5% to 6% and Indian ricegrass from 14.5% to 17% in 20 years.
  - a. A large degree of success would be considered if, the sum total of the percent frequency of Winterfat and Bud Sagebrush increased from 30% to 33%, Four-wing saltbush and Spiny Hopsage increased from 5% to 5.5% and Indian ricegrass increased from 14.5% to 16% in 20 years.
  - b. A moderate degree of success would be considered if, the sum total of the percent frequency of Winterfat and Bud Sagebrush increased from 30% to 31.5%, Indian ricegrass increased from 14.5% to 15% and Four-wing saltbush and Spiny Hopsage was maintained at or above 5% in 20 years.
- 11. At study site 3, increase the sum total of the percent frequency of Winterfat from 20.5% to 24%, Bud Sagebrush from 40% to 45% and Indian ricegrass from 26% to 30% in 20 years.
  - a. A large degree of success would be considered if, the sum total of the percent frequency of Winterfat increased from 20.5% to 22.5%, Bud Sagebrush increased from 40% to 43% and Indian ricegrass increased from 26% to 28.5% in 20 years.
  - b. A moderate degree of success would be considered if, the sum total of the percent frequency of Winterfat increased from 20.5% to 21%, Bud Sagebrush increased from 40% to 41% and Indian ricegrass increased from 26% to 27% in 20 years.

- 12. At study site 4, increase the sum total of the percent frequency of Spiny Hopsage from 11.5% to 12.5%, Bud Sagebrush and Winterfat from 5.5% to 6.5% and maintain Indian ricegrass at or above 0.5% in 20 years.
  - a. A large degree of success would be considered if, the sum total of the percent frequency of Spiny Hopsage increased from 11.5% to 12%, Bud Sagebrush and Winterfat increased from 5.5% to 6% and Indian ricegrass was maintained at or above 0.5% in 20 years.
  - b. A moderate degree of success would be considered if, the sum total of the percent frequency of Spiny Hopsage was maintained at or above 11.5%, Bud Sagebrush and Winterfat was maintained at or above 5.5% and Indian ricegrass was maintained at or above 0.5% in 20 years.
- 13. At study site 5, increase the percent frequency of Bud Sagebrush from 31.5% to 35%, Four-wing saltbush from 10% to 11.5% and Winterfat from 35.5% to 40% in 20 years.
  - a. A large degree of success would be considered if, the percent frequency of Bud Sagebrush increased from 31.5% to 34%, Four-wing saltbush increased from 10% to 11% and Winterfat increased from 35.5% to 38% in 20 years.
  - b. A moderate degree of success would be considered if, the percent frequency of Bud Sagebrush increased from 31.5% to 32.5%, Four-wing saltbush increased from 10% to 10.5% and Winterfat increased from 35.5% to 36% in 20 years.
- 14. At study site 6, increase the sum total of the percent frequency of Spiny Hopsage from 20% to 23%, Winterfat and Bud Sagebrush from 14.5% to 16% and Indian ricegrass from 7% to 8.5% in 20 years.
  - a. A large degree of success would be considered if, the sum total of the percent frequency of Spiny Hopsage increased from 20% to 22%, Winterfat and Bud Sagebrush increased from 14.5% to 15.5% and Indian ricegrass increased from 7% to 8% in 20 years.
  - b. A moderate degree of success would be considered if, the sum total of the percent frequency of Spiny Hopsage increased from 20% to 21%, Winterfat and Bud Sagebrush increased from 14.5% to 15% and Indian ricegrass increased from 7% to 7.5% in 20 years.

- 15. At study site 7, increase the sum total of the percent frequency of Winterfat and Bud Sagebrush from 34% to 36% and Indian ricegrass and Galleta grass from 4.5% to 5.5% in 20 years.
  - a. A large degree of success would be considered if, the sum total of the percent frequency of Winterfat and Bud Sagebrush increased from 34% to 35% and Indian ricegrass and Galleta grass increased from 4.5% to 5% in 20 years.
  - b. A moderate degree of success would be considered if, the sum total of the percent frequency of Winterfat and Bud Sagebrush was maintained at or above 34% and Indian ricegrass and Galleta grass was maintained at or above 4.5% in 20 years.
- 16. At study site 8, increase the sum total of the percent frequency of Spiny Hopsage and Four-wing saltbush from 31.5% to 32.5% in 20 years.
  - a. A large degree of success would be considered if, the sum total of the percent frequency of Spiny Hopsage and Four-wing saltbush increased from 31.5% to 32% in 20 years.
  - b. A moderate degree of success would be considered if, the sum total of the percent frequency of Spiny Hopsage and Four-wing saltbush was maintained at or above 31.5% in 20 years.
- 17. At study site 9, increase the percent frequency of Shadscale from 41% to 45% in 20 years.
  - a. A large degree of success would be considered if, the percent frequency of Shadscale increased from 41% to 43.5% in 20 years.
  - b. A moderate degree of success would be considered if, the percent frequency of Shadscale increased from 41% to 42% in 20 years.

#### 2. White Sage Allotment

The primary resource management objective for the White Sage allotment, as described by the Esmeralda-Southern Nye Resource Management Plan is simply to "maintain current range condition". As of 1985, 87% of the White Sage allotment was classified as being in the "late seral stage" (Table 5).

#### ESTIMATED PRESENT VEGETATION STATUS OF WHITE SAGE ALLOTMENT

Table 5

VEGETATION STATUS	ACRES	PERCENT
Early Seral	0	0
Mid Seral	568	6
Late Seral	9,009	87
Natural Potential	0	0
Non Productive	738	7
Total	10,315	100

As the White Sage Allotment is a low priority "C" category allotment, as shown in the Esmeralda-Southern Nye ROD, the following are the allotment specific objectives from the Land Use Plan.

a. Manage livestock grazing to assure the physiological needs of the key plant species are met by not exceeding utilization levels recommended in the Nevada Rangeland Monitoring Handbook (1984). On the key areas within the White Sage Allotment the following amounts of allowable use are applicable:

Oryzopsis hymenoides	55%
Eurotia lanata	45%
Atriplex canescens	45%

b. Maintain or improve ecological status as follows:

Mid Seral- 568 acres Late Seral- 9,009 acres

c. Manage to provide for 600 AUMs livestock forage use on a sustained yield basis if consistent with vegetative objectives 2a, 2b and wildlife objective 2a.

#### B. Wildlife Objectives

- 1. Oasis Ranch Allotment
  - a. Maintain Cottonwood Creek in good or better condition, as defined by the Riparian Condition Rating (BLM Technical Manual TR-1737-3, pp. 16-21). Keep utilization on willow and cottonwood seedlings under 10%. This will maintain fish habitat and vegetation cover for deer. Maintain some openings along the stream bank for access by fishermen.

b. Maintain key winter/spring forage species for deer and bighorn sheep in this area. Monitor use on Antelope Bitterbrush, Spiny Hopsage, Four-wing saltbush, and California buckwheat, and spring herbaceous growth. Keep utilization of these species under 40%.

#### 2. White Sage Allotment

- a. Maintain or improve yearlong mule deer habitat to good or better condition (rating value 60-80). Utilization of key mule deer forage will not exceed 45% for shrub species and 55% for perennial forb species.
- b. Manage habitat condition to support existing populations of big game and provide for increase to reasonable numbers as follows:

<u>Habitat Area</u>	<u>Species</u>	Current #	Reasonable#
Silver Peak/Palmetto	Mule Deer	120	600

#### C. Cultural Resources

Complete cultural inventories on the Oasis Ranch Allotment within two years on the following existing range improvements: (1) Oasis Ranch Well (5221), (2) East Garden Pipeline & Trough (5246), (3) Oasis Ranch Drift Fence (5494), (4) Oasis Drift Fence (5495), (5) Alexis Fence (5496), and (6) Albert West Corral (5682).

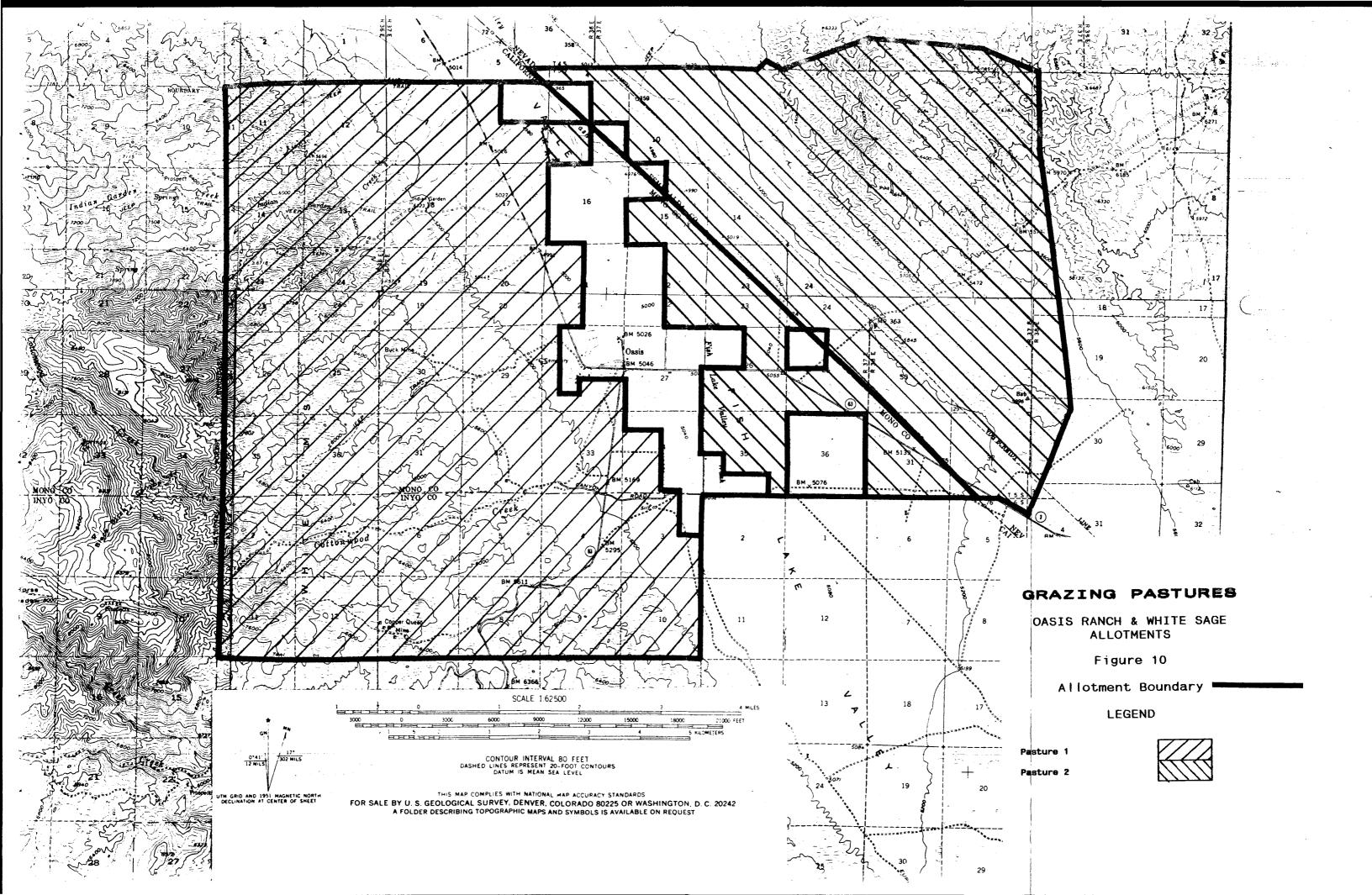
#### VI. GRAZING MANAGEMENT

- A. Mr. Alexis has the BLM lease for both the Oasis Ranch and White Sage Allotments. It is the intent of this AMP to coordinate the management of the Oasis Ranch and White Sage Allotments into one grazing management system.
- B. The Oasis Ranch Allotment will be managed under perennial guidelines. The current perennial allocation of 660 AUMs will be used as a starting allocation. The vegetation inventory indicates that the forage is available. Several years of grazing at the 660 AUMs level have revealed acceptable utilization levels. As additional information is gathered from the monitoring studies, adjustments in cattle use may be made.
- C. The White Sage Allotment in the Tonopah Resource Area will be managed as a "C" category allotment. The results of 1992 allotment evaluation may adjust the current active preference of 600 AUMs and/or season of use (04/01 to 09/30).

D. The grazing management is designed to improve the vegetative conditions where grazing animals occur on the Oasis Ranch and White Sage Allotments. This deferred grazing management system is designed to improve the overall condition of the Oasis Ranch and White Sage Allotments by increasing cover and frequency of key species, and to provide a uniform management system for the lessee and the BLM and a flexible, manageable system for the lessee. The overall condition for the allotments can be improved by maintaining or increasing the perennial cover on both allotments through the controlled timing of grazing.

The following actions will be implemented to achieve the grazing objectives:

- 1. The two allotments are divided by private fencing around private lands forming 2 natural pastures of nearly equal size (Figure 10). The estimated perennial production for Pasture 1 in the western side of the Oasis Ranch Allotment is 580 AUMs and Pasture 2, which includes all of the White Sage Allotment and the eastern side of Oasis Ranch Allotment, is 680 AUMs. A deferred grazing treatment will be established (Table 6) where the two pastures will be rotated and grazed differently during the critical spring greenup each year.
- 2. In the first year of the grazing system, all the livestock will graze in Pasture 1 from April 1 through June 10. The cattle will be moved to Pasture 2 and stay from June 10 through September 30.
- 3. In the second year of the grazing system, all the livestock will graze in Pasture 2 from April 1 through June 25. The cattle will be moved to Pasture 1 and stay from June 25 through September 30.
- 4. In the third year, the grazing system will repeat the first year.
- 5. In the fourth year, the grazing system will repeat the second year.
- 6. In March of each year, the BLM will meet with the lessee to go over concerns of both allotments and set up a schedule of water development use by cattle to control utilization and movements.
- 7. At the meeting in March, the BLM will provide forms for the lessee to fill out on the length of use for water developments which will be sent back to the BLM at the end of the grazing year.
- 8. No new range improvement projects will be needed to implement the deferred grazing system. Some reconstruction and improvements to existing range projects will occur.
- 9. Average utilization will be limited to proper use levels on the key species (Figure 5).



E. Rangeland Management Guidelines for WSA Areas (BLM, 1987)

These guidelines are part of the BLM Manual H-8550-1 Interim Management Policy and Guidelines for Lands Under Wilderness Review.

#### VII. INTERIM MANAGEMENT

On an interim basis, all the management proposals can be implemented without replacing the Oasis Ranch Well with water haul site. The following is a list of actions that will be implemented on an interim basis:

- A. All the management proposals in the grazing management section will apply in the interim management.
- B. Albert Alexis does not plan on reconstructing the Oasis Ranch Well at this time but would like to use the well area as a water haul site.

#### VIII. ADMINISTRATIVE PROCEDURES

The following a administrative terms and conditions apply to the Oasis Ranch and White Sage Allotments:

- A. The Ridgecrest Resource Area will be responsible for all administrative actions on the Oasis Ranch Allotment.
- B. On the White Sage Allotment, the Ridgecrest Resource Area will be responsible for Grazing Applications and Actual Use Billing.
- C. On the White Sage Allotment the Ridgecrest Resource Area will take the lead on Use Supervision, Vegetation Monitoring and to schedule annual meeting with both resource areas and the rancher before the grazing season (March) begins.
- D. On the White Sage Allotment, the Tonopah Resource Area will be responsible for the monitoring evaluations, the Environmental Assessments for range projects, grazing decisions, necessary actions, renewal of the lease, transfers and Battle Mountain Advisory Board Meetings.
- E. Grazing Applications will be issued by the Ridgecrest Resource Area annually showing the general grazing use authorized.
- F. Actual Grazing Use Reports (form 4130-5) must be submitted to BLM in Ridgecrest within 15 days after the end of the grazing season. Billing will be based on these Actual Use Reports. These bills must be paid within 15 days of issuance or additional interest will be assessed. Failure to report actual use on time will result in the issuance of a bill for the maximum use and the possible loss of the actual use privilege.

## Deferred Rotation Grazing System

Table 6

Year 1

Pasture #	1	2
APR	Х	
MAY	Х	
JUN	Y	Z
JUL	}	Х
AUG		Х
SEP		Х
	j	

Year 3

1	2
X	
X	
Υ	Z
	Х
1	Х
)	Х
	X

X=Grazing for the whole month.
Y=Cattle leave the pasture June 10.
Z=Cattle enter the pasture June 10.
V=Cattle leave the pasture June 25.
W=Cattle enter the pasture June 25.
Pasture 1 & 2 repeat cycle every two years.

Year 2

1	2
	Х
İ	X
W	V
X	}
X	
X	
	X

Year 4

Pasture #	1	2
APR MAY		X
JUN	W	٧
JUL	X	
AUG SEP	X	

- G. Monitoring data, range compliance and actual use records will be the basic criteria for adjustments in season of use or stocking rates. Future adjustments, either increases or decreases, will be based on the results of these monitoring studies and other appropriate inventory data. The lessee, his consultant and/or the Farm Advisor is invited to participate in the monitoring studies. The lessee will be contracted annually, prior to data collection.
- H. If cattle are found on the Oasis Ranch and White Sage Allotments outside of the authorized grazing season, the livestock operator will be responsible for removing the cattle within 5 days after notification.
- I. The livestock operator will be responsible for moving the livestock in a timely manner in order to meet the requirements of this plan.
- J. Salt and other mineral supplements may be fed as the need arises. Unless specifically authorized by the Area Manager, salt stations will be placed at sites at least 1/4 mile from water.
- K. No supplemental feed will be allowed on Public Lands without approval from the Area Manager.

#### IX. FLEXIBILITY

The permittee will be issued a Grazing Applications in advance of each grazing season which states the normal season of use, stocking rate and AUMs. The maximum number of AUMs will not exceed those authorized. The permittee may make the following modifications in his stocking rate and season of use by notifying BLM in advance (in person, by phone or in writing):

- A. The livestock may arrive in any pasture 5 days early or leave 5 days late as long as the authorized AUMs for that pasture are not exceeded.
- B. The number of cattle grazed may vary up to 10% than that shown on the authorization as long as AUMs are not exceeded.
- C. Any other modifications will require a written application and written approval in advance. Other modifications that will be considered include but are not limited to changes in pasture move dates, livestock numbers, and rotation schedules. Changes in this grazing plan are expected in order to adjust to variable climatic conditions and other unforseen factors. For example, pasture move date s may need to be changed to adjust to variable feed conditions within the pastures that result from variable precipitation patterns.

#### X. RANGE IMPROVEMENTS

# A. Existing Range Improvements

## 1. Oasis Ranch Allotment

The project number, name and condition of existing projects on the Oasis Ranch Allotment are shown in Table 7. The project locations are shown in Figure 11. The following is a list of actions that will be implemented on an interim basis:

- a. The Albert West Fence (5681) will be completed next spring (April 1992). The Environmental Assessment has been completed and materials have been issued.
- b. The West Esmeralda Pipeline & Trough (5683) will be completed next spring (April 1992). The Environmental Assessment has been completed. The rancher will provide materials.
- c. The Oasis Ranch Well (5221) will be replaced as a water haul site within two years.

Table 7
Existing Range Improvements

<u>Map</u>	<u>Project</u>	<u>Project</u>	Condition
Reference	<u>Number</u>	<u>Name</u>	
1 2 3 4 5 6 7 8 9 10 11 12 13 14	5221 5244 5245 5246 5247 5248 5419 5494 5495 5496 5497 5506 5639 5640 5681	Oasis Ranch Well Copper Queen Troughs Copper Mine Troughs East Garden Pipeline & Trough Esmeralda Pipeline & Trough Fish Lake Wash Pipeline & Trough White Sage Pipeline & Trough Oasis Ranch Drift Fence Oasis Drift Fence Alexis Fence Fish Lake Valley Fence Cottonwood Creek Fence & Cattleguard Fish Lake Valley Fence Cattleguard Oasis Ranch Drift Fence Cattleguard Albert West Fence	Good Good Being Built
16	5682	Albert West Corral	Good
17	5683	West Esmeralda Pipeline & Trough	Being Built

# 2. White Sage Allotment

The project number, name and condition of existing projects on the White Sage Allotment are shown in Table 8. The project locations are shown in Figure 11.

Table 8
Existing Range Improvements

<u>Map</u> <u>Reference</u>	<u>Project</u> <u>Number</u>	<u>Project</u> <u>Name</u>	Condition
18	3671	White Wolf Drift Fence	Good
19	3681	White Sage Allotment Fence	Good
20	4937	White Sage Pipeline & Trough #1	Good
21	4938	White Sage Pipeline & Trough #2	Good
22	4939	White Sage Pipeline & Trough #3	Good
23	4940	White Sage Gap Fence	Good
24	4941	White Sage Water Hauls	Good

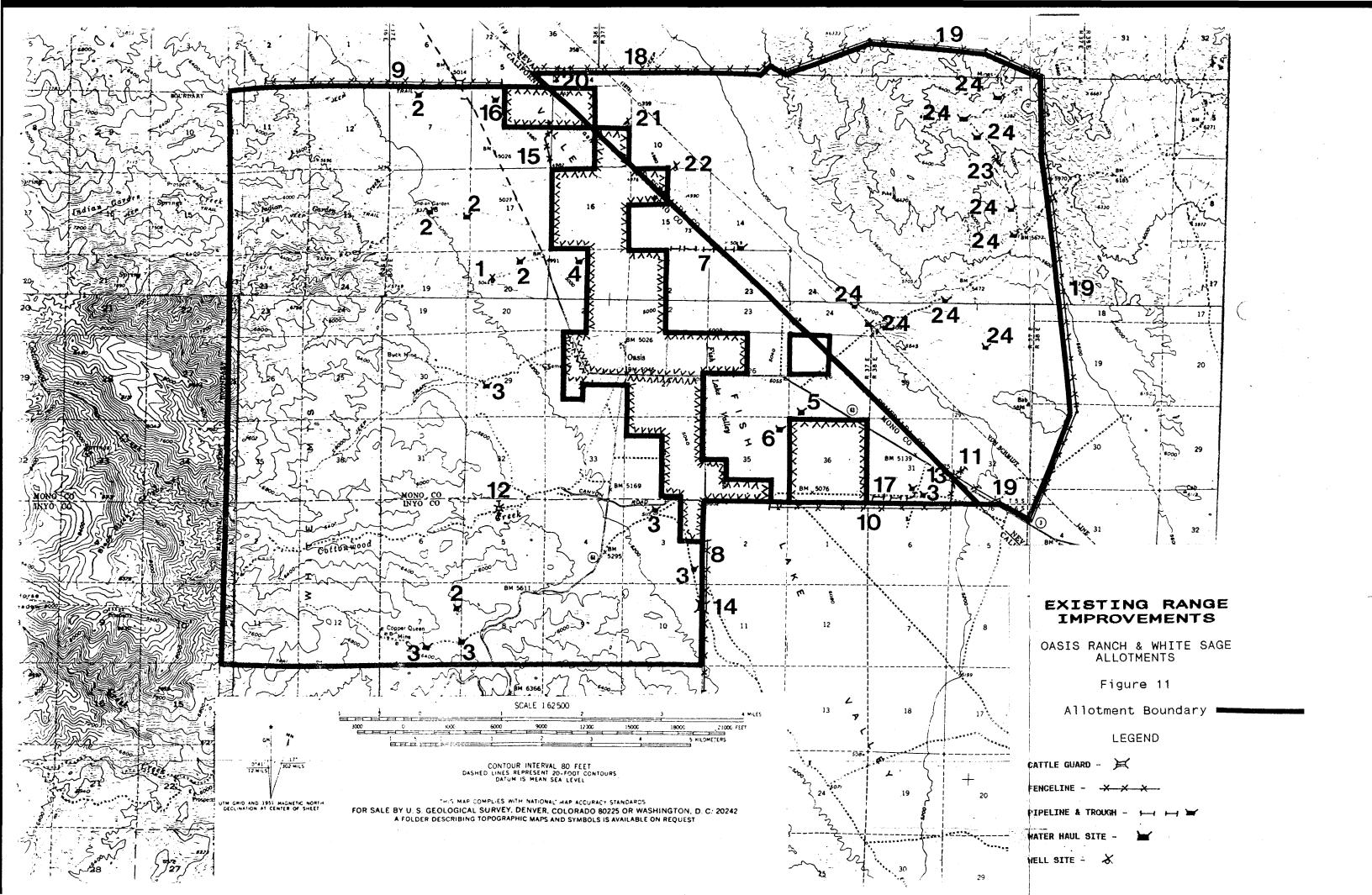
#### B. Proposed Range Improvements

No new range improvement projects are proposed for the Oasis Ranch and White Sage Allotments under this plan. The existing range improvement projects will be adequate to implement the grazing system.

#### XI. MONITORING

#### A. Narrative

The stratification-key area-key species concept were used in selecting the study sites where the monitoring data is collected. Stratification and selection of key areas are critical for valid determination. Key areas are portions of a stratum which, because of location, grazing or browsing value, and/or use, serve as an indicative sample of utilization and trend within the stratum. Key areas may be considered as the "pulse" of the rangeland. Key areas guide the management of the entire area which they represent. A key area is normally a significant unit of rangeland located in an area used by livestock or wildlife; is a representative sample of the stratum; is a representative sample of the suitable seasonable rangeland areas; is a representative sample of a small area having important grazing value; is grazed each year that the allotment or pasture is used; and is capable of showing utilization and trend. Monitoring studies are located on the key areas within each stratum of an allotment. Key areas may or may not be the same for livestock and wildlife objectives.



#### 1. Oasis Ranch Allotment.

- a. The Large Scale Photo Plots (Study Site 1) were initially one set of photos that had been collected during the period 1978/79 in support of and prior to preparation of the California Desert Conservation Area Plan. This set consisted of a large number of sampling transects each comprised of a set of five consecutive aerial photos providing overlapping stereo coverage over a linear distance of approximately 1350 feet. In 1985, the BLM contracted for and obtained a second set of aerial photos which repeated 100 of the earlier transects. Both sets of photographs were acquired at a nominal scale of 1:1000. In 1985, BLM's Denver Service Center interpreted the two sets of photographs that were taken. The scale of these is such that individual plants can be identified in the photograph and located on the ground. The value lies in the vegetation changes they may reveal in inaccessible areas, or sites not otherwise monitored.
- b. The line intercept method (Study Sites 2-9) will be used as one method for trend monitoring as an exact relocation method. Changes in basal area of perennial bunchgrasses and changes in canopy cover of shrubs and perennial forbs under a permanently established line transect will provide a determination of trend. The number of individual species under a specific line also may indicate trend. This method is limited to changes under the line and does not sample the entire plant population of the key area.
- c. Quadrat Frequency sampling (Study Sites 2-9) is a rapid, highly objective means of evaluating the trend of range vegetation. Frequency sampling is simple and easy to perform and easy to duplicate from year to year by the same or different examiners. Human decision is limited to whether the plant is rooted within the frame or not and to species identification. Frequency sampling is economical in terms of time because the average sample takes less than one hour to establish and read. Under the quadrat frequency method, 10 quadrats are observed along 20 transects randomly selected and run perpendicular to a 100 foot baseline.
- d. The stereo photo plot method (Study Sites 2 & 3) includes taking a close-up photograph of a 10' x 10' plot and a general view photograph of the study site. Measurements and/or estimates can be made to provide quantitative data concerning vegetation characteristics. The following indicators of trend can be monitored with this method: cover, composition (by cover), reproduction and density.
- e. The Photo Plot Method (Study Sites 10-17) includes taking a general view photograph of the study site. The value lies in the vegetation changes they may reveal in the cover and density of riparian areas.

f. Utilization is the proportion or amount by weight of the current year's production that is consumed or destroyed by animals (including insects). It may refer to a single plant species, a group of species, or to the vegetation as a whole.

Utilization data are important in evaluating the effects of grazing and browsing by livestock in specific areas of the allotment. The lessees and other interested parties will be consulted and encouraged to participate in the collection and use of utilization data.

Utilization monitoring employs an ocular estimate of the forage consumed within one of six utilization classes: no use (0 to 5%), slight (6 to 20%), light (21 to 40%), moderate (41 to 60%), heavy (61 to 80%), and severe (81 to 100%). Observations are made of the appearance of the rangeland, and especially the key species, along the transect which traverses the key area or pasture. The data is recorded on utilization pattern maps which show where and how intensively the allotment or pasture was grazed. Those areas that indicate no or severe grazing use will be indicated. Areas that show use from insects, rodents, and rabbits will also be shown on the map.

g. Actual use data are important for evaluating causes of trend on a specific area of rangeland. Actual use data are essential in evaluations directed toward adjustments in grazing use and preparing or revising management plans. Knowledge and interpretation of past use provides a basis for future management decisions. Actual use data are considered along with authorized use, estimated use, utilization, trend, climate, and any other data available or deemed necessary for allotment evaluation.

Livestock actual use is recorded from an actual use report provided by the lessee. Data are verified by field checks and occasional counts. Actual use data are obtained from the livestock operators at the end of specific grazing periods. Actual use data contain dates, numbers and classes of livestock turned out, moved or gathered, as well as deaths.

h. Climatic data is important because weather factors, particularly amount, distribution and timing of precipitation in arid and semi-arid areas, have a dramatic effect on vegetation production and must be considered when evaluating the allotment. Other weather factors such as temperature and frost also affect production and will be collected.

Baseline data obtained from National Oceanic and Atmospheric Administration (NOAA) weather stations will be supplemented by BLM or rancher - installed and maintained stations. The lessees are encouraged to establish and maintain precipitation gauges to supplement NOAA and BLM gauges. Precipitation mapping or averaging will be used to interpret precipitation on the allotment.

A weather station has been established by the lessee near Oasis in the Fish Lake Valley which will record the annual precipitation. The lessee will provide this data to the BLM in order to better evaluate cause and effect for precipitation, temperature and forage production.

#### 2. White Sage Allotment.

In accordance with the Bureau's Rangeland Monitoring and evaluation program, the Tonopah Resource Area will complete an allotment evaluation for the White Sage allotment in 1992. This evaluation will be prepared in order to determine if the objectives from the Esmeralda/Southern Nye Resource Management Plan for the White Sage allotment are being met. This evaluation will consider all available data which has been collected since the completion of the Esmeralda/Southern Nye RMP/EIS.

Short Term Monitoring for the White Sage allotment will consist of use pattern mapping, key forage plant utilization, actual use records and weather information. Use pattern maps will be used to determine if the grazing plan is functioning as proposed or if adjustments are needed. Use pattern maps can also identify areas which may require an increased level of study and perhaps the establishment of new key areas. Use pattern mapping was established in the White Sage allotment in 1987 and will continue until 1997. Short term monitoring may also indicate the need for future range improvements not currently proposed in the Esmeralda Southern Nye RMP/EIS.

Long term monitoring will consist of quadrat frequency for sites 1-3 and line intercept (cover) for site number 4 (wildlife). The White Sage Allotment is classified as a "C" category (custodial) allotment in the Esmeralda Southern Nye RMP\EIS and is a low priority allotment for high intensity management.

# B. <u>Prescribed Resource Monitoring for the Oasis Ranch and White Sage</u> Allotments.

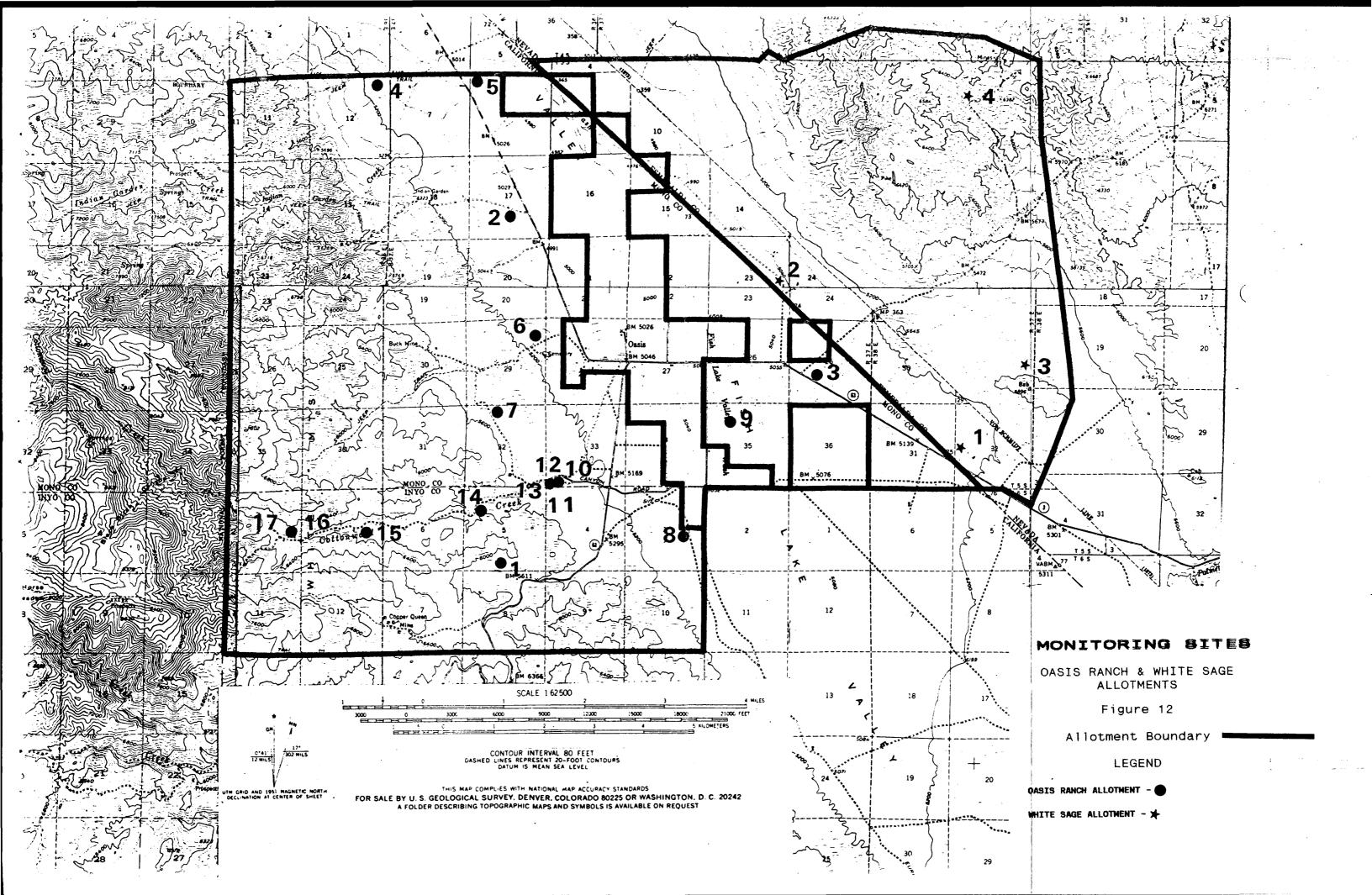
The prescribed resource monitoring studies for the Oasis Ranch and White Sage Allotments are shown in Table 9 and 10. The location of these studies are shown in Figure 12. The rancher will be encouraged to participate in the monitoring. After each season, the rancher and BLM will review monitoring data and other information from that year's use.

Table 9
Resource Monitoring for the Oasis Ranch Allotment.

Method	What is Measured	Location By Map Number	Interval	Remarks
Grazed-Class Method	Utilization	Allotment -wide	1-year	To determine amount of use.
Use Pattern Mapping	Utilization	Allotment -wide	1-year	To determine overused, underused, or properly used areas on the allotment
Large Scale Photo Plot	Trend, Composition	1	8-years	Repeat the photo from Desert Plan
Photo Plot	Trend, Composition	10 to 17	4-years	Repeat the photo
Stereo Photo Plots	Trend, Cover Composition	2 & 3	20-years	Use standard photographs from tripod.
Line Intercept	Trend, Cover Composition	2 to 9	4-years	
Quadrat Frequency	Trend, Cover Composition	2 to 9,	4-years	Use same permanent transect end point as Line Intercept.
Climatological Data	Temperature, Precipitation		Continuous	Data recorded by the rancher.

Table 10
Resource Monitoring for the White Sage Allotment.

Method	What is Measured	Location By Map Number	Interval	Remarks
Key Area Method	Utilization	Allotment -wide	1-year	To determine amount of use.
Use Pattern Mapping	Utilization	Allotment -wide	1-year	To determine overused, underused, or properly used areas on the allotment
Line Intercept	Trend, Cover Composition	4	4-years	For wildlife transect only
Quadrat Frequency	Trend, Cover Composition	1 to 3,	4-years	
Climatological Data	Temperature, Precipitation		Continuous	Data recorded by the rancher.



## XII. EVALUATION and REVISION

- A. The Resource Specialist from both Resource Areas will collect and compile the prescribed monitoring data each year.
- B. A review team will be established from both resource areas to evaluate the progress made toward meeting the objectives of the Allotment Management Plan using the following guidelines:
  - 1. The team will consist of a Range Conservationist, Wildlife Biologist, the rancher, and other BLM resource staff, as needed. The Range Conservationist will serve as team leader.
  - 2. The team will evaluated grazing every eighth year (the completion of 4 grazing cycles) or when monitoring data indicates a change is needed.
  - 3. The team will review the monitoring data and other pertinent information and make recommendations to the Area Manager as to progress toward AMP resource objectives and the possible need for modifications.

#### XIII. SIGNATURES

This Allotment Management Plan shall constitute the basis for cattle grazing in the Oasis Ranch and White Sage Allotments. It shall remain in effect until replaced or modified. The Area Manager from the Ridgecrest and Tonopah Resource Areas may modify this plan in coordination, consultation and cooperation with the grazing lessee if resource studies and/or operation experiences indicate that changes are needed. This Allotment Management Plan will not preclude the undersigned lessee from administratively challenging any future modifications.

Lee Delaney, Area Manager Ridgecrest Resource Area	Date	
Ted Angle, Area Manager Tonopah Resource Area	Date	
Albert Alexis	Date	

#### REFERENCES CITED

- (1) Blankinship, Tom, Vern Koontz and Clyde Edon
  1984 <u>Inyo-White Mountains Deer Herd Management Plan</u>. State of California, The
  Resource Agency. Department Fish & Game Publication. Pages 1-36.
- (2) Bureau of Land Management

  1980 <u>California Desert Conservation Area: Final Environmental Impact Statement and Proposed Plan-Appendix, Volume F.</u> United States Department of the Interior, Bureau of Land Management. Pages 64-76.
- (3) Bureau of Land Management

  1980 The California Desert Conservation Area Plan. United States Department of the Interior, Bureau of land Management, Desert District Riverside,

  California. Pages 59-82.
- (4) Bureau of land Management
  1986 Esmeralda-Southern Nye Planning Area (Record of Decision Planning Area
  A). United States Department of the Interior, Bureau of Land Management,
  Las Vegas and Battle Mountain Districts. Pages 13 and 33-34.
- (5) Bureau of land Management

  1984 Esmeralda-Southern Nye Planning Area (Resource Management Plan and
  Environment Impact Statement). United States Department of the Interior,
  Bureau of Land Management, Las Vegas and Battle Mountain Districts. Pages
  45 and 166.
- (6) Bureau of Land Management

  1987 <u>Inventory and Monitoring of Riparian Areas</u> TR-1737-3. United States

  Department of the Interior, Bureau of Land Management. Pages 16-21.
- (7) Bureau of Land Management

  1987 Interim Management Policy and Guidelines for Lands Under Wilderness

  Review H-8550-1. United States Department of the Interior, Bureau of Land Management. Pages 44-48.
- (8) Holland, R.F.

  1986 Preliminary Descriptions of the Terrestrial Natural Communities of

  California. State of California, The Resource Agency, Department Fish &

  Game Publication. Pages 12-83.
- (9) Nevada Range Studies Task Group1984 Nevada Rangeland Monitoring Handbook. Pages 3, 22-23.

## REFERENCES CITED (Continued)

- (10) Norwood, Richard H., Charles S. Bull and Ronald Quinn

  1980 <u>A Cultural Resource Overview of the Eureka, Saline, Panamint and Darwin Region, East Central, California</u>. United States Department of the Interior, Bureau of Land Management, California, 1980. Pages 138-39.
- (11) Soil Conservation Service 1987 <u>Nevada Site Descriptions - Major Land Resource Area 29</u>. United States Department of Agriculture, Soil Conservation Service.
- (12) Soil Conservation Service
  1989 Esmeralda County Soil Survey Report. United States Department of Agriculture, Soil Conservation Service.

#### **GLOSSARY**

Actual Use- a report of the actual grazing use certified to be accurate by the lessee.

Allotment- an area of land designated and managed for grazing of livestock.

Allotment Management Plan (AMP)— a documented program which applies to livestock grazing on the public lands, prepared in consultation, cooperation and coordination with the lessee and other involved affected interests.

Animal Unit Month (AUM) - the amount of forage necessary for the sustenance of one cow or its equivalent for a period of one month.

Base Property- land that has the capability to produce crops or forage that can be used to support authorized livestock for a specified period of the year.

Consultation, Cooperation and Coordination— an interactive process for seeking advice, agreement or interchange of opinions on issues, plans or management actions between other agencies, affected lessees and other affected interest parties.

Grandfathered Use-is the mineral or grazing use that was taking place on the land as of the date of approval of Federal Land Policy & Management Act (October 21, 1976).

**Grazing District**— the specific area within which the public lands are administered under section 3 of the Taylor Grazing Act of 1934.

**Grazing Lease-** a document authorizing use of the public lands outside grazing districts for the purpose of livestock grazing under section 15 of the Taylor Grazing Act.

**Grazing Preference**— the total number of animal unit months of livestock grazing on public lands apportioned and attached to base property owned or controlled by a lessee.

Livestock Grazing Capacity— the estimated number of animal unit months of forage available for livestock grazing on a sustained yield basis.