3/23/88 IN REPLY REFER TO:



United States Department of the Interior

BUREAU OF LAND MANAGEMENT CARSON CITY DISTRICT OFFICE 1535 Hot Springs Rd., Ste. 300 Carson City, Nevada 89701

MAR 23 1968

4120.2 (NV-03580)

3/23/88

Ms. Dawn Lappin Wild Horse Organized Assistance P.O. Box 555 Reno, NV 89505

Dear Ms. Lappin:

The Walker Resource Area is currently developing an allotment management plan (AMP) for the Marietta Allotment in accordance with the management actions presented in the Marietta Wild Burro Herd Management Area Plan approved on July 6, 1987. One of these actions required the development of an AMP that would dedicate the majority of the wild burro use area to burro management. Since the two permittees who have grazing preference in the Marietta Allotment also graze in the Huntoon Valley, Candelaria, and McBride Flat Allotments, the proposed AMP will also include the management of those three allotments.

Enclosed for your review is the introductory section of the proposed allotment management plan. Please inform us of any concerns or conflicts that you are aware of pertaining to the four allotments that comprise the planning area. All comments should be sent to this office prior to April 18, 1988.

If you are interested in more specific information about the allotments, the information will be sent to you upon request.

Sincerely yours,

Konald K. Buden

John Matthiessen Area Manager Walker Resource Area

Enclosure: As Stated U.S. Department of the Interior Bureau of Land Management Carson City, Nevada

MARIETTA, HUNTOON VALLEY, CANDELARIA, MCBRIDE FLAT ALLOTMENT MANAGEMENT PLAN

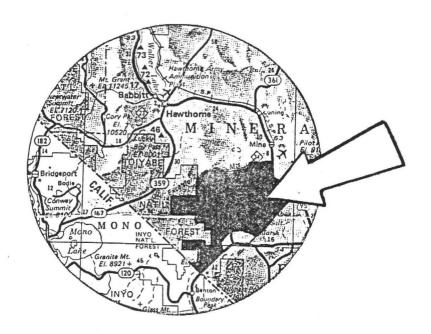


Table of Contents

I. Introduction

A. Purpose and Authority 1
B. General Information
1. Physical Location of the Allotments 1
2. Acreages and Land Status 2
3. Elevational Variations 2
4. Topography
5. Climate
6. Historical Grazing Use 3
7. Historical Multiple Use Values 4
C. Existing Information
1. Grazing Preference and Management 5
2. Wildlife Numbers and Use Areas 7
3. Wild Horse and Burro Numbers and Use Areas
4. Vegetation
a. Vegetation Types 8
b. Utilization 8
c. Trend, Condition and Potential
d. Phenology Data of Key Species
e. Threatened and Endangered Species
5. Existing Range Improvements10

Appendices:

- 1. Plant List
- 2. Ecological Sites in Huntoon Valley, Marietta, Candelaria, and McBride Flat Allotments

Maps:

- 1. Location of Private Land
- 2. Deer Season of Use in the Excelsior Mountains
- 3. Herd Areas
- 4. Range Improvements and Undeveloped Springs

SECTION I INTRODUCTION

A. Purpose and Authority

The Marietta Wild Burro HMAP approved by the Carson City District Manager on July 6, 1987, presented certain management actions that could effect livestock grazing in the Marietta Allotment. One of these actions is to propose an allotment management plan (AMP) which will dedicate a majority of the Herd Management Area to burro management. Since the two permittees who have grazing preference in the Marrietta Allotment also graze in the Huntoon Valley, Candelaria, and McBride Flat Allotments, the proposed Marietta AMP also includes the management of those three allotments.

B. General Information

1. Physical Location of the Allotments

The Marietta Allotment is located in Mineral County, Nevada, approximately 20 miles southeast of Hawthorne. One of the most prominent features is Teels Marsh, which is a large playa located in the north central portion of the allotment. The ghost town of Marietta is immediately north of Teels Marsh.

Huntoon Valley Allotment, lying west of Marietta Allotment, derives its name from the valley that traverses its central portion. The Toiyabe National Forest surrounds the allotment on the north, south, and west sides. The Excelsior Mountains surround Huntoon Valley and Teels Marsh.

Candelaria Allotment lies to the west of Marietta Allotment. It derives its name from the ghost town found in the Candelaria Hills (central and south portion). The Excelsior Mountains are found in the north portion.

McBride Flat Allotment lies to the south of Marrietta Allotment, and adjoins Forest Service lands (Toiyabe National Forest to the west and northwest, Inyo National Forest to the southwest). The Nevada-California state line and the Basalt Allotment forms the southern boundary.

2. Acreages and Land Status

Acreages and land status for the planning area is shown below. Map No. 1 shows the location of private parcels. None of the private land shown below is controlled by the grazing permittees.

Allotments	Acreages						
	Public	(%)	Private	(%)	Total		
Marietta	127,876	(99)	1,800	(1)	129,676		
Huntoon Valley	15,464	(95)	840	(5)	16,304		
Candelaria	100,331	(98)	1,716	(2)	102,047		
McBride Flat	25,452	(93)	1,863	(7)	27,315		

3. Elevational Variations

Elevation varies from a low point in Teels Marsh of 4,904 feet to a high point in the Excelsior Mountains of 8,805 feet. This entails a change of 3,901 feet. The lowest elevation, highest elevation, and elevation difference are shown below for each allotment.

Allotment	Elevation (feet)				
	High	Low	Difference		
Marietta .	8,805	4,904	3,901		
Huntoon Valley	7,120	5,640	1,480		
Candelaria	8,805	5,640	3,165		
McBride Flat	8,509	6,038	1,471		

4. Topography

Marietta and Huntoon Valley Allotments can be described as internally drained mountain basins. The valley floor in each basin contains a playa, which grades into an alluvial flat and then into the alluvial fans. The Excelsior Mountains which bound these basins are fairly rugged.

Candelaria has two basic areas that form basins: a small playa in the central portion of the allotment, and the area west of Rhodes Salt Marsh in the northeast portion of the allotment. To the north, the Excelsior Mountains bound the salt marsh, while the Candelaria Hills dominate the central and southern portions of the allotment. The Candelaria Hills are fairly rugged mountains. The McBride Flat Allotment is located within the southern end of the Excelsior Mountains. As previously stated, these mountains are rugged, however, Truman Meadows, McBride Flat, and Sagehen Spring are in basins that have more gentle terrain.

5. Climate

The climate of the planning area falls into three main types: mid-latitude desert, mid-latitude steppe and subhumid continental. The mid-latitude desert occurs on the valley floor and lower fans where the annual precipitation is 3-8 inches. Mid-latitude steppe generally occurs on the upper fans and on mountain slopes where the annual precipitation is 6 - 15 inches. The subhumid continental type occurs in the mountains. A more specific description of the climatic types is shown below.

Climatic Type	Mean Temperature (°F)		Annual Precip.	Snowfall	Dominant Vegetation
	Winter	Summer			1/
Subhumid	10-30°	50-70°	12-25"	Moderate	PIMO-JUOS
Contenental					
Mid-latitude	20-40°	65-80°	6-15"	Light to	ARTEM-PPGG
Steppe				Moderate	
Mid-latitude	20-40°	65-80°	3-8"	Light	SARCO &/or
Desert				-	ATRIP

1/Plant codes are identified in Appendix No. 1.

The majority of precipitation is in winter and is associated with Pacific fronts. In early spring the weather becomes quite variable namely because of low pressure areas over the Great Basin. In late spring and summer, high pressure systems in the southern United States causes drought conditions in Nevada. Occassional showers may occur in summer due to moist airs drifting from tropical oceans. Fall is dominated by fair weather with some storms associated with Pacific fronts and Great Basin lows (especially in late fall).

6. Historical Grazing Use

The Marietta and Huntoon Valley Allotments have historically been grazed by cattle in winter and early spring. Livestock use in Marietta has generally been in the vicinity of developed springs in the southern portion, principally near German, Stone Cabin, and Company Springs, and Little Huntoon Valley. Use in the Huntoon Valley Allotment has generally been concentrated in Huntoon Valley. The McBride Flat Allotment has historically been a cattle allotment. The majority of livestock use has been in the more level areas of Truman Meadows, McBride Flat and Sagehen Springs.

Since the early 1970's there has been occasional winter cattle grazing in the Candelaria Allotment. For more detailed historical information in the allotments described in this section, refer to grazing case files.

Marietta Allotment and the northwestern portion of the Candelaria Allotment also contain a resident herd of burros. The beginnings of the wild burro population is not certain, although there is a distinct possibility that they could have started from stock released by miners in the old mining district. The first documentation of numbers was in a 1973 census showing 68 head. The highest recorded numbers were 398 head counted in 1983. Two removals have reduced the numbers to 139 (June, 1986 count). These burros probably have occasionally drifted into the Huntoon Valley Allotment.

Two wild horse herd areas have been known to overlap into the planning area. The Garfield Flat herd has grazed in the northern portion of Marietta and Candelaria Allotments. The Montgomery Pass herd has used the McBride Flat Allotment and the southern portions of Marietta, Huntoon Valley, and Candelaria Allotments.

7.

Other Multiple Use Values

Mining began in the planning area with the discovery of silver at Candelaria in 1863. The Marietta district was soon discovered in the 1860s. During this time, the communities of Candelaria, Marietta and Belleville began (the later town was established to service Candelaria). Parelleling the development of gold and silver mining, salt production began at Teels Marsh and Rhodes Salt Marsh. Borax was discovered in association with the salt, and borax production continued until the discovery of the Death Valley deposits in 1892. The mining activity began to phase out in the 1890s due to adverse economic conditions.

Other than the large gold and silver operation that has reopened at the old site of Candelaria, mining activity has been relatively light in the twentieth century (considering the flurish of activity in the late 1800s). Exploration continues throughout the planning area.

Hunting and recreation values have been limited in the past due to the fairly remote and rugged nature of much of the planning area. As evidenced by the Marietta HMAP, great concern has been placed on the wild burro herd in the Marietta and Candelaria Allotments (Marietta is considered a prime spot for viewing burros). To a lesser extent, Candelaria and McBride Flat Allotments may be important as a wild horse viewing area.

B. Existing Information

1. Grazing Preference and Mangement

Marietta Allotment. The adjudication of May 6, 1959, established a preference of 2300 AUMs in the Marietta Allotment. Marietta was eventually divided into the Marietta Allotment (2015 AUMs) and the Huntoon Valley Allotment (285 AUMs). The preference in the Marietta Allotment is currently allocated as follows:

Permittee			Public	AUMs	
Mervin McK	ay 11/01	to	04/15	1215	
Harris Bro	thers 12/01	to	02/28	800	

Licensed use has been significantly lower than preference. This is illustrated in the chart shown below.

Permittee		Lice	nsed Use	e (AUMs))	
. –	1982	1983	1984	1985	1986	Ave.
МсКау	290	158	186	195	226	211
Harris	300	0	150	162	150	152
TOTAL	590	158	336	357	376	363

The areas that recieve the most use by livestock include the areas near of German, Stone House and Company Springs, and the Little Huntoon Valley. There is no suspended nonuse in this allotment.

Huntoon Valley Allotment: The current active preference in the Huntoon Valley Allotment is 285 AUMs. All preference is attached to the base property currently controlled by Mervin McKay, who grazes cattle in the allotment from 01/01 to 04/15.

McKay grazes on public lands administered by the BLM in the Huntoon Valley and Marietta Allotments during winter and early spring. These two allotments are used in conjunction with the Huntoon C & H Allotment administered by the Bridgeport Ranger District of the Toiyabe National Forest. The licensed use over the past five years is shown below calculated between the dates of 12/01 and 04/15. Most of this use has been in the Huntoon Valley.

Permittee		Lice	nsed Use	AUMs)	
	1982	1983	1984	1985	1986	Ave.
МсКау	329	130	307	310	262	268

<u>Candelaria Allotment</u>: This allotment does not have an adjudicated grazing preference. Occassionally, temporary nonrenewable grazing has occurred to help releive the competition between livestock and burros in the Marietta Allotment. The licensed use since 1984 is shown below. Most of the livestock grazing has ocurred primarily on the flats just east of Silver Dyke Canyon and in the vicinity of the playa in the central portion of the allotment.

Permittee		Lice	nsed Use	(AUMs))	
	1982	1983	1984	1985	1986	Ave.
Harris	0	0	849	398	98	349

<u>McBride Flat Allotment</u>: The adjudication of May 6, 1959 established a preference of 488 AUMs in the McBride Flat Allotment. All preference is attached to base property owned by the Harris Brothers, who graze cattle in the allotment from 06/01 to 09/31.

As with the Marietta Allotment, there has been very little licensed use in the McBride Flat Allotment. The licensed use for the past five years is shown below.

Permittee		Lice	nsed Use	(AUMs)		
	1982	1983	1984	1985	1986	Ave.
Harris	300	0	150	0	0	225

Permittees' Yearlong Operation: In winter, Mervin McKay trails cattle from his base properties in Smith and Antelope Valleys to the Marietta and Huntoon Valley Allotments. In spring, the cattle are moved back onto the base property, eventually being moved onto Toiyabe National Forest in the vicinity of the Sweetwater Range. The cattle remain in the Sweetwaters throughout the summer and go back onto the base in the fall.

The Harris Brothers' operation is quite variable. Generally, Orin Harris will bring cattle into the Marietta Allotment in late winter. The cattle are moved from the allotment in spring, spending the remainder of the year on his base property, or on BLM and Forest Service administered lands in California.

Wildlife Numbers and Use Areas

The existing demand and reasonable numbers for mule deer identified in the Walker RMP are shown below. Map 2 shows seasonal use areas. A small herd of Desert bighorn sheep also exists in the Excelsior Mountains, although no population data is available.

	Numbers		Season-of-Use	AUM Demand	
Allotment -	Reason-	Exist-	Dates(Months)	Reason-	Exist-
	able	ing		able	ing
Marietta	532	352	01/15 - 05/15 (4)	532	352
McBride F.	320	126	01/15 - 05/15 (4)	320	126
Candelaria	51	. 36	Yearlong *	153	107
Marietta	11	8	Yearlong *	33	23
*Resident 1		0	Tearroug		

3.

2.

Wild Horse and Burro Numbers and Use Areas

The Marietta Burro HMAP has established an initial population level of 85 burros. After this number has been reached, monitoring will establish the actual appropriate management levels.

Horses from two different herd areas are found in the planning area. The Montgomery Pass herd is managed by the U.S. Forest Service while the Garfield Flat herd is managed by the BLM. Existing numbers and management objectives are shown below. Herd areas are shown on Map No. 3.

	Kind of	Herd	1983	Management
Allotment	Animal	Area	Existing	Objective
			Numbers	Nos (AUMs)
Marietta	Horses	Montgomery	10	10 (120)
		Pass		
	Burros	Marietta	129	Initially:
				85 (1020)
Candelaria	Horses	Garfield	15	15 (180)
<i>i</i> .		Flat		
	Burros	Part of th	e Marietta	Herd
McBride Flat	Horses	Montgomery	23	23 (276)
		Pass		

4. Vegetation

a. Vegetation Types: The main vegetation types found in the planning area as described in the Walker RMP includes salt-desert shrub, sagebrush-bunchgrass, and pinyon-juniper woodland. The salt desert shrub communities are characterized by shadscale, Bailey greasewood, and a combination of cool and warm season grasses (eg., Indian ricegrass, needlegrass, and galleta). The sagebrush-bunchgrass communities are generally dominated by various species of sagesagebrush and a combination of cool and warm season grasses. The woodland communities are characterized characterized by Utah juniper and pinyon pine in pure or mixed stands. Based on Walker Resource Area records, there are eleven riparian areas in the planning area. Acreages of the major vegetation types are shown below.

Allotment	Sage-	Barren	Pinyon/	Salt-	Grease-	Desert
	brush		Juniper	brush	wood	shrub
Candelaria	15,050		5,016	17,056	32,106	31,103
Huntoon V.	2,629		928	4,175	2,320	5,412
Marietta	29,928	3,742	13,717	6,235	12,470	58,610
McBride F.	11,962		12,981	127		382

- b. <u>Utilization</u>: Allotment-wide utilization has been recorded since 1976 in much of the planning area. Heavier utilization readings generally have been found in the areas of livestock concentration discussed in "Historical Grazing Use" (page 3). Most notible of these concentration areas is the Marietta Allotment in the vicinity of Teels Marsh, which has shown severe utilization levels in past studies (principally from wild burros). Another area of severe utilization is on meadows in the McBride Flat Allotment (principally from wild horses).
- c. <u>Trend</u>, <u>Condition and Potential</u>: The apparent trend in most of the planning area is static to slightly upward. Exceptions to this are the severe use areas described in the previous section, which show a static to downward trend.

An order 3 soil survey has been completed throughout the planning area. Ecological sites were identified, however ecological status was not recorded. Appendix No. 2 shows a ranking of ecological sites found on public lands in the various allotments. A ranking of management potential based on soils is shown below.

Allotment	Acres and	% Allotment	per Potenti	al Category
	High	Moderate	Low	Barren
Marietta	2304(2%)	21014(17%)	92654(74%)	8635(7%)
Huntoon Val.	0	4828(31%)	10111(65%)	526(4%)
Candelaria	292(1%)	4912(5%)	90276(90%)	4850(5%)
McBride Flat	4418(17%)	4657(18%)	15064(60%)	1312(5%)

d. <u>Phenology Data of Key Species</u>: No phenological data has been collected for the planning area. Data for the BLM Tonopah Resource Area is shown below. The specific site from which the data was derived is at the same elevation and close to the same latitude as the planning area.

Spec-		Develo	pement St	ages 2	/	
ies	Start	Flow-	Peak of	Seed	Seed	Re-
1/	Growth	ering	Flower-	Ripe	Disim-	growth
_			ing		inate	
ARSP5	3/15	4/15	5/15	5/25	6/10	
EULA5	6/01	3/	3/	3/	11/15	
HIJA	5/10	6/10	6715	7701	7/10	9/25
ORHY	4/01	6/01	6/05	6/25	7/10	9/25
SPAM2	3/15	6/01	6/15	7/01	7/15	

<u>1</u>/ Refer to Species List (Appendix No. 1) for identification of plant codes.

- 2/ These are median dates: actual dates may vary as much as a month due to annual climatic fluctuation.
- 3/ No data.
- e. <u>Threatened and Endangered Plants</u>: The only sensitive plants of particular concern within the planning area are <u>Oryctes nevadensis</u> and <u>Penstemen arenarius</u>, which have been found near the road going to Marietta, near Belleville, and near Candelaria (ie., in Marietta and Candelaria Allotments). These plants have been recommended for the Federal Threatened List by the U.S. Fish and Wildlife Service. The current threats to the plants are summer grazing and mining.

Existing Range Improvements

5.

The only BLM range improvements in the planning area are found in the Huntoon Valley and Candelaria Allotments. These projects are shown below (refer to Map No. 4 for locations). In addition, Harris has hauled water for his livestock in the Marietta and Candelaria Allotments.

Huntoon Valley Allotment:

	Condition	Coop. Agree-	
Project No. and Name	(Year	ment or	Assignee
	Inspected)	R.I Permit	
(0197)Huntoon Well #3	Failure(1987)	Coop.	McKay
(5093)Huntoon Well #2	Good(1987)	Coup.	McKay
(5094)Huntoon Well #1	Good(1987)	Coop.	McKay
(6318)Little Huntoon	Good(1987)	R.I. Permit	McKay
Fence			
(6452)Cow Camp Holding	Good(1987)	R.I. Permit	МсКау
Corral		,	

Candelaria Allotment:

	Condition	Coop. Agree-	
Project No. and Name	(Year	ment or	Assignee
	Inspected)	R.I Permit	
(5085)Baker Well	Fair(1987)	R.I. Permit	Harris
(6439)Candelaria	Good(1987)	R.I. Permit	Harris
Storage Tank			

APPENDIX NO. 1 Plant List

Plant Code	Scientific Name	Common Name	Plant Type
AGSM	Agropyron smithii	western wheatgrass	native perennial grass
ARAR8	Artemisia arbuscula	low sagebrush	native shrub
ARARN	Artemesia arbuscula nova	black sagebrush	native shrub
ARSP5	Artemesia spinescens	bud sagebrush	native shrub
ARTEM	Artemesia sp.	sagebrush	native shrub
ARTR2	Artemesia tridentata	big sagebrush	native shrub
ARTRT*	Artemisia tridentata tridentata	basin big sagebrush	native shrub
ARTRV	Artemisia tridentata vaseyana	mountain big sage- brush	native shrub
ARTRW*	Artemisia tridentata wyomingensis	Wyoming big sagebrush	native shrub
ATCA2	Atriplex canescens	fourwing saltbrush	native shrub
ATCO	Atriplex confertifolia	shadscale saltbrush	native shrub
ATRIP	Atriplex sp.	saltbrush	native shrub
ATTO	Atriplex torreyi	whitesage saltbrush	native shrub
CELEI2	<u>Cercocarpus</u> <u>ledifolius</u> <u>intricatus</u>	white curleaf mount- ain mahogany	native shrub
CHNA2	<u>Chrysothamnus</u> <u>nauseo-</u> <u>sus</u>	rubber rabbitbrush	native shrub
CHRYS9	Chrysothamnus sp.	rabbitbrush	native shrub
CHVI8	Chrysothamnus viscid- iflorus	Douglas rabbitbrush	native shrub
COME5	Cowania mexicana	Mexican cliffrose	native shrub
DAP02	Dalea polydenia	Nevada dalea	native shrub

Plant Code	Scientific Name	Common Name	Plant Type
DIST	Distichlis stricta	inland saltgrass	perennial native grass
ELCI2	Elymus cinereus	basin wildrye	perennial native grass
EPNE	Ephedra nevadensis	Nevada ephedra	native shrub
EULA5	Eurotia lanata	winterfat	native halfshrub
GLNE	Glassopetalon neva- dense	Nevada greasebrush	native shrub
GRSP	Grayia spinosa	spiny hopsage	native shrub
HIJA	Hilaria jamesii	galleta	perennial native grass
HYMEN3	Hymenoclea sp.	burrobrush	native shrub
JUOS	Juniperus osteosperma	Utah juniper	native tree
LYCO2	Lycium cooperi	Cooper wolfberry	native shrub
MESP2	Mendora spinescens	spiny mendora	native halfshrub
ORHY	Oryzopsis hymenoides	Indian ricegrass	perennial native grass
PIMO	Pinus monophylla	singleleaf pinyon	native tree
POA++	<u>Poa</u> sp.	bluegrass	perennial native grass
POSC	Poa scabrella	pine bluegrass	perennial native grass
PPGG	(This is a general cod	e used for all perenni	al grasses)
PUTR2	Purshia tridentata	antelope bitterbrush	native shrub
SARCO	Sarcobatus sp.	greasewood	native shrub
SAVE4	Sarcobatus vermicu- latus	black greasewood	native shrub
SAVEB	<u>Sarcobatus</u> <u>vermicu-</u> <u>latus baileyi</u>	Bailey greasewood	native shrub
SIHY	Sitanion hystrix	bottlebrush sqirrel- tail	perennial native grass
SPAI	Sporobolus airoides	alkali sacaton	perennial native grass
SPAM2	Sphaeralcea ambigua	desert globemallow	perennial native forb
STCO	<u>Stipa</u> comata	needleandthread	perennial native grass
STIPA	Stipa sp.	needlegrass	perennial native grass

.

•

.

Plant Code	Scientific Name	Common Name	Plant Type
STSP3	<u>Stipa</u> <u>speciosa</u>	desert needlegrass	perennial native grass
STTH2	Stipa thurberiana	Thurbers needlegrass	perennial native grass
SUAED	Suaeda sp.	seepweed	perenial native forb
TECO2	Tetradymia comosa	hairy horsebrush	native shrub
TEGL	Tetradymia glabrata	littleleaf horsebrush	native shrub

1/All codes and names used in this appendix are based on the National List of Scientific Plant Names (SCS 1982).

AFPENDIX 2 Ecological sites

A. Huntoon Valley Allotment:

		an anteen verte, atteracter.				
Site No.	Site Name	Potential_Vegetative_Type_24	Potential <u>Category</u>	Total Acres	Percent of <u>Allotment</u>	
027×029N	Sandy 5-8" p.z.	ORHY, ATCA2, EULA5, DAPO2	Moderate	3,581	23	
029X036N	Cobbly Loam 5-8" p.z.	MESP2, ORHY, SAVEB, ATCO, HIJA	Law	1,709	11	
029X037N	Shallow Stony Loam 5-8" p.z.	MESP2, HIJA, EPNE, SAVEB	Low	1,585	10	
027X023N	Dunes 4-8" p.z.	TEC02, ATCA2, ORHY	Low	1,424	9	
027X036N	Sodic Flat 3-6" p.z.	SAVE4, ATCO, LYCO2, ORHY	Low	1,383	7	
029X033N	Sodic Hill 3-5" p.z.	ATCD, SAVES, DAPO2, ORHY	Low	E31	5	
027X025N	Sodic Flat 4-8" p.z.	SAVE4, ATCO, DIST	LON	634	4	
029X010N	Steep Loamy p.z.	ARTRW*, HIJA, DRHY, STIPA	Moderate	576	• 4 .	
027X015N	Sodic Dunes 4-8" p.z.	SAVE4, ORHY	Low	469	3	
029X041N	Wash 3-5" p.z.	CHNAZ, ATCA2, HYMEN3, ORHY	Low	46B	3	
029X026N	Loamy 8-10" p.z.	ARTRW*, HIJA, ORHY	Moderate	408	3	
	Rock Outerop	Barren	,	379	2	
029X016N	Loany Upland 5-8" p.z.	EREP, HIJA, ORHY	Low	365	2	
227X214N	Shallow Calcareous Hill 8-12" p.z.	ARAN, HIJA, EPNE, ORHY	Low	294	2	
027X057N	Droughty Loam 8-10" p.z.	STSF3, ARTRW*, EPNE	Low	238	1	
027X007N	Loamy Slope 8-10" p.z.	POSC, ARTRE*, GRSP, STTH2	Moderate	175	1	
	Flaya	Barren	"	147	:	
027X060N	Sandy 3-5" p.z.	DRHY, ATCA2, LYC32	Low	143	1	
027X022N	Wash 4-8" p.z.	TEGL, CHNA2, SAVEB, GRSP, ORHY	Low	135	1	
027X043N	Bravelly Loam 3-4" p.z.	ATCO, LYCGZ, ORHY, SAVEB	Low	130	1	
029X063N	Dry Sodic Terrace 3-12" p.z.	ATCO, SAVE4, SAVEB	Low	112	1	
C29X049N	Sandy Loam 8-12" p.z.	HIJA, ARTR#*, ORHY, STIPA	Moderate	88	1	
027X029N	W≥sh 8-10" p.z.	ARTR2, CHEYE9, SRSP	Low	80	1	
i	Pinyon - Juniper Woodland	PIMO, JUGS	Low	56	 Trace	
027X030N	Gravelly Loam 6-8" p.z.	ATCD, SAVEB, PDA++	Law	32	Trace	
027X065N	Droughty Slope 8-10" p.z.	STSF3, ARTRW*, EPNE, GRSF	Low	28	Trace	
027X047N	Sandy Loam 5-8" p.z.	HIJA, EULAS, ATCA2, ARSP5, ORHY	Low	20	Trace ·	

din se

÷

÷

-

÷

•					
029X008N	Shallow Calcareous Loam 9-12" p.z.	ARARN, HIJA, ARSP5, STIPA	Moderate	308	Trace
028X02EN	Mountain Ridge 16+" p.z.	ARARB, STIPA, PCA++	Low	277	Trace
027X044N	Saline Flat 5-8" p.z.	ATTO, SAVE4, ELCI2	Low	261	Trace
027X045N	Sandy 8-10" p.z.	ORHY, AGSM, ARTRW*	Moderate	256	Trace
027X030N	Gravelly Lcam 6-8" p.z.	ATCD, SAVEB, PDA++	Low	167	Trace
026X020N	Sandy 8-10" p.z.	ARTRW*, STCO4, ORHY	Moderate	65	Trace
026X038N	Loamy 14-18"p.z.	ARTRV, STIPA	High	63	Trace
629X089N	Wash 5-12" p.z.	ARTRT*, CHNA2, ELCI2	Moderate	51	Trace
026X005N	Loamy 12-14" p.z.	ARTRV, PUTR2, STIPA	High	48	Trace
027X066N	Breaks 6-12" p.z.	EFNE, ARARN, COMES	Low	31	Trace
027X223N	Silty 5-8° p.z.	EULA5, ARSP5, HIJA, ORHY	Low	28	Trace
029X040N	Mahogany Thicket	CELEI2, GLNE	Low	25	Trace
027X020N	Claypan 8-10" p.z.	ARARB, STTH2, POSC	Low	25	Trace
Ø22X011N	Shallow Calcareous Loam 8-12" p.z.	ARARN, DRHY, STCO4	High	18	Trace
027X041N	Deep Sodic Fan 4-8" p.z.	ATTD, ELCI2, SAVE4	High	13	Trace
	Rubbleland	Barren		12	Trace
029X063N	Dry Sodic Terrace 3-12" p.z.	ATCO, SAVE4, SAVEB	Low	11	Trace
027X061N	Shallow Calcareous Loam 6-8" p.z.	ARARN, SAVEB	Low	9	Trace
`	Badlands	Barren		8	Trace
	Dunes	Barren		5	Trace

.

•	,								
		Hereita Didees (f.)							
		Mountain Ridges 16+" p.z.	ARARS, STIPA, PCA+	+	Low		119	Trace	
			Barren			~	115	Trace	
	1.5	Sandy 8-12" p.z.	ORHY, ARTR2, SPCR,	EULAS	Hig		94	Trace	
•	- v •	Rubbleland	Barren	•			86	Trace	
		Silty 5-8" p.z.	EULAS, HIJA, ARSP5	, ORHY	Low		49	Trace	
		Sandy 3-5" p.z.	ORHY, ATCA2, LYCO2		Low		48	Trace	
		Sandy Loam 8-12" p.z.	HIJA, ARTRW*, CRHY	, STIRA	Modera	ate	39	Trace	
			ARTR₩*, GRSP, POSC		Modera		30	Trace	
	•	Shallow Calcareous Loam 6-8" p.z.			Low		28	Trace	
			ATTO, SAVE4, ELCI2		High	1	24	Trace	
		Loamy 8-10" p.z.	ARTR₩≉, HIJA, ORHY		Modera	ite	22	Trace	
		Sandy 8-10" p.z.	AGSM, ORHY, ARTRW*		Modera	te	21	Trace	
		Saline Flat 5-8" p.z.	ATTO, SAVE4, ELCI2	-	. Low		21	Trace	×.
	027X054N	Lcamy Slope 10-12" p.z.	ARTR2, POA++, STTH	2	Modera	te	16	Trace	
	029X240N	Mahogany Thicket 12-18" p.z.	CELEI2, GLNE		Low		15	Trace	
	029X063N	Dry Sodic Terrace 3-12" p.z.	ATCO, SAVE4, SAVEB		Low		13	Trace	-
		Badlands	Barren	×		а 1.4	9	Trace	÷
	027X027N	Shallow Slope 4-8" p.z.	ATCO, SAVEB, ORHY,	ETEP3 ·	Low		в	Trace	
	027X622N	Wash 4-8" p.z.	TESL, CHNA2, SAVEB	, GREP, ORHY	Low	с. ж	3	Trace	
		1							
		•					•		
		е - Р 							
									2
							·,		
			•			-			
	Ϋ́					2			
		,							
						(*)			
								•	
								ž	
				- · · · ·					
	X								

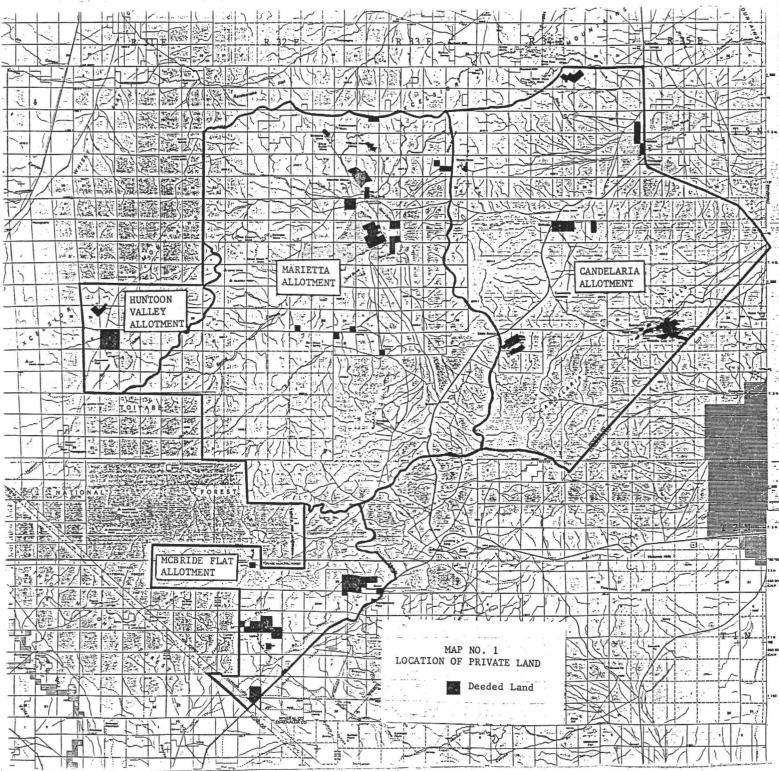
Cita to Ci	te Name		Potential	Total	Percent of
		Potential Vegetative Type	Category_	Acres	Allotaent_
	bbly Loam 5-8" p.z.	MESP2, ORHY, SAVEB, ATCO	Low	27,834	22
	allow Stony Loam 5-8" p.z.	MESP2, HIJA, EPNE, SAVEB	Low	15,002	12
	e∈p Lcamy 8-12° p.z.	ARTRU*, HIJA, ORHY, STIFA	Moderate	10,370	8
	nyon - Juniper Woodland	PIMO, JUOS	Low	9,053	7
	allow Calcareous Hill 8-12" p.z.	, , _, _,	LOW	7,874	6
	dic Hills 3-5" p.z.	ATCO, SAVEB, DAPO2, ORHY	Low	6,872	6
	ndy 3-5" p.z.	ORHY, LYCO, ATCA2	Low	6,264	5
Ro	enteen formeeting men oon op	Barren		5,545	4
029X241N Wa	sh 3-5" p.z.	(Unstable) CHNA2, ATCA2, GRHY	Low	4,341	3
027X009N Sa	ndy 5−6* p.z.	DRHY, ATCA2, EULAS	Moderate	4,034	2
027X065N Dr	oughty Slope 8-10" p.z.	ARTRW*, STSF3	Low	3,073	2
PI	aya	Barren		3,065	2
029X006N Lo	amy 8−10° p.z.	ARTR₩*, HIJA, ORHY	Moderate	2,653	2
027X007N Loa	amy Slope 8-10" p.z.	POSC, ARTRW*, GRSP	Moderate	2,472	2
027X025N Wet	Sodic Bottom 4-8" p.z.	SFAI, DIST, SAVE4	High	2,162	2
027X017N Sou	th Slope 4-3" p.z.	STSP3, ATCO, TEGL	Low	1,909	2
827X816N Soc	iic Dunes 4-8" p.z.	SAVE4, ORHY	Lew	1,561	i
027X022N Was	ih 4-8" p.z.	TEGL, CHNA2, SAVEE, ORHY	Law	1,556	1
029XC22N Sec	ic Hill 5-8" p.z.	ATCO, HIJA, ORHY, SAVEB	Low	1,443	1
227X036N Sod	lic Flat 3-6" p.z.	SAVE4, ATCO, LYCO	Low	922	:
027X047N Sha	llow Granitic Upland	STSF3, TESL, LYAN	Low	919	1
227X025N Sod	ic Flat 4-8" p.z.	SAVE4, ATCO, SUAED	Low	921	1
029X049N San	dy Loam 8-12" p.z.	HIJA, ARTEN*, ORHY, STIPA	Moderate	798	1
627X829N Was	h 8-10" p.z.	ARTRW*, ARTRT*, GRSP, CHRYS9	Lew	482	1
827X823N Dun		TECO2, ORHY	Low	634	1 -
029X016N Loa	my Upland 5-8" p.z.	GRSF, HIJA, ORHY	Low	590	Trace
027X043N Sra	velly Loam 3-6" p.z.	ATCO, LYCO, ORHY	Low	365	Trace
		STSP3, ATCO, TEGL	Low	326	Trace
	ा । सं ठें। को को स्था		LUN		
· · ·	8 				

.

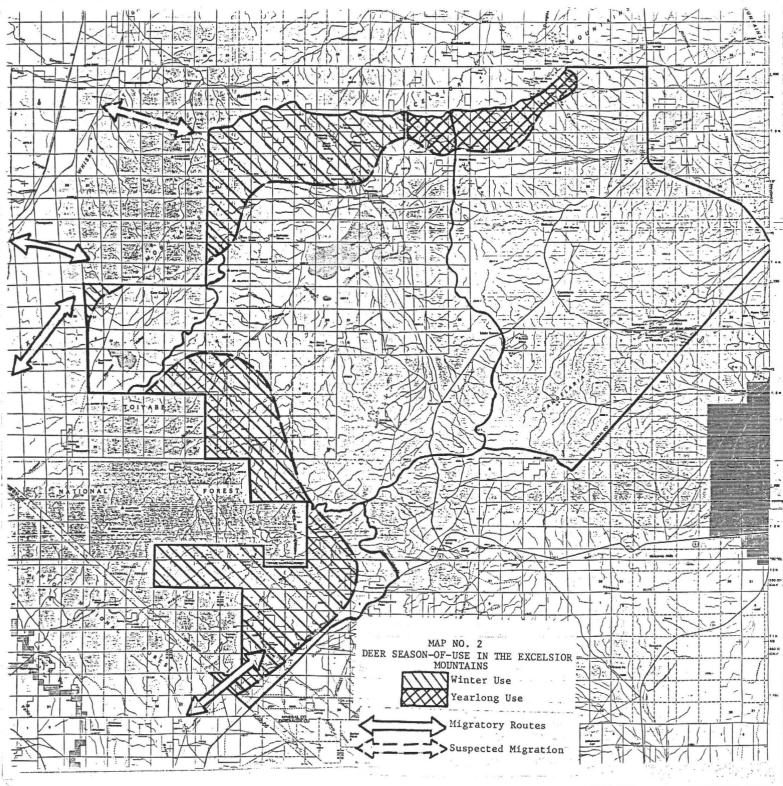
C. Candelaria Allotaent:

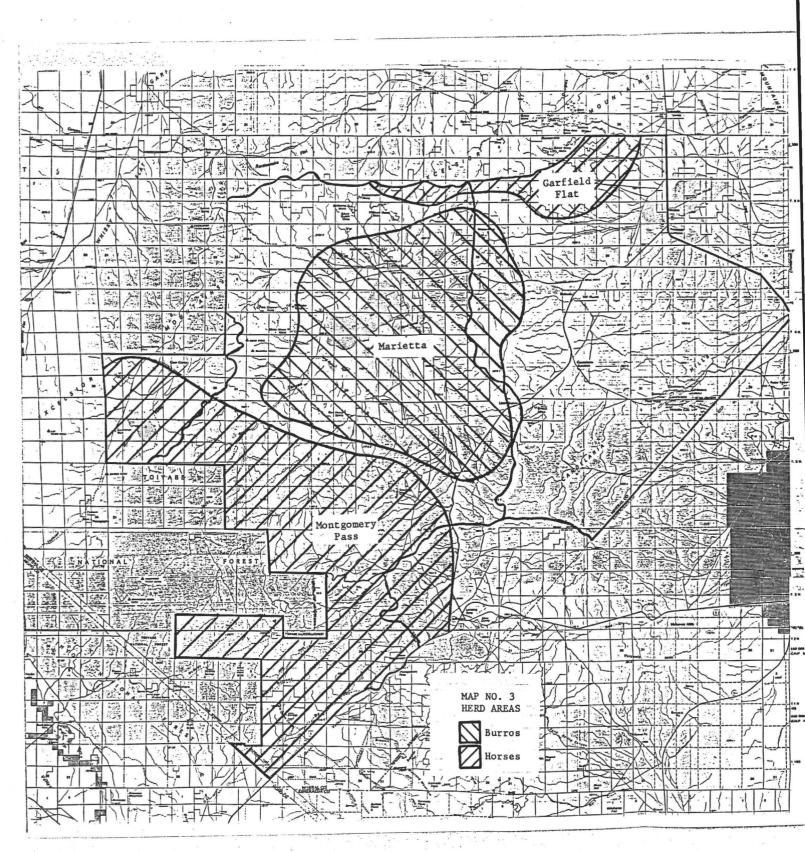
Site_No.	Site Name	Potential Vegetative Type	Potential Category_	Total Agres	Percent of Allotment_	
029X036N	Cobbly Loam 5-8" p.z.	MESP2, ORHY, SAVEB, ATCO, HIJA	Low	24,389	24	
029X037N	Shallow Stony Loam 5-8" p.z.	MESP2, HIJA, EPNE, SAVEB	Low	15,653	16	
029X014N	Shallow Calcareous Hill 8-12" p.z.	ARARN, HIJA, EPNE, ORHY	Low	9,452	9	
029X033N	Sodic Hill 3-5" p.z.	ATCO, SAVEB, DAPO2, ORHY	Low	9,312	9	
029X017N	Lcamy 5-8" p.z.	HIJA, ATCO, SAVEÐ, ARSPS	Low	6,266	6	
027X041N	Wash 3-5" p.z.	CHNA2, ATCA2, HYMEN3, ORHY	Law	5,804	6	
027X043N	Gravelly Loam 3-6" p.z.	ATCO, LYCO2, DRHY, SAVEB	Low	4,322	4	
,	Rock Cuterop	Barren		4,030	4	
	Pinycn - Juniper Woodland	FIMD, JUDS	Low	3,936	. 4 • .	
027X007N	Loamy Slope 8-10" p.z.	FOSC, ARTRW*, GRSP, STTH2	Moderate	2,260	2	
029X032N	Sodic Upland 3-5" p.z.	ATCC, SAVEB, LYCO2	Low	2,242	2	
029X022N	Sodic Hill 5-8" p.z.	ATCO, HIJA, SAVEB, ORHY -	Low	2,109	2	
027X045N	Droughty Loam 8-10" p.z.	ARARN, SAVEB, STSP3	Low	1,954	2	
029X010N	Steep Loamy 8-12" p.z.	ARTRH*, HIJA, GRHY, STIPA	Moderate	1,221	1	
027X020N	Claypan 8-10" p.z.	ARARS, POSC, STTH2	Low	767	1	
027X023N	Dunes 4-8" p.z.	TECDZ, ATCAZ, ORHY	Low	946	1	
027X036N	Sodic Flat 3-6" p.z.	SAVE4, ATCO, LYCO2, ORHY	Low .	933	1	
027X009N	Sandy 5-8" p.z.	ORHY, ATCA2, EULA5, DAP02	Mccerate	856	1	
027X029N	Wash 8-12" p.z.	ARTR2, CHRYS7, GRSP	Low	537	i	
027X017N	South Slope 4-8" p.z.	STSPS, TEGL, ORKY, ATCO	Low	4E3	Trace	
029X208N	Shallow Calcareous Loam 8-12" p.z.	ARARN, HIJA, STIPA, ARSPS	Moderate	448	Trace	
	Dumps / Pits	Barren	,	349	Trace	
	Dunes	Barren		262	Tracâ	
@27X047N	Shallow Granitic Upland 4-8" p.z.	STSP3, LYAN, TEBL, EPNE, HIJA	Low	245	Trace	
027X016N	Sodic Dunes 4-8" p.z.	SAVE4, ORHY	Low	211	Trace	
027X030N	Gravelly Loam 6-8" p.z.	ATCO, SAVEB, POA++	Low	229	Trace	
027X025N	Sodic Flat 4-8" p.z.	SAVE4, ATCO, DIST	Law	183	Trace	
027X025N	Wat Sodic Bottom 4-8" p.z.	ELTR2, ELCI2, AGSM	High	174	Trace	

. .



....







Part Name and the state of the