



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Winnemucca Field Office

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In Reply Refer To:

(NV-22.18)

4160.1-1

**AUG 25 1999**

CERTIFIED MAIL NO. Z551571472

RETURN RECEIPT REQUESTED

Dawn Lappin  
WHOA  
P.O. Box 555  
Reno, NV 89505

Dear Interested Public:

Please find enclosed the Final Little Owyhee Allotment Re-Evaluation Summary and Proposed Multiple Use Decision.

If you have any questions, feel free to contact Gene Seidlitz at (702) 623-1500.

Sincerely yours,

Colin P. Christensen  
Assistant Field Office Manager  
Renewable Resources

Enclosure

## FINAL LITTLE OWYHEE ALLOTMENT RE-EVALUATION SUMMARY

This re-evaluation supplements the Final Little Owyhee Allotment Evaluation dated February 12, 1993.

### I. **PURPOSE**

The purpose of this re-evaluation is to update the livestock, wildlife and wild horse grazing use on the Little Owyhee Allotment which was implemented by the Area Manager's Final Decision dated March 26, 1993 and the Stipulation for Dismissal of the Nevada First Corporation Appeals dated February 10, 1995 and February 17, 1995.

The livestock grazing system for the Little Owyhee Allotment is a three (3) pasture, rest within each pasture, rotation grazing system for the spring/winter pastures and a five (5) pasture deferment on the summer pastures.

Use can be made in each of the spring pastures based on available water sources. Livestock use is scheduled based on these water sources and available forage around the water source. The following stipulations pertain to the grazing use in the spring pastures: 1. no water source and accompanying service area will be scheduled for use more than two years in a row. The third year, the area will be rested. 2. if service areas for individual water sources overlap, the water source encompassing the greatest overlap will be used as the basic forage allocating unit.

The summer grazing system consists of a deferment for the Antelope #1, Antelope #2, and Rock Springs pastures while the Capital Peak pasture is scheduled for 07/28 to 08/15 use every year. Calico pasture is used for working/sorting and trailing livestock plus use in this pasture is from 08/16 to 08/31.

Fall/winter use within each of the three (3) spring pasture can be made within specific use areas which are separate from spring use areas. Use within each fall/winter use area will be limited to no more than two consecutive years. The third year the area will be rested.



II. SUMMARY OF DATA

A. Livestock (Actual Use)

Nevada First Corporation

<u>Year</u>	<u>Pasture</u>	<u>AUM's</u>
1995	Fairbanks	5004 Spring 1392 Winter
	Twin Valley	4318 Spring 587 Winter
	Antelope #1	278
	Antelope #2	328
	Calico	553
	Rock Spring	REST
	Capitol Peak	REST
	<b>TOTAL</b>	<b>12,460 AUM's</b>

Nevada First Corporation

1996	Fairbanks	5522 Spring 1093 Winter
	Antelope #1	541
	Antelope #2	444
	Calico	179
	Rock Spring	REST
	Capitol Peak	REST BLM
	<b>TOTAL</b>	<b>7,779 AUM's</b>

Nevada First Corporation

1997	Fairbanks	6407 Spring 369 Winter
	Lake Creek	3653 Spring
	Antelope #1	1539
	Antelope #2	701
	Rock Springs	1122
	Calico	289
	<b>TOTAL</b>	<b>13,711 AUM's</b>

Nevada First Corporation

1998	Fairbanks	4703 Spring
	Fairbanks	1355 Winter
	Lake Creek	1860 Spring 1319 Winter
	Antelope #1	413
	Antelope #2	133
	Calico	165
	Rock Sp. Native	945
	Rock Sp. Rehab	198
	<b>TOTAL</b>	<b>11091 AUM'S</b>



Jerry Harper

1996	Twin Valley	2376 Spring 335 Winter
	Antelope #1	146
	Calico	453
	Rock Spring	REST
	Capital Peak	512
	<b>TOTAL</b>	<b>3822 AUM's</b>
1997	Twin Valley	2467 Spring 607 Winter
	Calico	592
	Capital Peak	434
	<b>TOTAL</b>	<b>3493 AUM's</b>
1998	Twin Valley Spring	2583 spring 480 winter
	Calico	72
	Capitol Peak	735
	<b>TOTAL</b>	<b>3870 AUM'S</b>

B. Wild Horse

CENSUS

12/04/97

Pasture	Adults	Foals
Fairbanks - west	67	
Fairbanks - east	6	
Twin Valley - south	124	2
Twin Valley - north	42	1
Lake Creek - south	61	
Lake Creek - north	54	2
<b>TOTAL</b>	<b>354</b>	<b>5</b>

07/29-30/97

Pasture	Adults	Foals
Fairbanks - west	304	56
Fairbanks - east	39	13
Twin Valley	320	67
Lake Creek	284	70
Rock Springs	1	0
Calico	9	1
<b>TOTAL</b>	<b>957</b>	<b>207</b>

09/20/95

Pasture	Adults	Foals
Fairbanks	155	41
Twin Valley	169	47
Lake Creek	181	45
Summer	11	2
<b>TOTAL</b>	<b>516</b>	<b>135</b>



08/31/94

<b>Pasture</b>	<b>Adults</b>	<b>Foals</b>
Fairbanks	89	24
Twin Valley	91	30
Lake Creek	99	22
<b>TOTAL</b>	<b>279</b>	<b>76</b>

### **GATHER**

10/01/97 - 10/18/97

Fairbanks	324
Twin Valley	269
Lake Creek	312
Calico	5
Capital Peak	3
Antelope	2
<b>TOTAL</b>	<b>915</b>

### **1997 RELEASED**

Lake Creek	97
Twin Valley	100
Fairbanks	112
<b>TOTAL</b>	<b>309</b>

## **C. Wildlife Populations**

### **MULE DEER**

There are 32 BLM grazing allotments and the Humboldt National Forest in Nevada Division of Wildlife (NDOW) hunt unit 051. Estimates of mule deer populations for allotments in Unit 051 are calculated using the following information:

1. Unit-wide population estimates published annually by NDOW.
2. Allotment proportions of seasonal population distributions which were developed in 1976 by Bill Foree. The estimates were based on 14 years of actual distribution data. This was reviewed in 1995 by NDOW personnel who verified that the original figures were still representative of present day distribution.

With this information, estimates of winter, summer, spring and year-long forage demand were determined for the Little Owyhee Allotment.

Mule deer use in the Little Owyhee Allotment occurs on a year around basis in various locations in the allotment. The major deer population using the Little Owyhee originates on summer ranges on the west side of the allotment in the Santa Rosa Mountain Range. This herd summers throughout the high elevation portions of the mountain range and disperses down slope in the late fall and early winter onto the Little Owyhee Allotment. From this location, deer may or may not continue their down slope migration in response to weather conditions and snow accumulations. In years with heavier snow deer move off of the mountain foothills in the Summer pastures of the allotment and onto the foothills at the edge of the Owyhee plains, or south and east onto habitats in the neighboring William Stock Allotment.

As spring approaches, or as conditions permit, mule deer wintering in this area may move back toward the mountain and more diverse forage. During these movements deer are keying on green succulent perennial or annual grasses which greener up in the fall or in the early spring as well as browse other than sagebrush. With full spring grownup, the majority of the deer population moves back into the higher elevation areas in the summer pastures of the allotment as well as back onto Forest lands for the summer.

With this pattern described, the following table summarizes annual estimates of mule deer populations in the Little Owyhee allotment during the spring, summer and winter periods.

Estimated Spring, Summer, and Winter Mule Deer population Size in the Little Owyhee Allotment for 1992 Through 1997

	1992	1993	1994	1995	1996	1997	Average
SUMMER	54/ 81 AUMs	55/ 83 AUMs	81/ 121 AUMs	79/ 119 AUMs	65/ 97 AUMs	67/ 100 AUMs	101 AUMs
WINTER	88/ 88 AUMs	89/ 90 AUMs	131/ 131 AUMs	129/ 129 AUMs	105/ 105 AUMs	109/ 109 AUMs	109 AUMs
SPRING	84/ 42 AUMs	85/ 43 AUMs	125/ 62 AUMs	123/ 61 AUMs	79/ 40 AUMs	103/ 52 AUMs	52 AUMs
Allotment Totals	211 AUMs	216 AUMs	314 AUMs	309 AUMs	242 AUMs	261 AUMs	263 AUMs

Mule Deer populations are continuing to recover from the effects of the 1986-1992 drought. Populations have been recovering steadily since 1993 and are approaching reasonable numbers established in 1982.



## PRONGHORN

Little is known about the Pronghorn populations in the Little Owyhee Desert area. Conversations with biologists from Regions I and II, NDOW in March, 1997 and September 1998, resulted in the following general information.

Pronghorn populations in the Little Owyhee Allotment have been up and down in the past 20 years. The population dropped significantly in 1992-1993, but is currently increasing. The estimated population size for the Little Owyhee Allotment for 1998 is as follows:

Summer months - 225-250 animals

Winter months - 375-425 animals

Water is a major limiting factor to the expansion of pronghorn in the Owyhee plateau with significant areas currently unoccupied due to lack of water.

## SAGE GROUSE

Sage grouse populations in the Little Owyhee Allotment are some of the healthiest in the Winnemucca District. Numerous strutting grounds have been documented over the last four years as a result of the ongoing effort by NDOW and BLM to locate and document population status. Suitable crucial habitats abound in the allotment.

Since the last allotment evaluation 6 strutting grounds have been identified. When flown by NDOW in the spring of 1997 59 sage grouse were sighted using these strutting grounds.

## BIGHORN SHEEP

California bighorn sheep occur as periodic visitors to suitable habitats in the extreme southern portions of the allotment in association with the South Fork Little Humboldt and North Fork Little Humboldt Rivers as a result of past reintroduction in the South Fork Drainage. In addition, recent pioneering activity has been noted in the Calico Mountains portion of the allotment as sheep from the west side of the Santa Rosa Mountains expand their range. This activity has been noted as recently as 1996 when several sheep were observed around Capitol Peak during the Quinn Odell wildfire. Long range planning by NDOW has identified the canyonlands associated with the North Fork Little Humboldt River as a priority site for reintroduction to supplement the natural expansion of South Fork and Eight Mile sheep populations.



D. Climatological Data

(NOAA) 1995-1996 Paradise Valley  
Precipitation in Inches

<u>Year</u>	<u>Growing Season *</u>	<u>Annual</u>
1995	7.56	13.98
1996	3.01 m	14.05 m
1997	3.53 m	7.2 m
1998	7.69 m	15.76 m

\* growing season is defined as March - August  
m partial data

E. Utilization

The following use classes were used during monitoring:

No Use	0
Slight Use	1-20%
Light Use	21-40%
Moderate Use	41-60%
Heavy Use	61-80%
Severe Use	81-100%

A. Livestock and Wild Horse Use (Upland Utilization)  
1995, 1996 and 1998 Key Forage Plant Method  
1997 & 1998 - Landscape Assessment Method for Fairbanks, Twin Valley,  
and Lake Creek

<u>Year</u>	<u>Pasture</u>	<u>Key Area</u>	<u>Species</u>	<u>% Utilization</u>		
1995	Twin Valley	701	AGSP	10		
			SIHY	10		
		703	ORHY	10		
			SIHY	10		
		704	ORHY	10		
			SIHY	10		
		705	STTH2	10		
			SIHY	10		
		1995	Fairbanks	401	SIHY	46
					SIHY	28
403	STTH2			12		
	AGSP			14		
	SIHY			10		



<u>Year</u>	<u>Pasture</u>	<u>Key Area</u>	<u>Species</u>	<u>% Utilization</u>
1995	Antelope	101	STTH2	10
			SIHY	10
			FEID	10
		102	STTH2	10
			SIHY	10
		103	SIHY	10
			STTH2	10
			FEID	12
110	SIHY	10		
	STTH2	10		
1995	Calico	201	SIHY	10
			STTH2	10
		202	STTH2	32
			SIHY	24
1995	Capital Peak	301	STTH2	3
			AGSP	2
			FEID	1
1995	Lake Creek	REST		
1995	Rock Spring	REST		
1996	Twin Valley	701	AGSP	2
		702	SIHY	2
			ORHY	1
		703	ORHY	2
			SIHY	2
		704	ORHY	2
SIHY	2			
1996	Fairbanks	401	SIHY	22
			402	STTH2
		402	SIHY	26
			ORHY	36
		403	AGSP	14
			SIHY	12
STTH2	46			
1996	Lake Creek	REST		
1996	Antelope	101	STTH2	28
			SIHY	14
		102	STTH2	16
			ORHY	26

<u>Year</u>	<u>Pasture</u>	<u>Key Area</u>	<u>Species</u>	<u>% Utilization</u>
1996	Antelope	103	SIHY	10
			STTH2	22
1996	Calico	201	SIHY	12
			STTH2	16
1996	Capital Peak	202	STTH2	18
			SIHY	8
1996	Rock Spring	202	SIHY	10
			REST	
1996	Capital Peak	301	STTH2	12
			AGSP	16
1996	Rock Spring	REST	SIHY	14
			FEID	12
1997	Twin Valley	701		21.1
		702		5.6
		703		40.3
		704		3.5
		705		4.6
1997	Fairbanks	401		17.1
		402		23.8
		403		27.3
		404		8.4
		405		3.5
1997	Lake Creek	501		48.0
		502		4.6
		503		2.5
		504		2.5
		505		2.5
		506		3.5
		507		3.5
		508		44.0
		509		50
		510		2.5
		511		2.5
		512		2.5
		513		2.5
1997	Antelope	101	STTH2	58%
			SIHY	8%
		102	STTH2	24%
			ORHY	30%
103	SIHY	6%		
	STTH2	56%		
1997	Antelope	110	STTH2	60%
			SIHY	10%



<u>Year</u>	<u>Pasture</u>	<u>Key Area</u>	<u>Key Species</u>	<u>% Utilization</u>
1997	Calico	201	STTH2 SIHY	36% 16%
		202	STTH2 SIHY	44 34
1997	Capital Peak	301	FEID STTH2 AGSP	2% 3% 3%
1997	Rock Springs	601	FEID	7%
			STTH2	6%
			SIHY	4%
		602	SIHY AGSP STTH2	11% 6% 12%
1998	Twin Valley	603	STTH2	6%
			SIHY	5%
			701	SIHY STTH2 AGSP
		702	STTH2 SIHY ORHY	7% 3% 2%
		704	ORHY SIHY	3% 2%
1998	Fairbanks	705	STTH2	11%
			SIHY ORHY	10% 8%
		401	SIHY	46%
		402	STTH2 SIHY	38% 36%
		403	STTH2 SIHY AGSP	18% 1% 2%
1998	Lake Creek	501		2.5%
		502		2.5%
		503		2.5%
		504		2.5%
		505		2.5%
		506		2.5%
		507		2.5%
		508		9%
		509		18%
		510		2.5%
		511		2.5%
512		2.5%		
513		2.5%		

<u>Year</u>	<u>Pasture</u>	<u>Key Area</u>	<u>Key Species</u>	<u>% Utilization</u>
1998	Antelope	101	STTH2	4%
			SIHY	1%
		FEID	2%	
		102	STTH2	3%
SIHY	3%			
103	STTH2	64%		
	SIHY	3%		
110	SIHY	2%		
	STTH2	7%		
1998	Rock Spring	601	FEID	24%
			STTH2	50%
			SIHY	8%
		602	SIHY	14%
STTH2	48%			
603	STTH2	39%		
	SIHY	2%		
608	SIHY	2%		
	STTH2	3%		
	AGCR	2%		
	KOCHI	2%		
	MESA	23%		
1998	Capital Peak	301	SIHY	2%
			AGSP	10%
			FEID	5%
			STTH2	34%
1998	Calico	201	STTH2	10%
			SIHY	1%
202	STTH2	34%		
	SIHY	3%		



B. Livestock (Wetland and Streambank Riparian Utilization)

Utilization studies utilizing the Key Forage Plant Method (KFPM) were conducted in 1995, 1996, 1997 and 1998. The following table is summary of the utilization levels found on the summer pastures during the evaluation period.

pasture	key area	species monitored	Year			
			8/24,31 1995	8/7 and 10/16 1996	8/26,27/ 1997	09/14 09/18 1998
Antelope	105	SALIX CAREX JUNCUS PONE3	0% 22% 24% 26%	0% -- -- --	0, 64%## 64% --	0% 44%
	106	JUNCUS PONE3 CAREX	10% 10% 10%	30% -- 30%	30% -- 28%	<5% <5%
	107	JUNCUS PONE3 CAREX	26% -- --	not measured	13% -- 14%	no data
	108	CAREX PONE3 JUNCUS	not measured	25% 25% --	32% 30% 31%	14% 17% 13%
Capitol Peak	303	CAREX JUNCUS PONE3	8%*** 2%*** 0%	****	32% 35% --	50% 50% --
	304	PONE3 TRIFO	2%*** <5%***		0% --	<5% --
	305	JUNCUS PONE3 CAREX	3%*** 2%*** --		5% 13% 10%	24% 24% 24%



Rock Springs	605	CAREX	0%**	0%**	--	42%
		JUNCUS	0%**	0%**	--	42%
		PONE3	0%**	0%**	50%	50%
	606	CAREX	0%**	0%**	50%	34%
		JUNCUS	0%**	0%**	48%	34%
		PONE3	0%**	0%**	--	--

## The indication of two utilization rates for the Antelope pasture key area 105 represent two different monitoring locations along the little Owyhee river. The first number represents the utilization at the upper site and represents 60 to 70 percent of the utilization pattern along the little Owyhee. The second utilization figure represents the lower 30 to 40% of the reach beginning above the reservoirs and extending to a point 1/4 mile below them.

\*\* Rock Springs Pasture was rested in 1995 and 1996, Permittee did not need to use it. Utilization was documented to determine the influence of the existing wild horse population on utilization rates in this pasture.

\*\*\* The BLM lands within the Capitol Peak Pasture was rested in 1995, Permittee did not need to use it. Slight utilization rates are as a result of limited livestock drift off of the private lands.

\*\*\*\* The Capitol Peak Pasture was burned over the majority of its surface during the Quinn Odell Incident which began on 8/26 and was controlled on 9/2. Total acreage was over 56,000 acres with just over 8,100 acres occurring in the Capitol Peak Pasture 311 of which was on private lands.

With implementation of the January 1995 stipulated agreement, utilization levels dropped considerably. Another effect of the stipulated agreement was the implementation of rest in the Rock Springs pasture for the last two years. With the addition of extended spring use in the spring pastures, the Rock Spring pasture was not needed in the rotation from spring to summer use. Horse use, which had been believed to be significant in this pasture was found to be inconsequential to the total utilization of the allotment.

#### C. Wild Horse Utilization

##### Use Pattern Mapping

Use pattern mapping was conducted in the southern Fairbanks pasture on 2/28/96 prior to increased livestock turnout on 3/1. Species monitored included ELCI, ATCO, SIHY, POSE, and STTH2. The area monitored extended from the Bullhead Ranch to the Little Mud Spring area, including Fairbanks Reservoir and northeast toward the North Fork of the Little Humboldt. Although cattle and horses were in the area, use was no heavier than light-to-moderate at two stops around Key Management Area #402; light,



slight or none observed elsewhere.

Use pattern mapping was conducted in the southern Twin Valley Springs pasture on 3/13/96 prior to increased livestock turnout on 3/15. Species monitored included SIHY, ORHY, POSE, STTH2 and AGSP. The area monitored extended from the southern gate to the Eight Mile Reservoir area. Use was moderate within the first 2 miles from the gate, tailing off to light and slight elsewhere.

An incidental observation of light use on AGSP by wild horses on Humboldt Hill was recorded 9/5/95.

Key Management Area utilization monitoring

10/28-30/98

KMA#	Species	Use	Comments
401	SIHY	44%	
402	STTH2 SIHY	STTH2 39% SIHY 36%	
403		2.5%	
404		4.6%	
405		2.5	
501	ORHY, SIHY, EULA	ORHY 10%, SIHY 6%, EULA 2%	
502		2.5%	
503		2.5%	
504		2.5%	
505		2.5%	
506		2.5%	
507		4.6%	
508	SIHY ORHY	SIHY 7% ORHY 18%	
509	SIHY ORHY	SIHY 26% ORHY 30%	
510		2.5%	
511		3.6%	



512		4.6%	
513		2.5%	
11/5-8/96			
401	SIHY	18%	
402	stth,sihy,crepis	6% stth	
403	stth,sihy,agsp	19% stth, 9% sihy, 6% agsp	
(Big Reserv area)	sihy,stth	heavy	horses in area
(Greeley Flat to Bull Pen Reserv)	stth,sihy	heavy	livestock drifting when trailing home from National Forest
501	orhy,sihy,eula	48% SIHY	
502	orhy,sihy,pose	1% SIHY	
503	sihy,stth	2% sihy, 2% stth	
504	orhy,sihy,pose	none observed	
505	orhy,sihy	none observed	
506	orhy,sihy,eula	none observed	
507	orhy,stth,sihy	1% stth	
508	orhy,sihy	none observed	
509	orhy,sihy	none observed	
510	sihy,stth	2% sihy, 7% stth	
511	orhy,sihy,stth	9% stth, 5% orhy	
512	sihy,stth	1% sihy, 4% stth	
513	orhy,sihy	none observed	
701	agsp,sihy,stth	2% agsp, 4% sihy, 5% stth	
702	sihy,orhy,crepis	none observed	
703	orhy,sihy	12% orhy, 4% sihy	



704	orhy,sihy	4% orhy,1% sihy	
705	stth,sihy	12% sihy, 4% stth	

8/1-2/95

KMA#	Species	Use	Comments
401	sihy	46% sihy	
402	sihy,stth	28% sihy,25% stth	
403	stth,agsp,sihy	12% stth, 14% agsp, 10% sihy	
404	agsp,sihy	none observed	
405	agsp,stth,sihy	very slight	1 grazed plant each
501	orhy,sihy,eula	14% orhy,6% sihy 0% eula	horses in area, Lake Creek reservoir full of water
508	orhy,sihy	none observed	
509	orhy,sihy	none observed	

7/20/95

KMA#	Species	Use	Comments
701	agsp,sihy	10% agsp, 10% sihy	
702	orhy,sihy	10% orhy, 10% sihy	
704	orhy,sihy	10% orhy, 10% sihy	
705	stth,sihy	10% stth, 10% sihy	

2/22-24/95

KMA#	Species	Use	Comments
401	sihy	slight (1%)	
402	stth,sihy,crepis	none observed	
503	sihy,stth	slight to none	
504	orhy,sihy,pose	slight to none	
513	orhy,sihy	slight to none	
701	agsp,sihy,crepis	slight	
702	sihy,orhy,crepis	none observed	
704	orhy,sihy	none observed	

F. Trend

Upland Key Areas (Data collected by Intermountain Range Consultants)

<u>Year</u>	<u>Pasture</u>	<u>Key Area</u>	<u>Key Species</u>	<u>%Frequency</u>
1994	Fairbanks	401	STTH2	48
			SIHY	55
			ORHY	1.5
1995	Fairbanks	401	STTH2	51
			SIHY	52
			ORHY	1
1996	Fairbanks	401	STTH2	52
			SIHY	51
			ORHY	0
1997	Fairbanks	401	STTH2	49.5
			SIHY	44
			ORHY	0
1998	Fairbanks	401	STTH2	45.5
			SIHY	46.5
			ORHY	.5
1994	Fairbanks	402	STTH2	21
			SIHY	41.5
			ORHY	.5
			ELCI	4
1995	Fairbanks	402	STTH2	20.5
			SIHY	42
			ELCI	5



<u>Year</u>	<u>Pasture</u>	<u>Key Area</u>	<u>Key Species</u>	<u>%Frequency</u>
1996	Fairbanks	402	STTH2	22
			SIHY	37.5
			ELCI	3.5
			AGSP	1
			ORHY	.5
1997	Fairbanks	402	STTH2	22
			SIHY	44
			ELCI	4.5
			AGSP	1
1998	Fairbanks	402	STTH2	21
			SIHY	41
			ELCI	3
			AGSP	2.5
1994	Twin Valley	701	AGSP	42.5
			STTH2	2.2
			SIHY	34.5
1995	Twin Valley	701	AGSP	51
			STTH2	1.5
			SIHY	57
1996	Twin Valley	701	AGSP	43.5
			STTH2	5
			SIHY	42
1997	Twin Valley	701	AGSP	37
			STTH2	4.5
			SIHY	50
1998	Twin Valley	701	AGSP	49.5
			STTH2	3
			SIHY	39
1994	Twin Valley	702	ORHY	10
			SIHY	68
1995	Twin Valley	702	ORHY	9
			SIHY	75
1996	Twin Valley	702	ORHY	10.5
			SIHY	71
1997	Twin Valley	702	ORHY	9
			SIHY	66.5
1998	Twin Valley	702	ORHY	7
			SIHY	74.5
1994	Lake Creek	501	SIHY	45.5
			ORHY	10.5
1995	Lake Creek	501	SIHY	27.5
			ORHY	8.5

<u>Year</u>	<u>Pasture</u>	<u>Key Area</u>	<u>Key Species</u>	<u>%Frequency</u>
1996	Lake Creek	501	SIHY ORHY	47.5 14.5
1997	Lake Creek	501	SIHY ORHY	39 8
1998	Lake Creek	501	SIHY ORHY	41.5 11
1994	Lake Creek	502	SIHY ORHY	81.5 16
1995	Lake Creek	502	SIHY ORHY STTH2	79 .5 21
1996	Lake Creek	502	SIHY ORHY STTH2	77.5 13.5 4
1997	Lake Creek	502	SIHY ORHY STTH2	70.5 9 1.5
1998	Lake Creek	502	SIHY ORHY STTH2	68 11.5 4.5
1994	Lake Creek	504	ORHY SIHY	14 54
1995	Lake Creek	504	ORHY SIHY	15 59
1996	Lake Creek	504	ORHY SIHY	12 60.5
1997	Lake Creek	504	ORHY SIHY	12.5 63.5
1998	Lake Creek	504	ORHY SIHY	13.5 64.5
1994	Lake Creek	505	ORHY SIHY	15.5 25
1995	Lake Creek	505	ORHY SIHY	13.5 38
1996	Lake Creek	505	ORHY SIHY	16 34.5
1997	Lake Creek	505	ORHY SIHY	13.5 31
1998	Lake Creek	505	ORHY SIHY	14 38



<u>Year</u>	<u>Pasture</u>	<u>Key Area</u>	<u>Key Species</u>	<u>% Frequency</u>
1994	Calico	201	STTH2 ORHY ELCI	47 10 3.5
1995	Calico	201	STTH2 ELCI	37 4
1996	Calico	201	STTH2 ORHY ELCI SIHY	42.5 1.5 4.5 61.5
1997	Calico	201	STTH2 ELCI SIHY	44.5 3.5 67.5
1998	Calico	201	STTH2 ELCI SIHY ORHY	39 4.5 62 1.5
1994	Calico	202	STTH2 ORHY AGSP ELCI	17 3.5 1.5 8
1995	Calico	202	STTH2 ORHY AGSP ELCI	16 3.5 1 4
1996	Calico	202	STTH2 ORHY AGSP ELCI	19.5 2.5 .5 6.5
1997	Calico	202	STTH2 ORHY ELCI SIHY	15.5 3 6.5 57
1998	Calico	202	STTH2 ORHY ELCI SIHY	12.5 2.5 7.5 41.5
1994	Capital Peak	301	STTH2 FEID AGSP ELCI SIHY ORHY	36 7.5 1 1 47.5 1.5
1995	Capital Peak	301	STTH2 FEID AGSP ELCI	37.5 13.5 3 1.5

<u>Year</u>	<u>Pasture</u>	<u>Key Area</u>	<u>Key Species</u>	<u>% Frequency</u>
1996	Capital Peak	301	STTH2 FEID AGSP ELCI	36 12.5 1.5 1
1998	Capital Peak	301	STTH2 FEID AGSP ELCI SIHY	31 10.5 1 1.5 43.5
1994	Antelope	103	STTH2 SIHY	24 51.5
1995	Antelope	103	STTH2 SIHY	25.5 56
1996	Antelope	103	STTH2 SIHY	27 54.5
1997	Antelope	103	STTH2 SIHY	30 61
1998	Antelope	103	STTH2 SIHY	27 62.5
1994	Antelope	110	SIHY STTH2	69.5 3
1995	Antelope	110	SIHY STTH2	60 2.5
1996	Antelope	110	SIHY STTH2	74.5 4.5
1997	Antelope	110	SIHY STTH2	67 3
1998	Antelope	110	SIHY STTH2	69.5 1.5
1994	Rock Spring	601	STTH2 FEID SIHY	25 39 64
1995	Rock Spring	601	STTH2 FEID SIHY	16.5 35.5 68.5
1996	Rock Spring	601	STTH2 FEID SIHY	27.5 36.5 66
1997	Rock Spring	601	STTH2 FEID SIHY	24 34.5 65.5



<u>Year</u>	<u>Pasture</u>	<u>Key Area</u>	<u>Key Species</u>	<u>% Frequency</u>
1998	Rock Spring	601	STTH2 FEID SIHY	28.5 25 62.5
1994	Rock Spring	602	ELCI STTH2 ORHY SIHY	20.5 7.5 2.5 62.5
1995	Rock Spring	602	ELCI STTH2 SIHY	6.5 15.5 62.5
1996	Rock Spring	602	ELCI STTH2 ORHY SIHY	7.5 19.5 1.5 58
1998	Rock Spring	602	ELCI STTH2 ORHY SIHY	14.5 3.5 2.5 63.5
1994	Rock Spring	603	STTH2	53
1995	Rock Spring	603	STTH2 SIHY	60.5 60.5
1996	Rock Spring	603	STTH2 SIHY	51.5 65.5

## Riparian

One riparian key area was established as a headcut monitoring site in 1982. This site was located in the Capitol Peak pasture. The site was chosen to represent the numerous headcuts of various sizes which were documented in several mesic riparian meadows in the summer pastures.

### Key Area 304-Capitol Peak Pasture

This key area is located at T46N R41E section 12 NE1/4NE1/4. The headcut is believed to have developed as a result of the access road which bisects the meadow at the lower end near a seasonally wet seep. The road crosses just uphill of the seep and the headcut begins as a noticeable feature within 10 feet of the edge of it.

The design of the study consists of two transects oriented perpendicular to the gully/headcut. The first intersects the main body of the gully, while the second was established at the cut face. A tape stretched tightly between the transect ends and flattened to the ground surface serves as a baseline from which width and depth measurements are collected at one foot intervals. Using this data, a profile diagram of the gully was developed. This methodology was used for all monitoring transects.

The first measurement of this site was made in summer 1982 with subsequent measurements being made in 1983, 1987 and 1993.



## Results

In the period between 1982 and 1993, T-2 the lower transect located in the main body, widened four feet. The overall profile of the gully changed very little with exception of slight depth changes of less than 3 inches over the study period. One side of the gully was composed of a gently declining slope which was not wholly vegetated but did not move perceptibly through the study period. The other side of the gully sustained the most change of any site on the transect. The greatest movement was detected between 1982 and 1983 measurements when this bank lost nearly two feet of material. This movement was presumably a consequence of the runoff event of 1983 which impacted systems throughout the region. In 1987 very little change was documented in the transect profile.

By 1993, an additional 1.4 feet had detached from the face as a slump. This material was still evident, creating a small bench. The transect has not been measured since 1993, however, due to the detachment of the last slump as a unit, the intact vegetation appeared to have become reattached to the soil. Assuming no flushing of the gully bottom or hoof action, this vegetation mass is likely to start the healing process of this gully.

Transect T-1 was initially established at the nick point of the headcut and measurements of the profile of the undercut site were made in addition to cross sectional measurements.

Very little movement of soil beneath this transect was recorded between 1982 and 1983 except for a deepening of the cut from 15 to 19 inches. In 1987, the cut profile had widened by 7 inches and had become more rectangular in shape suggesting the dynamics of water flow through its bottom had changed. By 1993, the cut profile had widened on both sides from 19 inches to over 4 feet. The rectangular shape had developed further and some of the initial depth had been restored as a result of filling.

The profile of the head of the cut as measured horizontally from the stretched tape also changed between 1982 and 1993. In 1982, the tape was located at the edge of the downcut. By 1993, the headcut had advanced 42 inches from the tape location at the 1982 headcut edge.

### G. Ecological Site Inventory (ESI)

Ecological site inventory data for the Little Owyhee Allotment was collected in 1985 through 1989. This data was compiled into the Field Office Geographical Information System in July 1999. The ecological site inventory is designed to serve as the basic inventory of present vegetation compared to potential. Four classes are used to express the degree to which the production or composition of the present plant community reflects that of the potential natural community.



<u>Seral Stage</u>	<u>Percent of Present Community that is Climax</u>
PNC	76-100
Late	51-75
Mid	26-50
Early	0-25

The General Ecological Status Map represents the seral stages for the allotment. This map consists of single seral stage units and ecological sites association as identified in the soil survey units. To produce the map, associated ecological sites were grouped into one seral stage based on the dominated seral stage, which is greater than 50 percent. The total acres by seral stage are derived from the site writeup area percentages. No adjustments were made to this acre total. The count is the number of site writeup areas that the seral stage occurs in.

Two major fires occurred on the Little Owyhee Allotment since the ecological status inventory has been collected. The Quinn Odell (8575 acres) and the North Chimney fire (15805 acres) have not been updated with ESI.

#### H. Wildlife; Riparian/Fisheries Habitat Inventory

1. Priority Species: mule deer, pronghorn, sage grouse, bighorn sheep.
2. Other Species: Several species of game and non game wildlife species occur in the allotment.
3. Habitat Evaluation

#### PRONGHORN/SAGE GROUSE

Since the identification of conflicts between livestock and wildlife in the 1993 FMUD and the subsequent February, 1995 stipulation for dismissal of appeals between Nevada First Corporation and BLM, crucial wildlife issues with regard to riparian habitats and conflicts with livestock grazing have been alleviated. The stipulated dismissal modified stocking rates and livestock seasons of use to improve/maintain the condition of the numerous riparian and wetland habitats in the allotment. The result of this agreement has been dramatic improvements in vigor and forage availability of riparian species crucial to sage grouse.

Supplemented by the establishment of appropriate management levels for wild horses, overall habitat conditions have improved for both pronghorn and sage grouse.

In August, 1996 the Quinn Odell fire burned a total of over 56,000 acres. Of this total, 8,165 acres occurred on BLM administered public lands in the Capitol Peak, Calico, and Rock Springs Pastures. In January and February of 1997, 5,500 acres were reseeded by BLM as a fire rehabilitation measure to mitigate impacts to wildlife and watershed values. The remaining acres were not seeded due to inaccessibility and an identified natural recovery potential. The rehabilitation seed mixture utilized a combination of grass, forb and shrub



species in the mixture which are palatable to wildlife. Sagebrush, which is a crucial wildlife forage and cover species was included in the rehabilitation seed mix.

Both pronghorn and sage grouse will have direct benefits from this fire in coming years. Pronghorn have realized a net increase in suitable habitat with the reduction of sagebrush as result of the fire. Cover height has been identified as a limiting factor to pronghorn population growth throughout the Owyhee plateau. In addition, the release of suppressed grass and forb species and the planting of palatable grass, forb, and shrub species after the fire has resulted in an increase in both habitat quantity and forage quality and diversity for both sage grouse and pronghorn. Population status/densities in the future should improve dramatically.

## FISHERIES

There is one currently existing fishery in the Little Owyhee Allotment. The North Fork Little Humboldt River contains a self sustaining population of Brook Trout Salvelinus fontinalis.

With the completion of the North Fork Exclosures in 1997, the majority of public lands in the upper reaches will be protected from grazing and significant improvement is expected.

### North Fork Little Humboldt River

#### Background

The North Fork of the Little Humboldt River (River) begins at an elevation of 8200 feet on the East side of Buckskin Mountain in the Santa Rosa Range of the Humboldt National Forest. From this point, the River flows in an easterly direction for approximately 12.8 miles through National Forest and private land until it enters BLM administered public land. From the Forest Service/BLM boundary, the North Fork flows an additional 31 miles, including 6.75 miles of private land, where it exits the gorge at the North Fork Ranch.

The North Fork Little Humboldt River is the longest (43.81 miles total length) and largest (total watershed is 134,400 acres in size) perennial stream flowing in the Winnemucca District. The North Fork contains a significant self sustaining trout fishery and has been recognized for its resource values by both BLM which identified the Lower Gorge as Wilderness Eligible, as well as the Nation Park Service which included the North Fork in the Nationwide Rivers Inventory of 1982.

The North Fork Little Humboldt River sustains perennial flows from its inception to its terminal point at Chimney Reservoir on the Little Humboldt River. Peak flows on this stream have been recorded as high as 205 Cubic Feet per Second (cfs) and average flows are 26 cfs.



The North Fork Little Humboldt River, on BLM administered public lands occurs in two major forms. The upper reach (Forest Boundary to Greeley Crossing) can be characterized as a typical Nevada stream with a V shaped, narrow valley bottom and branching ephemeral tributary channels. The stream itself is slightly confined within a past downcut, however the perennial flows have widened this cut substantially, allowing the stream to regain a moderate degree of sinuosity. Vegetation along this reach includes several willow species including Coyote, and Yellow willow. Both willow species are well distributed throughout the reach with reproduction commonly noted on point bars and along the stream edge. Heavy past utilization has inhibited the success of this reproduction in its development, however. Herbaceous vegetation is very diverse and includes several species of sedge as well as JUNCUS, and a diverse array of forb species. Nebraska and beaked sedge species (Carex nebraskensis, CAREX rostrata are abundant and widespread and appear to be increasing at historic photo points. Invading large stands of basin big sagebrush are also abundant on the upper terraces of the creek. In these areas, great basin wild rye and wood's rose, as well as several other mesic drainage bottom species occur in association.

In 1996, an enclosure was constructed on the upper reach of the North Fork from the forest boundary to Greeley crossing. While the potential for dramatic improvement is present with the completion of the fence, continuing problems with keeping livestock out are hampering the progress of recovery on some sections. A large number of watergaps contributes to this problem

The Middle Reach begins approximately 3 miles downstream of the mouth of the canyon marking the end of the upper reach and the beginning of the private land around Greeley Crossing. The downstream end of Greeley Crossing and the beginning of the middle reach is marked by the reentry of the creek into a canyon.

This is the upper end of the North Fork Gorge, as well as the beginning of the Wilderness Study Area.

From this point, the North Fork is characterized as a moderately well confined stream with valley bottom widths ranging from one hundred feet to less than thirty. Due to the degree of confinement and the size of the watershed, this system is prone to large runoff events. The stream flows through a generally low gradient valley. The major control for the stream is geologic in the form of a regular series of twenty five to over one hundred foot long boulder steps. These steps are often but not always located on turns or narrow spots and appear to be extensions of rockslide or debris slide materials originating from the gorge walls. The step features are integral components to the



maintenance of stream conditions and appear to have prevented significant large scale downcutting along this reach.

Riparian vegetation along this stretch is somewhat different than at the upper reach. Dominant woody vegetation along this stretch also includes Yellow and Coyote willow species, however, Wood's Rose, Red-Osier dogwood and Alder are much more prevalent. In addition, several areas include the dead remains of Cottonwoods. These cottonwoods appear to be mostly extirpated from the reach except for one mature tree on the extreme lower end of the gorge. Herbaceous vegetation is dominated by Juncus species with Carex species present but much less common than at the upper reach. In addition, true grass species are also much more abundant along this reach. This condition may be an expression of the long history of overgrazing by horses and livestock which tend to become stuck in the gorge once they achieve access to the water. Once there, the likelihood of heavy season long or even year around grazing in the bottom is high. There were only five negotiable access points between the upper and lower mouth of the canyon, by which livestock or horses could enter or exit without significant exertion, and use levels and cattle and horse presence in November demonstrated the difficulty with managing use in the Gorge.

Several times throughout the last twenty or more years, the lower gorge has been proposed for selected fencing to control access to the creek. Based on the continuing problems managing horse and livestock access, the selected fencing proposal is still germane to the management of this unique resource. Much of the original survey and design staking is still present in the gorge and could be used.

#### Stream Survey

The North Fork Little Humboldt River has been surveyed several times since the initial inventory in 1976 ( 1978, 1980, 1982, 1984, 1988, 1990, 1997). With exception of 1997 data, all stream surveys were incomplete with respect to sample intervals which varied up to four miles and were tied specifically to areas of easy access, not only by survey personnel, but by livestock and wild horses as well.

In 1997, a complete survey was initiated by BLM personnel. This survey established permanently marked survey stations at approximate one mile intervals and relocated/remarked all previous stations as well. This survey was complete, except for the last four miles of stream above the North Fork ranch. These stations were not inventoried due to a down turn in temperatures resulting in icing up of the channel. The comparative outcomes for the upper reach, lower reach, and overall stream survey findings, presented by marker year are provided below.



Table 1. Stream Habitat Parameters North Fork Little Humboldt River Upper Reach (forest boundary to Greeley), Middle Reach (Greeley to four miles above mouth) and overall, For Years 1976 to 1997 \*

	Upper Reach				Middle Reach				OVERALL Rating for Upper and Middle Reaches			
	1997	1990	1980	1976	1997	1990	1980	1976	1997	1990	1980	1976
% Pool/Riffle Ratio	37	96	32	84	35	78	91	60	35	88	72	66
% Quality Pools	21	26	0	9	20	20	0	37	21	23	0	32
% Desirable Materials	59	37	74	37	53	23	48	12	55	31	61	19
% Bank cover	56	25	38	36	55	25	45	57	55	25	41	50
% Bank Stability	70	41	61	45	75	63	86	58	73	48	73	54
% Overall Habitat Optimum	48	45	41	42	48	42	54	45	48	43	49	44
Avg. Water Depth(feet)	.79	.66	.55	.38	.86	.6	.51	.51	.83	.63	.53	.46
Avg. Water Width(feet)	11.9	14.6	10.1	14.7	16.2	16.4	14.5	20.3	14.3	15.5	11.6	18.3
Width/Depth Ratio	15.1	22.1	18.4	38.7	18.8	27.3	28.4	39.7	17.2	24.6	21.9	39.3

- Overall % Habitat Optimum rating is the average of the next five habitat parameters.  
 - Data blocks not showing values were not available from the original study findings  
 - 1997 data utilized a 5 transect per station approach whereas a 4 transect per station approach was used in previous years.  
 \* Data for years 1982, 1984, and 1988 was not included for ease in interpretation, but is available at the District Office.  
 \*\* Total sample size was smaller than for 1997 data due to irregular station intervals. One to 5 stations were used in reaches indicated versus 8 for upper Reach and 10 for middle reach in 1997.

In general, the North Fork Little Humboldt River has improved slightly during the study period. A closer analysis of the study data indicates that major changes in the pool to riffle ratio and pool quality have been the primary reason for the lack of a more substantial improvement in overall habitat conditions. All of the three other Priority A limiting Factors, used to determine overall stream condition, have improved dramatically.

Bank cover is the element of the stream environment composed of the living streamside vegetation in close proximity to the stream. Bank cover provides several crucial contributions to aquatic habitat conditions including stabilization of the water column, temperature regulation, insects for forage, and filtration of sediment. Bank cover values on the North Fork have improved over ten points since 1976. Bank stability values have likewise improved over the period.



Bank stability is an assessment of the resilience of the immediate stream soil interface from destruction. Bank stability is maintained by a combination of vegetation and rock or bedrock. Bank stability values on the North Fork have improved by just over twenty points through the study period.

Stream bottom material composition is likewise another important parameter for quality stream habitat conditions. Stream bottom materials, both size and distribution, can directly affect fisheries habitat by influencing reproductive success of the fishery and the quality of the aquatic forage base. Stream bottom material quality has improved over 100 percent over its conditions in 1976.

The declines in pool quality and pool/riffle ratio are somewhat confusing given the state of the other critical habitat parameters discussed above. Pool quality and pool/riffle ratio components are generally the last parameters to unravel as a stream declines in condition. In a scenario of a declining stream, bank cover and bank stability decrease first. With this in place declines in stream bottom material quality follows. Finally, the channel profile itself changes from narrow and deep system to a wide and shallow system.

In the case of the North Fork, bank cover, bank stability and stream bottom material quality are all improving through the study period. The explanation in this sequence is found in an understanding of the process a stream goes through when it begins to improve. Once the stream reaches begins to improve, generally the first thing to happen is vegetation changes will occur. Both herbaceous and woody species will increase establishing a barrier to the rushing water. As this barrier becomes more established, the water slows and suspended sediments starting with the larger particles, begin to drop out. This process is known as bank building and can take several years to progress. As this process accelerates (more favorable growing sites are established and more vegetation becomes established and/or grows larger) the elevation of the sides of the stream begins to rise, and as this happens the water is forced to flow through a more and more confined space. The channel begins to evolve back towards a narrower and deeper system. As this happens, more and more of the stream becomes deeper and slower moving. Pool quality may improve, but often it lags as the relative number of pools increases dramatically, but the quality of the pools remains relatively low.

The North Fork demonstrates all of these qualities. Bank cover has improved dramatically, as has bank stability and stream bottom material quality. In addition, the average water depth has increased, and the overall average water width has decreased. (Note that water width change varied significantly between the upper and middle reaches). This is tied to the increased accessibility of the upper reach segment mostly by cattle, and the decreased use of the middle reach by both cattle and horses (though there still are areas of significant impact by horses and cattle). The percentage of stream width in pools has increased over thirty percent, but the overall quality of pools (expressed as the percentage of pools over 2 feet deep, longer than the stream is wide, and with cover divided by the width of all pools combined) has decreased. Lastly, the increase in the number and size of pools and the static quantity of riffles has decreased the pool/riffle ratio.



The conclusion of this data is that the North Fork has improved slightly since 1976. Pool parameters have not improved to date, and have actually declined as a consequence of the improvements in bank cover and stability and subsequent decreases in channel width and water width and increases in water depths. It would be expected, should improvements continue, that stream parameters (cover, stability and stream bottom material quality) continue to improve, and that pool parameters will follow with time. The improvement in pool parameters will likely not occur in the short term however.

Besides the existing fishery in the North Fork, portions of streams in the allotment drain to the north, out of the great basin and contribute to the Upper Columbia River Basin watershed. Since 1994 an interagency team has been working to complete and Environmental Impact Statement for the Upper Columbia River Basin. This document will be used to guide decision making regarding future land use and development in the basin. To date, the document has not been finalized. Potentially significant management implications are being contemplated in this document which will effect management of the Little Owyhee Allotment.

The East Fork Little Owyhee River was historically occupied by populations of Redband trout Onchoryncus mykis and seasonally supported anadromous stocks of Chinook Salmon.

Stream temperature monitoring has been conducted on the North Fork of the Little Humboldt since the Spring of 1996. The temperature data has been collected at four separate sites: 1) Upper station is located adjacent to an under cut bank approximately 150 yards downstream of the upper end of the exclosure (1996, 97, 98) 2) Mid station is located approximately 500 yards upstream of the lower end of the exclosure (1997, 98), 3) Abandoned Mid Reach is located at the downstream edge of the private property on Greely flat, at the beginning of the lower gorge (1996-This site was abandoned and replaced by #2 above), and 4) Lower station is at the mouth of the lower gorge above the North Fork Ranch (1997). Air temperature data has been collected at a site adjacent to the upper stream station. Maps showing the exact location of all monitoring sites are located in the Thermograph monitoring files.



The table illustrates the percentage of time that the stream temperature exceeded select reference points, and allows a comparison of the stream's temperature to that of the air.

Reach	Year	# of days exceeding 68°F July1-Sept1	% total hours spent in excess of 68°F July1-Sept1	# of days exceeding 75°F July1-Sept1	% total hours spent in excess of 75°F July1-Sept1	Average July1-Sept1 Diurnal Fluctuation	Average Daily maximum temp July1-Sept 1	Daily Average Temperature July1-Sept1
Air	1996					37.84	81.84	63.50
Station	1997					51.08	87.81	63.18
	1998					51.27	92.16	67.02
Upper	1996	61	37.0%	40	12.0%	19.62	75.46	65.27
	1997	56	30.5%	21	5.0%	17.62	73.17	64.01
	1998	62	33.1%	30	7.9%	18.02	74.32	64.77
Mid	1996*	61	46.8%	54	22.4%	21.62	78.77	67.37
	1997	52	27.9%	7	1.6%	11.19	71.27	65.17
	1998	53	37.6%	5	1.3%	8.71	70.86	66.46
Lower	1997	54	45.9%	27	7.9%	12.22	74.41	67.76

\*During 1996 the Mid Reach was different than that of 1997 and 1998.

Although the period of record is brief (2-3 years) there appears to be a downward trend in temperature extremes. Due to their locations on the stream system, the upper station serves to document the stream temperature as the waters enter on to BLM administered land and the mid station illustrates the cooling affects that the riparian enclosure has had on the North Fork of the Little Humboldt. Stream temperatures normally share an inverse relationship with respect to elevation, as the stream drops in elevation the temperature of the water tends to rise. As shown in the table above, during 1998 the mid station exhibits a 3.46°F decrease in daily average maximum temperature and a 9.31°F decrease in diurnal temperature fluctuation, as compared to the upper station.



## 5. PROPER FUNCTIONING CONDITION (PFC)

Functionality was determined in accordance with BLM Technical Report 1737-9 (1993) Process for Assessing Functioning Condition (lotic) and Technical Report 1737-11 (1994) Process for Assessing Proper Functioning Condition for Lentic Riparian-Wetland Areas. Five assessment classes are used: 1 - Proper Functioning Condition (PFC), 2 - Functioning at Risk, Upward Trend (FAR+), 3 - Functioning at Risk, Static Trend (FAR=), 4 - Functioning at Risk, Downward Trend (FAR-) and 5 - Non Functioning (NF).

	Lotic (Miles)				
	PFC	FAR+	FAR=	FAR-	NF
Calico Creek	18.12	0.60	0.27	2.24	0.00
Little Owyhee (East Fork)	11.16	0.00	3.10	2.43	0.00
Mahogany Creek	6.26	0.00	3.40	0.00	0.00
Milligan Creek	0.00	0.00	1.82	0.00	0.00
North Fork	5.11	20.85	0.00	0.00	0.00
Little Humboldt					
Willow Creek	<u>11.47</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>
Totals	40.65	20.85	8.59	4.67	0.00

	Lentic (Acres)				
	PFC	FAR+	FAR=	FAR-	NF
Calico Spring	50.50	0.00	0.00	0.00	0.00
Piccolo	0.00	0.00	0.00	11.39	0.00
Piccolo Enclosure	5.69	0.00	0.00	0.00	0.00
Piccolo Reservoir	<u>0.00</u>	<u>0.00</u>	<u>4.00</u>	<u>0.00</u>	<u>0.00</u>
Totals	56.19	0.00	4.00	11.39	0.00

The limiting factors inhibiting PFC on the above Lotic and Lentic systems are:

### LOTIC

Calico Creek - herbaceous diversity and vigor are lacking, age class of wood species is limiting, reservoir in channel and water trough adjacent to channel

East Fork of Little Owyhee River - heavy livestock use, incised/widened channel, limited woody species, poor streambank storage ability, poor herbaceous species diversity

Mahogany Creek - sloughing banks, riparian area has not achieved full potential, vegetation not comprised of desirable plant communities, adequate vegetation not present to protect banks and dissipate energy.

Milligan Creek - heavy use by livestock and wild horses, age structure and vegetative diversity are lacking



## LENTIC

Piccolo - numerous headcuts, recent burn in the upland watershed, riparian vegetation dominated by POA, and less than 1% hydric soils

Piccolo Reservoir - lack of riparian vegetation to protect banks due to livestock use

### 6. THREATENED/ENDANGERED/CANDIDATE/SENSITIVE SPECIES

Informal consultation on effects of livestock grazing on the allotment was completed in January, 1993 (1-5-93-I-70) This consultation concluded that Lahontan cutthroat trout Onchoryncus clarki henshawi do not occur in the allotment.

In addition, a species list received in April, 1995 (1-5-95-SP-65) indicated that the spotted frog Rana pretiosa may occur in the allotment. The spotted frog is currently maintained as a candidate species. No other threatened, endangered, or candidate species were known to occur on the allotment. This list was updated in 1997 with no further additions.

The following BLM listed sensitive species is likely to occur on the allotment and could potentially be impacted by livestock grazing:

western burrowing owl Athene cunicularia hypugea

The Burrowing owl is a colonial underground nesting raptor which preys on small mammals, rodents and reptiles. Impacts to this species from livestock grazing would occur in the form of competition for forage between livestock and prey species and/or direct destruction of burrow entrances by hoof action. Competition for forage is not believed to occur and impacts to den entrances would be highly uncommon due to the high visibility of these features and the resistance of livestock to step in and on these holes. Therefore, there are not believed to be any significant negative effects on sensitive species as a result of livestock grazing.

### 7. Other Information

#### a. Range Improvements

Some of the riparian habitats identified for fencing by the permittee in the Stipulation For Dismissal of the Nevada First Corporation Appeals have been completed.

The South Cow Camp and East Antelope Spring Enclosures were constructed in addition to the North Fork Little Humboldt River riparian fence. Lone Willow Spring Enclosure is surveyed and designed, but won't be constructed until a pipeline system is developed to provide water to the area outside of the enclosure.



The Antelope #2 Division Fence has been resurveyed and designed to encompass the majority of the public reaches of the East Fork of the Little Owyhee River. This project will be called the East Fork Riparian Pasture.

b. Wildland Fire

The Quinn/Odell Fire started on 08/26/96 and was controlled on 09/02/96. The fire burned a total of 8,476 acres of which 8,165 acres were on BLM administered lands and 311 acres on private land.

Rehabilitation efforts were completed during the winter of 1997 with 5,485 acres being aerially seeded. Seven (7) miles of fence were also constructed to separate the seeded areas from the unburned areas in the Rock Springs pasture and allow necessary rest to the rehabilitated ranges. The burned portions of the Capitol Peak and Calico pastures were closed as a result of fire.

c. Transfer

In February 1996, NFC transferred 4100 AUM's from the Home Ranch to the Little Humboldt Ranch. These AUM's are part of the Little Owyhee Permit.

d. Lease

In February 1996, NFC leased the Little Humboldt Ranch and the grazing privileges associated with the base property (4100 AUM's) to Jerry Harper for a period of three years. A three year grazing permit was issued to Jerry Harper for the Little Owyhee Allotment.

e. Standards and Guidelines of Rangeland Health

The following are the Standards of Rangeland Health as developed in consultation with the Sierra Front-Northwest Great Basin Resource Advisory Council, other interested publics and approved by the Secretary of the Interior on February 12, 1997. The terms and conditions of the livestock grazing permit must be in conformance with these approved Standards and Guidelines.

1. Soil processes will be appropriate to soil type, climate and land form.
2. Riparian/wetland systems are in properly functioning condition.
3. Water quality criteria in Nevada or California State Law shall be achieved or maintained.
4. Populations and communities of native plant species and habitats for native animal species are healthy, productive and diverse.



5. Habitat conditions meet the life cycle requirements of special status species.

These standards will be addressed as to whether they are met or not met in the conclusion section.

- f. Cultural Resources

This allotment had heavy use at key area 103 in 1998. This key area is in the Antelope pasture. There is no inventory for that area. There are no known conflicts at this time.

Any range improvements would be subject to Section 106 of the National Historic Preservation Act, which requires inventory prior to surface disturbance.

8. Noxious Weeds

A complete noxious weed inventory for the allotment has not been completed. However, noxious weeds have been documented along roads/trails. Control measures have taken place to control the spread of noxious weeds.

### III. CONCLUSIONS

#### A. Short Term

1. The objective for utilization of key plant species (CAREX, JUNCUS, POA) in wetland riparian habitats is 50%.

This objective was met throughout the re-evaluation period. Since the implementation of the January 1995 stipulated agreement, grazing seasons and number have been different. Under this grazing system, utilization levels have been met. The Rock Springs pasture was rested in 1995 and 1996.

2. The objective is for utilization of key streambank riparian plant species (CAREX, JUNCUS, POA, SALIX, ROWO) on the East Fork of the Little Owyhee River is 30%.

This objective was met in 1995 and 1996. However, in 1997, heavy use occurred on the herbaceous and woody vegetation along reaches of this river and in 1998 moderate use (44%) was noted on the herbaceous component.

3. The objective for utilization of key streambank riparian plant species (CAREX, JUNCUS, POA, SALIX, ROWO) on the North Fork of the Little Humboldt River is 30%.



This objective was not monitored for during the evaluation period. Utilization rates and trends are believed to be similar to those for other riparian areas in the Antelope pasture. The completion of the North

Fork Little Humboldt Exclosure fence in 1996 was expected to remove the majority of the public stretches of this creek from grazing use with exception of watergap locations. Inspection of these sites in the fall of 1997 indicated that portions of this exclosure received livestock use and some areas received more than 30% utilization.

4. The objective for utilization of key upland plant species will be 50% for STTH2, SIHY, and FEID and it will be 40% for CREPIS, ELCI, POSE, AGSP, EULA5, ORHY and LUPIN.

This objective was met in 1995 and 1996. However, data collected in 1997, at key areas 101, 103 and 110 indicates that the utilization objective for STTH2, in the Antelope pasture was exceeded, but utilization remained in the moderate category. In 1998, heavy use (64%) occurred on STTH2 at key area 103.

#### B. Long Term

1. Manage, maintain and improve public rangeland conditions to provide forage on a sustained yield basis for livestock with an initial stocking level of 27,800 AUMs.

No baseline data (ESI) has been collected since 1987 to evaluate this objective.

2. Improve to and maintain the ecological status per key management areas as determined in the Little Owyhee Monitoring Plan.

No baseline data (ESI) has been collected since 1982-1987 to evaluate this objective. Personal observations indicate that improvement has taken place.

3. Manage, maintain and improve public rangeland conditions to provide forage on a sustained yield basis for big game, with an initial forage demand of 288 AUMs for mule deer, 1,233 AUMs for pronghorn and 72 AUMs for bighorn sheep.

- a. Improve to and maintain 2,756 acres in Paradise Valley DY-1, 29,612 acres in Santa Rosa DY-10, 31,678 acres in Santa Rosa D-2, and 44,210 acres in Santa Rosa DS-1 in good or excellent mule deer habitat condition.



b. Improve to and maintain 2,490 acres in Mahogany Ridge PS-8, 25,837 acres in Santa Rosa PS-7 and 21,608 acres in Little Owyhee PS-10 to good condition. Improve to and maintain 457,963 acres in Owyhee Desert PY-9, 17,847 acres in Maiden Butte PW-9, 2,306 acres in Evans Lake PW-10, 7,762 acres in Button Lake PW-11, 4,939 acres in Button Lake PS-9, 8,322 acres in Evans Lake PS-11, and 7,469 acres in Bullhead PW-13 in fair or good pronghorn habitat condition.

New data has not been collected since the last evaluation to evaluate whether progress is being made toward attainment of this objective. Portions of Santa Rosa DW-1 and nearly all of Santa Rosa DS-1 use areas in the allotment were burned by the 1996 Quinn/Odell Fire. Much of the winter habitat which burned in this fire was reseeded in February, 1997, and drainages on the summer range were reseeded as well. The rehabilitation seed mix utilized a combination of perennial shrubs and grasses including sagebrush and it is hoped this action will minimize the period when habitat conditions as a result of the burn are depressed.

Pronghorn habitat conditions were not assessed. Two guzzlers were completed in PS-9 and PS-11 in 1994 and two more were constructed in 1997. This should reduce the effects of the most limiting factor to antelope habitat condition on the allotment (water availability and distribution). A second limiting factor has been identified in areas of tall sagebrush occurring as a strip up to two miles wide running roughly north and south of Button Lake. This vegetation presents a possible barrier to movement by antelope between areas east and west of this habitat. Selective cool season burning of portions of these ranges is recommended to provide corridors for movement and mixing of animals. In addition, the 1997 fire resulted in an increase in useable habitat for pronghorn within the allotment.

4. Improve to and maintain 594 acres of riparian and meadow habitat types in good condition.

With the implementation of grazing use under the terms and conditions of the January, 1995 stipulated agreement, riparian conditions have improved dramatically. Forage vigor noticeably increased after 1994, and observation of several of the identified headcuts in the summer pastures indicate the healing process is beginning on some. Progress is being made toward attainment of this objective.

5. Improve to and maintain 21 acres of aspen habitat types in good condition.



Data has not been collected to evaluate the achievement of this objective. Functionality assessments conducted in 1997 indicated much of this habitat lies on private land, however specific acreage were not indicated.

6. Improve to and maintain 60 acres of mahogany habitat types in good condition.

The principal mahogany habitat in the allotment is in the Antelope and extreme southern end of the Capital Peak pastures with the only public portion of this habitat occurring in the Antelope field. These areas were observed in 1996 and were found to have vigorous regeneration occurring. The limited mahogany habitat near Calico spring has had heavy use on regeneration in past years, most likely due to the limited extent of this plant and the proximity to water. In 1996 the utilization on regeneration was observed to be much lower.

7. Improve to or maintain the following stream habitat conditions on the North Fork of the Little Humboldt and East Little Owyhee from 48% on the North Fork, unknown on the East Little Owyhee to an overall optimum of 60% or above.

- 1) Streambank cover to 60% or above.
- 2) Streambank stability to 60% or above.
- 3) Maximum summer water temperature below 70 degrees Fahrenheit.
- 4) Sedimentation below 10%.

With completion of the enclosure fencing in 1996, progress is expected to be made toward achievement of this objective at least for portions of North Fork Little Humboldt River within the enclosure. Conditions downstream from the enclosure (unfenced) are functioning at risk with an upward trend.

In general, the North Fork Little Humboldt River has improved slightly during the study period. A closer analysis of the study data indicates that major changes in the pool to riffle ratio and pool quality have been the primary reason for the lack of a more substantial improvement in overall habitat conditions.. All of the three other priority A limiting factors use to determine overall condition, have improved dramatically.

Bank cover has improved dramatically, as has bank stability and stream bottom material quality.

As it is currently written, the temperature objective is not being met. The potential of the site needs to be characterized through the collection



of baseline data prior to the establishment of an objective. Until the potential of the site is realized, any reversal in the current trend of decreasing temperatures shall constitute an "unmet" objective.

Even at that time, the potential for the stream on public lands may not meet state water temperature objectives due to management on non-public lands upstream of public lands reaches.

8. Protect sage grouse strutting grounds and brooding areas. Maintain a minimum of 30% canopy cover of sagebrush for nesting and winter use.

Data has not been collected to evaluate whether progress is being made toward achievement of this objective. Portions of sage grouse habitat in the Capitol Peak pasture burned in 1996. In coming years, and following the establishment of the rehabilitation seeding the area is expected to provide high quality habitat for sage grouse. Together with the significant improvement in livestock grazing practices resulting in improvement in vigor in riparian habitats, it is believed that sage grouse habitat is improving.

9. Improve to or maintain the water quality of the North Fork Humboldt River and East Little Owyhee River to the state criteria set forth for the following beneficial uses: Livestock drinking water, cold water aquatic life, wading and wildlife propagation and sport fishery.

Data has not been collected to determine the condition of the water in these systems. Temperature data has been collected at several locations along the North Fork since 1995 and will continue to be collected. With completion of the enclosure fences, improvements in water quality will be expected.

#### C. Standards of Rangeland Health

1. Soil processes will be appropriate to soil type, climate and land form.

Utilization objectives for upland habitats, at the majority of the key areas have been met. In 1997, the utilization objective for STTH2 was exceeded at the key areas in the Antelope pasture. However, utilization was within the moderate use category. In 1998, heavy use occurred at key area 103. These utilization objectives provide for maintenance of soil processes.

2. Riparian/wetland systems are in properly functioning condition.



Fifty seven percent (57%) of the lotic systems are in properly functioning condition, twenty four percent (24%) are functioning at risk with an upward trend, twelve percent (12%) are functioning at risk with a static trend and six percent (6%) are functioning at risk with a downward trend. Lentic systems are seventy eight percent (78%) properly functioning condition, six percent (6%) functioning at risk with static trend, sixteen percent (16%) functioning at rise downward trend. Utilization levels have generally been met providing improvement towards achieving this standard.

3. Water quality criteria in Nevada or California State Law shall be achieved or maintained.

Although no data has been collected, there is no evidence that State Standards are being met.

4. Populations and communities of native plant species and habitats for native animal species are healthy, productive and diverse.

Numerous ecological sites exists with varying plant communities within this allotment. Attainment of the majority of the utilization objectives indicates that this standard is being met.

5. Habitat conditions meet the life cycle requirements of special status species.

The allotment provides the necessary environment for special status species. There are not believed to be any significant effects on sensitive species as a result of livestock grazing.

#### IV. TECHNICAL RECOMMENDATION

##### A. Livestock

1. Grazing Preference (AUM's) Nevada First Corporation

a.	Total	43,363
b.	Historical Suspended	19,663
c.	Permitted Use	23,700
d.	Authorized	17,570
e.	Suspension	6,130
	- Voluntary Non-Use	
	Spring/fall/winter	399
	- Temporary Suspension Non-Use	
	Summer	5,731 *



\* The 5,731 AUM's held in temporary suspension may be activated during the re-evaluation period. These AUM's are being held in temporary suspension based on the fire rehabilitation efforts and also the possibility of more AUM's being available if utilization levels on streambank/wetland riparian habitats are being achieved.

Grazing Preference (AUM's) Jerry Harper

- |    |                      |       |
|----|----------------------|-------|
| a. | Total                | 4,100 |
| b. | Historical Suspended | 0     |
| c. | Permitted Use        | 4,100 |
| d. | Authorized           | 4,100 |
2. Season of Use
- |                   |                |
|-------------------|----------------|
| Spring            | 03/01 to 05/31 |
| Additional Spring | 06/01 to 06/30 |
| Summer            | 07/01 to 08/31 |
| Fall/Winter       | 10/01 to 02/28 |
3. Kind of Livestock - Cow/Calf
4. Percent Federal Range - 100%
5. Grazing

The following grazing system will be implemented for the 2000-2004 grazing seasons.

**NEVADA FIRST CORPORATION**

**SPRING USE (EVERY YEAR)**

<u>Pasture</u>	<u>Livestock Number</u>	<u>Season of Use</u>	<u>AUM's</u>
Fairbanks	2000	03/01 to 05/31	6049
	500	06/01 to 06/30	493
Lake Creek	1500	03/01 to 05/31	4537
	500	06/01 to 06/30	329
<b>TOTAL</b>			<b>11,408</b>



## JERRY HARPER

Twin Valley	350	03/01 to 03/15	173
	450	03/16 to 03/31	237
	630	04/01 to 04/30	621
	665	05/01 to 06/30	1332
		<b>TOTAL</b>	<b>2,363</b>

The maximum spring period of use will be 03/01 to 06/30. All three spring pastures will be used every year. Total scheduled spring use will be up to 13,771 AUM's.

A total of 21,462 AUM's have been calculated based on the identified permanent and seasonal available water sources in the spring, fall/winter pastures.

The carrying capacity for the spring, fall/winter pastures is as follows:

13,773 AUM's for spring use - livestock  
2,516 AUM's for winter use - livestock  
4,776 AUM's for year round use - horses  
397 AUM's non-use pending additional water  
21,462 AUM's total spring, fall/winter

Twelve thousand two hundred ninety five (12,295) AUM's will be authorized annually from 03/01 to 05/31. An additional 1,478 AUM's may be authorized between 06/01 to 06/30 as additional spring use, provided that utilization is less than 50%. In normal years, of the 2,000 head in Fairbanks 1,500 head will be going onto the Forest and of the 1,500 head in Lake Creek 1,000 head will be going onto the Forest. In most years, these livestock will be moved out of the spring pastures on 05/31 and onto the U.S. Forest Service and by 06/30 all livestock will be removed from the spring pastures.

Use in the spring pastures will continue to be based on available water sources. Use will be scheduled based on these water sources and available forage around the water source. Availability of water sources and forage will be determined by BLM and NFC based on the following criteria:

1. Water source(s) and accompanying service area(s) will be scheduled for use two consecutive years. The third year, the water source and service area will be rested.
2. If service area(s) for individual water sources overlap, the water source encompassing the greatest overlap area will be used as the basic forage allocating unit.



## ADDITIONAL SPRING USE

Upon request by the permittee, additional spring use may be approved by the authorized officer. The authorization will be subject to the availability of sufficient forage in the spring pastures to support the additional use. Additional use, if authorized will be at the scheduled water source(s) for the current year only, with the stipulation that utilization must be less than 50%.

## SUMMER USE

### NEVADA FIRST CORPORATION

#### 2000 (EVEN YEARS)

<u>Pasture</u>	<u>Livestock Number</u>	<u>Season of Use</u>	<u>AUM's</u>
Antelope East	1500	06/01 TO 06/10	493 AUM'S
Antelope West	1500	06/11 TO 06/18	395 AUM'S
Antelope West	500	07/01 TO 08/15	756 AUM'S
Antelope East	500	08/16 TO 08/31	263 AUM'S
Calico *			574 AUM'S
Rock Spring Native	1000	06/01 TO 06/10	329 AUM'S
Rock Spring Rehab	1000	06/11 TO 06/18	263 AUM'S
Rock Spring Rehab	500	07/01 TO 08/15	756 AUM'S
Rock Spring Native	500	08/16 TO 08/31	263 AUM'S
		<b>TOTAL</b>	<b>4092 AUM'S</b>

\* Variable livestock numbers and season of use.

#### 2001 (ODD YEARS)

Antelope East	1500	06/01 TO 06/10	493 AUM'S
Antelope West	1500	06/11 TO 06/18	395 AUM'S
Antelope East	500	07/01 TO 08/15	756 AUM'S
Antelope West	500	08/16 TO 08/31	263 AUM'S
Calico *			574 AUM'S
Rock Spring Native	1000	06/01 TO 06/10	329 AUM'S
Rock Spring Rehab	1000	06/11 TO 06/18	263 AUM'S
Rock Spring Native	500	07/01 TO 08/15	756 AUM'S
Rock Spring Rehab	500	08/16 TO 08/31	263 AUM'S
		<b>TOTAL</b>	<b>4092 AUM'S</b>

\* Variable livestock numbers and season of use



**JERRY HARPER - Every Year**

<u>Pasture</u>	<u>Livestock #</u>	<u>Season of Use</u>	<u>AUM's</u>
Calico	600	07/01 to 07/07	138 AUM'S
Capital Peak	600	07/08 to 08/15	769 AUM'S
Calico	600	08/16 to 08/31	316 AUM'S
		TOTAL	1,223 AUM'S

Season of use in the summer pastures will be 07/01 to 08/31. Total scheduled summer use will be 5,315 AUM's .

Five thousand seven hundred thirty one (5,731) AUM's will be held in temporary suspension until utilization monitoring, in the summer pastures, indicates that these additional AUM's are available and also the possibility exists for additional AUM's as a result of the rehabilitation efforts.

Every year 2,500 head of livestock will be in the Antelope East, Antelope West, Rock Spring Native and Rock Spring Rehab pastures from 06/01 to 06/18. The limited use in these pastures is for facilitation of the livestock onto the Forest Service. The remaining 1,600 head will be authorized from 07/01 to 08/31.

Calico pasture will continue to be used to facilitate livestock operations from the spring pastures to the Forest Service and to and from spring pastures and summer pastures. The total combined use in this pasture, including scheduled use and working/sorting livestock, should not exceed 1028 AUM's. The livestock numbers and season of use vary year to year. The permittee will notify the BLM prior to using the Calico pasture for the purpose of trailing and processing livestock.

**WINTER USE EVERY YEAR**

**NEVADA FIRST CORPORATION**

<u>Pasture</u>	<u>Livestock Number</u>	<u>Season of Use</u>	<u>AUM's</u>
Fairbanks	254	11/01 To 02/28	1000 AUM'S
Lake Creek	200	10/01 To 02/28	1000 AUM's

**JERRY HARPER**

Twin Valley	104	10/01 to 02/28	516 AUM's
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Fall/winter use within each pasture will be made within specific use areas which are separate from spring use areas. Use within each fall/winter use area will be limited to no more than two consecutive years. The third year the area will be rested. Livestock use will be limited to specific use areas by utilizing natural snow accumulations, and by limiting access to developed waters. While some livestock drift out of the scheduled use area(s) may occur, the low livestock numbers will make these impacts minimal.

Fall/winter use areas by pasture are described as follows:

### **Twin Valley Spring Pasture**

The fall/winter use area will consist of the basin around the Little Humboldt Ranch from the southern pasture boundary north to Four Mile Butte. Use can be made in the fall/winter use area for two consecutive years. The third year the area will be rested.

### **Lake Creek Pasture**

The northern portion of this pasture has three use areas within it:

- Area A        The area serviced by the Maiden Spring Pipeline
- Area B        The area serviced by the Lake Creek Reservoir, East Fork Little Owyhee River and Cathcart Cabin.
- Area C        The area serviced by Willow Reservoir and Wild Bill Spring.

### **Fairbanks Pasture**

The southern portion of this pasture has three use areas within it:

- Area A        The area serviced by private waters, Fairbanks Reservoir, and Pete's Reservoir.
- Area B        The area serviced by private waters along the North Fork of the Little Humboldt River and Chimney Reservoir.
- Area C        The areas east of the North Fork of the Little Humboldt River and various reservoirs.

Use can be made in a particular fall/winter use area for two consecutive years. The third year, the fall/winter use area will be rested.



## **RATIONALE**

### **Spring Use**

The proposed management action will continue to use each spring pasture every year from 03/01 to 05/31. However, rest within each pasture will be implemented. The authorized spring use will be based on available public and private water sources in these pastures, with the stipulation that a specific use area will not be utilized more than two consecutive years. The third year it will be rested. This rest will allow for an increase in plant vigor and seeding establishment.

Additional spring use, if authorized, will enable the permittee to utilize AUM's held in non-use, and will allow the summer season of use to be adjusted. Additional spring use will be authorized only if utilization is less than 50%.

### **Summer Use**

The summer pastures contain the majority of the wetland riparian and streambank riparian habitats in the allotment.

Grazing use in the summer pastures will continue to end on 08/31.

The Antelope pasture will be split into the East and West Antelope Pastures. The Calico Mountains will be the imaginary split for these pastures. Riding by the permittee will be required to minimize the possible drift over the mountain. The Rock Spring pasture will also be split into the Rock Spring Native and Rock Spring Rehab Pastures. This pasture is split by an existing fence.

A deferment system will be implemented for the Antelope East and Antelope West pastures and also for the Rock Spring Native and Rock Spring Rehab pastures. On odd years the Antelope West and Rock Spring Rehab pastures will be used early for a longer period of time (07/01 to 08/15) with the Antelope East and Rock Spring Native pastures receiving 15 days of later use (08/16 to 08/31). On even years, Antelope East and Rock Spring Native pastures will be used early for a longer period of time (07/10 to 08/15) with the Antelope West and Rock Spring Rehab pastures receiving 15 days of later use (08/16 to 08/31).

This deferment will allow the vegetative resource a partial growing season rest until it would be utilized.

The Calico and Capital Peak pastures will continue to be used every year. The Calico pasture will be used throughout the summer months to facilitate the livestock operations. Capital Peak pasture will be used from 07/08 to 08/15. In the past three years the majority of the livestock have been placed on unfenced private land on the Calico Mountain Range in this pasture. The permittee has herded the livestock away from the public wetland riparian and streambank riparian habitats to eliminate excessive use. The fire rehab objectives have been met for this pasture. Thus, livestock use will be encouraged on the public portions of this pasture. By



alternating use on the private land, thus resting the public portions and with use on the public land and resting the private land, rest is being incorporated. This rest will allow for an increase in plant vigor and seedling establishment. Some livestock drift will occur, but the impacts to the resource will be minimal. A continuous commitment by the permittee to ensure that livestock are in the authorized areas of this pasture is essential.

Use in Capitol Peak will end on 08/15.

The Antelope #2 fence as outlined in the Stipulation for Dismissal has not been constructed, but has been re-surveyed and designed to encompass the majority of the public reaches of the East Fork of the Little Owyhee River. Once this project is built, livestock use may be authorized on a limited basis.

If it is determined through monitoring that grazing to 08/31 does not result in the attainment of the utilization objectives in all summer pastures, appropriate measures will be taken to correct the situation.

The utilization objectives will be evaluated annually. Adjustments to the season of use will be made until the utilization objectives can be consistently met. This relief measure will be a term and condition of the permit.

#### **Fall/Winter Use**

Fall/winter use will be taken when plants are dormant, thus the vegetative resource should not be adversely impacted.

Some use may be made on fall and spring green-up. If this does occur, the low livestock numbers along with the large use areas should result in low grazing pressure on the vegetative resource. Spring use of the vegetation in the winter use areas will be limited to that which is made during trailing to spring use areas.

#### **TERMS AND CONDITIONS**

The terms and conditions must be in conformance with the Standards and Guidelines for the Sierra Front - Northwestern Great Basin Resource Advisory Council, approved by the Secretary of the Interior on February 12, 1997.

1. Salt and/or mineral blocks shall not be placed within one quarter (1/4) mile of springs, streams, meadows, riparian habitats, or aspen stands.
2. The permittee is required to perform normal maintenance on the range improvements as per their signed cooperative agreements/section 4 permits prior to turn out.
3. The permittees' certified actual use report, by pasture, is due 15 days after the end of the authorized grazing period.



4. Livestock use is not authorized in the following exclosures:
  - a. Lone Willow Exclosure T.46N., R.41E., Sec. 1, 6, 7, 12
  - b. Mahogany Ridge Exclosure T.46N., R.41E., Sec. 14, 15, 22, 23
  - c. Antelope Spring Exclosure T.45N., R.42E., Sec. 28, 29, 33
  - d. Owyhee Reservoir # 3 Exclosure T.47N., R.41E., Sec 25
  - e. South Cow Camp Exclosure T.45N., R.42E., Sec. 24
  - f. Antelope Spring East Exclosure T.45N., R.42E., Sec. 33
5. Any livestock owned or controlled by the permittee must be eartagged. The permittee must submit to the BLM as list of private ear tags which will include numbers and colors.
6. If monitoring at the end of the grazing season in the summer pastures indicates that utilization objectives were not met on wetland riparian or streambank riparian habitats, appropriate corrective actions will be taken the following year. If BLM and NFC can't agree as to what the "appropriate management action should be, fifteen (15) days will be taken from the ending date of that pasture(s) that did not achieve the utilization objective.
7. The permittee will notify the BLM prior to using the Calico Pasture for the purpose of trailing and processing livestock.
8. No water source and accompanying service area will be scheduled for use more than two years in a row. The third year the area will be rested.
9. Additional spring use will be authorized only if utilization is less than 50% at the time of the request.
10. Spring and fall/winter use areas will be identified by NFC and BLM during the grazing application process.
11. The authorized officer may modify annual grazing authorization as long as the modification is consistent with management objectives and remains within the permitted season of use. Request outside of the permitted season of use will require input from interested publics.

B. WILDLIFE

Adjustment to the wildlife population is not warranted. Wildlife populations will remain at the reasonable numbers outlined in the Land Use Plan. Reasonable numbers of wildlife are as follows:

Mule Deer	288 AUM's
Pronghorn	1,233 AUM's
Bighorn Sheep	72 AUM's



## RATIONALE:

Analysis of monitoring data indicates that the utilization objectives for upland, wetland riparian and streambank riparian habitats have been met, except for 1997. Wildlife use did not contribute to the non-attainment of the objectives. Therefore, a change in the existing wildlife populations or the existing wildlife management, within the Little Owyhee Allotment, is not warranted.

### C. WILD HORSES

- 1) Maintain AML within a range of 194-298 adult wild horses, as identified in the 1993 Final Multiple Use Decision.
- 2) At 3 year intervals, gather wild horses. The present population is approximately 450-500; population modeling indicates an approximate population of 600+ by the time the next gather is scheduled in 2000. Remove horses up to five years of age based on present policy (under certain conditions, animals up to nine years of age may be removed). At Bureau discretion, return to the range up to 5% of mares in the 3-5 age class.
- 3) After the 1997 gather, an estimated 398 horses remained on the allotment. Thus, 4,776 AUMs are being allocated for the wild horses. The allocation of forage is as follows:

Fairbanks -	112 horses or 1344 AUMs
Twin Valley -	169 horses or 2028 AUMs
Lake Creek -	117 horses or 1404 AUMS

## RATIONALE

The Appropriate Management Level range of 194-298 horses in the Little Owyhee HMA was set in the 1993 Final Multiple Use Decision, following a prolonged, six year drought. It was based upon water availability on public land, as this is the limiting resource in the area rather than forage. Although the forage base can sustain the current population given adequate water, a reduction to AML is justified as it is unknown how long the current wet cycle will last. Increases or decreases in forage availability, which may affect numbers of livestock permitted on the range, will have no effect on the wild horse AML.

The Little Owyhee HMA has undergone 3 selective removals in the past 6 years: a partial removal in summer 1992 which removed horses up to 9 years of age from southern Lake Creek and northern Twin Valley pastures, a full gather in the winter of 1993-94 which removed horses up to 5 years of age from the entire HMA and the summer pastures, and another full gather in October 1997 which removed horses up to 9 years of age from the HMA and summer pastures. The horses remaining from the 1992 gather are now at least 16 years old; those remaining from the 1993-94 gather are at least 10 years old. If all younger horses are removed at each gather, when the progressively aging population on the range eventually



dies, or a catastrophic event occurs, a population crash will occur.

Population modeling indicates that, under current policy, AML may be reached by 2004 following gathers in 2000 and 2003. At that time, the age structure of the population will be approximately 33% 0-5, 1% 6-9, 1% 10-14, and 65% 15+. Continued modeling until 2010 shows the AML staying within the range, as older horses die and fewer colts are born. If AML is not reached in 2004, it should be reached by 2007. (See appendix 2 and 3)

It should be emphasized that the population model is not precise, and should not be used to make definite predictions regarding population sizes. Variables which can affect the model include imprecise initial age structure of herd due to inaccurate ageing and not being able to gather all horses, and uncertain survival probabilities and foaling rates. Therefore it will be necessary to monitor closely herd size and composition, with an attempt made to determine as accurately as possible the age structure during gathers. It may be necessary to return to the range a limited number of animals in the age classes to be removed.

#### D. RANGE IMPROVEMENTS

1. Prescribed Burns
2. East Fork of the Little Owyhee River Riparian Pasture
3. Lone Willow Pipeline
4. South Cow Camp Pipeline

#### RATIONALE:

The proposed prescribed burn sites have not been specifically identified. However, dense stands of sagebrush with grass/forb understory occur throughout this allotment allowing for a highly successful burn.

Burning the sites, will promote greater grass and forb production which will benefit all resources. Prior to this project, cooperation, consultation, and coordination will occur with all interested publics.

The East Fork of the Little Owyhee River Enclosure will encompass the majority of the public reaches of the East Fork of the Little Owyhee River in the Antelope pasture. In the past, this streambank riparian habitat has received moderate to heavy use by livestock. This fence will be constructed this FY with 8100 funds and the permittee will be assigned maintenance.

The Lone Willow and South Cow Camp pipelines will provide additional water to the Rock Spring Rehab and the East Antelope Pasture. The Lone Willow pipeline should be installed this FY.



## E. OBJECTIVES

1. Revise the long term objectives to the following:

Manage, maintain and improve public rangeland conditions to provide forage on a sustained yield basis for livestock with an initial stocking level of 27,800 AUMs.

Improve to and maintain 594 acres of riparian and meadow habitat types to ensure species diversity and quality, and to maximize reproduction and recruitment of woody riparian species..

Improve to and maintain 21 acres of aspen habitat types to ensure good reproduction and maximize recruitment within the stand.

Improve to and maintain 60 acres of mahogany habitat types by allowing for successful reproduction and recruitment in the stand.

Improve to or maintain the following stream habitat conditions on the North Fork of the Little Humboldt and East Little Owyhee from 48% on the North Fork, unknown on the East Little Owyhee to an overall optimum of 60% or above.

- 1) Streambank cover to 60% or above.
- 2) Streambank stability to 60% or above.
- 3) Maximum stream temperatures do not exceed 68 degrees Fahrenheit.

Improve or maintain suitable sage grouse strutting, nesting, brood rearing, and/or wintering habitat in good condition.

The following parameters have been found to constitute optimum (good) conditions for sage grouse use:

### Strutting Habitat

1. Low sagebrush or brush free areas for strutting, and nearby areas of sagebrush having 20-50% canopy cover for loafing.

### Nesting Habitat

1. Sagebrush between seven (7) and 31 inches in height (optimum= 16 inches)
2. Sagebrush canopy coverage 15-30% (optimum = 27%)
3. 25-35% basal ground cover
4. Average understory height of 6-7 inches



### Brood Rearing Habitat

#### Early Season

1. Sagebrush canopy cover 10-21% (optimum = 14%)

#### Late Season

1. Meadow areas that are in functioning condition
2. Residual meadow vegetation of no less than 3-6 inches in height

#### Winter Habitat

1. Greater than 20% sagebrush canopy cover

Improve to and maintain state water quality criteria for North Fork Humboldt River and East Little Owyhee River.

## 2. Standards of Rangeland Health

1. Soil processes will be appropriate to soil type, climate and land form.
2. Riparian/wetland systems are in properly functioning condition.
3. Water quality criteria in Nevada or California State Law shall be achieved or maintained.
4. Populations and communities of native plant species and habitats for native animal species are healthy, productive and diverse.
5. Habitat conditions meet the life cycle requirements of special status species.

## E. MONITORING

The following types of monitoring data are needed to make a determination of attainment of allotment objectives

1. Utilization - Livestock and Wild Horses
2. Trend
3. Actual Use - Livestock and Wild Horses
4. Climatological
5. Stream Survey
6. Lotic/Lentic riparian functionality assessment.
7. Water Quality
8. Condition and Trend - Wildlife Habitat



## VII CONSULTATION

### A. Consultation of this evaluation is listed chronologically as follows:

November 10, 1998	Draft Re-Evaluation sent to: Nevada First Corporation, Charley Amos, James Bonavia, Humboldt County Commissioners, RCI, Sierra Club, NRDC, NDOW, USFWS, USFS, Nevada Cattlemen's Association, Idaho Watersheds Project, Desert Bighorn Council, Trout Unlimited, WHOA, NCPWH
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### B. Summary of Comments

December 10, 1998, comments received from Nevada Division of Wildlife

#### COMMENT #1

The proposed increase of 24% in the Lake Creek and Fairbank pasture is attributed to extending the season of use into June. Appropriate monitoring must be in effect to assure that the 50% utilization guideline is not exceeded.

#### RESPONSE:

A part of the 1995 Stipulation for Dismissal was additional spring use. The maximum spring period of use was from 03/01 to 06/30. This additional spring use is being carried forward with the same season of use in the spring pastures (03/01 to 06/30). The utilization objective of 50% in the Lake Creek and Fairbank pastures was met throughout the re-evaluation period. Utilization data will continue to be collected to determine if the utilization objective is being met with the increase in AUM's for these pastures.

#### COMMENT #2

Use pattern mapping data of the previous allotment evaluation suggested that extending the season of use in Rock Springs, Antelope and Capitol Pastures will exceed the 50% utilization guideline for riparian habitat. We were assured that additional range improvements, intensive management and proper permit conditions will protect these resources.

#### RESPONSE:

The majority of the range improvements outlined in the Stipulation for Dismissal were completed. The South Cow Camp and East Antelope Spring Enclosures were constructed in addition to the North Fork Little Humboldt River Enclosure. Lone Willow Spring Enclosure is surveyed and designed, but won't be constructed until a pipeline system is developed to provide water to the area outside of the enclosure. At present time, the pipeline system is being initiated and construction of the enclosure and installation of the pipeline system could take place in FY2000.



The Antelope #2 Division Fence is being changed to a riparian pasture that will encompass the upper public reaches of the East Fork Little Owyhee River. This project should be completed in FY 2000.

The permittees for this allotment have initiated an intensive livestock management practice of riding to better distribute their livestock and to lessen the pressure on the streambank/wetland riparian habitats.

Another part of the Stipulation for Dismissal were twelve (12) specific terms and conditions of the grazing permit. The sixth term and condition states "If monitoring at the end of the grazing season in the Capitol Peak Pasture indicates that utilization objectives were not met on wetland/riparian habitats, appropriate corrective actions will be taken the following year. If BLM, NFC and affected interests cannot agree as to what the "appropriate" management action or days should be, fifteen (15) days will be taken from the ending date of the season of use. Subsequent adjustments determined through monitoring will also be made."

This term and condition will be carried forward and further clarified to mean all summer pastures.

#### COMMENT #3

We strongly suggest that proper monitoring be completed in late July to validate the pending decision.

#### RESPONSE:

Monitoring of the habitats on the allotment will continue to take place.

#### December 14, 1998, comments received from the Commission For The Preservation of Wild Horses

#### COMMENT #1

The draft document does not accurately validate the appropriate management level for wild horses with the criteria and data since the multiple use decision. While there is rationale to keep horse numbers at levels to survive a severe drought, there is also the basic assumption that intensive management of livestock and range improvements will increase the carrying capacity of the allotment.

#### RESPONSE:

The AML was set based on forage availability around perennial water sources, including those with permittee owned water rights (wells and pipelines), and apportioned based on CRMP percentages. Water from two of these sources, the Button Lake well and Corral Lake well and pipeline, have not been used by livestock since before 1991. The Maiden Springs pipeline and McCleary Wells 1 and 2 are not all in use every year. The Rodear Flat and Milligan Creek



waters are not used by horses until the other water has dried up, generally long after the livestock has been removed. It doesn't seem likely that carrying capacity has increased around the water sources through use of livestock management, with the possible exception of the springs in Fairbanks.

COMMENT #2

In our review of the draft document, livestock use is being increased on summer pastures that were considered critical during the past allotment evaluation. Therefore, changes other than climatic are accountable for the increase in livestock use.

RESPONSE:

Forage availability and livestock use in the summer pastures have no bearing upon the AML for wild horses, as these areas are not part of the HMA.

Livestock use is being increased based on utilization objective(s) being met on the streambank riparian and wetland riparian habitats. Herding by the permittees along with fencing of some streambank riparian/wetland riparian habitats allowed for this increase.

COMMENT #3

We encourage the District to validate the present appropriate management level with the data collected since 1993.

RESPONSE:

See response to comment #1.

COMMENT #4

We appreciate the District's population modeling of past gather and census data. Again, we would appreciate an analysis to validate the model with observed data since the last gather. Allowing a reasonable proportion of mid-age mares to exist in the herd at the next gather might assure the viability of the herd.

RESPONSE:

The initial population used in the model consisted of horses released after the 1997 gather, including the 10-and-olders and 40 9-and-youngers, with the age structure of the remaining horses estimated from horses released after the 1992 and 1993-94 gathers. Of the 40 younger animals released, 26 were mares, 11 were studs and 3 were stud colts. Although the years it happens are not exact, the model shows the population declining to the AML range in the next 5-8 years, stabilizing there a few years as the older horses die off, then starts climbing again. It is not possible to directly simulate the release of younger animals following a gather in the model. However this is done indirectly through the number-captured parameter which for this



simulation was set at 95%. This means that 5% of the animals are not gathered during a removal, which would include some of the younger mares. Unfortunately, since age structure can only be determined at a gather, it won't be possible to validate or invalidate the model until the next gather.

December 28, 1998, Comments received from Idaho Watersheds Project

COMMENT #1

IWP is concerned that there is insufficient information in the Allotment Evaluation of 1993 and this Re-Evaluation to conform with NEPA requirements. For example, the Environmental Impact Statement (EIS) for the Paradise/Denio Area is approaching 20 years in age and the Rangeland Program Summary (RPS) is almost 12 years old. While the Evaluation and this Reevaluation do serve to develop more current information, there has been no NEPA compliant analysis of the Paradise/Denio Area or the Little Owyhee allotment since the 1981 EIS and the 1982 Management Framework Plan (MFP). While this failure appears to be in violation of the Council on Environmental Quality recommendations in regard for the need to supplement EISs that are more than 5 years old, IMP is concerned that without adequate analysis and development of additional alternatives for management the BLM may be placing itself at risk of legal action to force compliance with NEPA.

RESPONSE:

In the 40 Most Asked Questions on NEPA, number 32 states that ... As a rule of thumb, if the proposal has not been implemented, or if the EIS concerns an ongoing program, EIS's that are more than five years old should be carefully re-examined to determine if the criteria in Section 1502.9 compel preparation of an EIS supplement. 1502.9 states that a supplement shall be prepared if: The agency makes substantial changes in the proposed action that are relevant to environmental concerns; or there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts

In 1993, a Plan Conformance/NEPA Compliance Record was completed after the evaluation and multiple use decision process and it was determined that the MUD was in conformance with our LUP. The stipulation for dismissal signed in 1995 was also in conformance with NEPA as addressed in the 1993 Compliance Record.

COMMENT #2

IWP is especially concerned with the marginal improvement on the North Fork of the Little Humboldt River since 1976 as documented in the re-evaluation.

RESPONSE:

The overall optimum rating for the NFLHR in 1976 was 44% and 48% in 1997. The reach of this river from the Forest Service boundary to Greeley Crossing was fenced with isolated watergaps in 1996. The remainder of the river downstream is unfenced with limited access



due to topography. With noticeable improvements in streambank cover and streambank stability occurring, the % optimum habitat as reflected in the stream survey process will continue to improve until another stream survey is completed. Some of the parameters of the stream survey will take a longer period of time to show improvement over the long term. However, in the short term, professional observations have shown improvements in bank cover and stability since the completion of the North Fork Riparian Exclosure.

#### COMMENT #3

Lone Willow Spring Exclosure is surveyed and designed, but won't be constructed until a pipeline system is developed to provide water to the areas outside of the exclosure. This suggests that degradation of Lone Willow Spring will be permitted pending the construction of the exclosure.

#### RESPONSE:

Currently, the project planning for a pipeline system from Lone Willow Spring to the adjacent uplands is in progress. The survey and design of the exclosure has been completed. Both of these projects should be completed FY 2000.

In the interim, the permittees have intensively herded the livestock away from the wetland riparian habitats in this area for the past three years. The Lone Willow Spring, located in the Capitol Peak Pasture, along with other wetland riparian habitats in this pasture met the utilization objective of 50% for wetland riparian habitats. So, in regards to your statement about "no management in the interim", management is and will continue to be in place on this allotment.

#### COMMENT #4

It is not clear from the Reevaluation if the listing of lentic area acreage on page 29 of the document includes all upland riparian areas such as springs, seeps, and wet meadows within the allotment. All of these areas need to be inventoried and have an annual measurable standard of use for livestock and wild horse grazing. Utilization or stubble height standards or both need to be set.

#### RESPONSE:

The acres assessed as stated on page 29 of the document do not include all upland riparian habitats. The total number of acres for these habitats for the allotment is 594 acres. Due to funding and man power constraints along with other priorities, all the acres have not been inventoried including Lone Willow Spring.

Utilization objectives have been set for this allotment as referenced in the conclusion section starting on page 32. The utilization objectives were also presented in the 1993 Allotment Evaluation and Proposed./Final Multiple Use Decisions.



#### COMMENT #5

The BLM is clearly avoiding providing management for these areas (upland riparian) as well as the critical lotic areas such as the East Little Owyhee River.

#### RESPONSE:

This statement is not true. Utilization objectives for wetland riparian and streambank riparian habitats are established. Two wetland riparian habitats (South Cow Camp & East Antelope Spring Enclosures) and one streambank riparian habitat (North Fork Enclosure) have been fenced. One wetland riparian (Lone Willow Enclosure) and one streambank riparian habitat (East Fork Riparian Pasture) will be fenced FY 2000. The wetland riparian habitats were funded and constructed by the permittee. The BLM funded and constructed the streambank riparian habitat (North Fork) and the same holds true for the East Fork Riparian Pasture.

Also, the term and condition #6 of the Stipulation for Dismissal is also a term and condition of the grazing permit and license. This has been addressed in 1998, where an allowable use level of 30% was incorporated for the East Fork of the Little Owyhee River. This allowable use level came about as the result of the non attainment of the utilization objective for the EFLOR in 1997. It was recommended and agreed to by the permittee that once the use level reaches 25%, the permittee will be notified to remove the livestock from this use area.

This same term and condition is being enforced in 1999 as a result of the utilization objective on the East Fork not being met in 1998. To address this situation, the only approved 1999 authorization in this use area was for trailing livestock to the Forest Service. The proposed East Fork Riparian pasture will elevate the issue in this area.

#### COMMENT #6

It is unacceptable to propose management which only improves conditions "at least within the enclosure.."

#### RESPONSE:

On page 35 of the conclusion section for Long Term Objective 7, it was stated "With completion of the enclosure fencing in 1996, progress is expected to be made toward achievement of this objective at least for portions of North Fork Little Humboldt River within the enclosure. What was meant by this statement was that at the watergaps along the enclosure the possibility exists that the objective will not be met. However, the upper reaches of this river are fenced with watergaps and where the river is enclosed progress is expected to be made. The lower unfenced reach is characterized by a narrow canyon with limited livestock/wild horse access. See pages 27-29 for description of the river.



COMMENT #7

The BLM must provide management and consequences for the permittees' failure to meet management standards on all riparian resources within the allotment.

RESPONSE:

See response to comment # 5.

COMMENT #8

IWP is especially concerned that the BLM is failing to address management of the East Little Owyhee which is an Idaho watershed. The Reevaluation documents excessive livestock use on this watershed and yet, proposes no management to address this problem.

RESPONSE:

No where in this document is it stated that "excessive " livestock use occurred on the East Fork of the Little Owyhee River.

Upon inventory of this river during the last evaluation period, it was determined that large portions of this river are ephemeral. Thus, it stands to reason only those portions of the river that are perennial will have fish habitat objectives. The long term objective for this river will be modified in the final allotment re-evaluation.

The BLM has taken action(s) to address livestock management on this river. For one, two plus (2+) miles are perennial in nature while the remaining reaches are ephemeral. Two, in 1997 utilization levels on this stream exceeded the objective of 30%. The following year (1998) an allowable use level of 30% was implemented for this habitat (perennial) and once 25% utilization occurred the permittee was given five (5) days to remove the livestock. This allowable use level came about as "appropriate actions" as stated in the Terms and Conditions of the Stipulation for Dismissal, and also in the Terms and Conditions of the grazing permit and license. Thirdly, in 1999, as the result of non-attainment of the use objective in 1998, the only authorization in this area was a trailing permit. The upper reach (perennial) on public land is proposed to fenced in FY2000.

The BLM IS addressing this streambank riparian habitat along with all habitats on the allotment.

COMMENT #9

IWP notes also that major problems exist on Mahogany Creek, Milligan Creek, and Calico Creek on the allotment which are not adequately addressed in the proposed management.



RESPONSE:

These streams are 32.71 miles in length consisting of 74% (24.38 miles) in properly functioning condition, 2% (.6 mile) functioning at risk upward trend, 17% (5.49 miles) functioning at risk static, and 7% (2.24 miles) functioning at risk downward trend. Management has been addressed and utilization objective is 50%.

COMMENT #10

IWP also points out that the current management plan objective for the North Fork Little Humboldt and the East Little Owyhee to meet state criteria for cold water aquatic life, wading, and wildlife propagation and sport fished requires management standards to ensure that these criteria are being met regardless of whether data has been collected to date to determine the condition of the water in these systems. Since no management is proposed for the East Little Owyhee to ensure this or any other criteria, the BLM is not in compliance with its own Land Use Plan or current regulations.

RESPONSE:

Objective W.1.1 of the Paradise Denio Management Framework Decisions specifies that the Best Management Practices of the State of Nevada shall be employed in all public land activities (providing the BMPs do not conflict with BLM policy and procedures). This allotment re-evaluation complies with the grazing practices described in the Best Management Practices of the State of Nevada.

COMMENT #11

IWP objects to a blanket capability of the BLM to authorize additional AUMs such as the 1478 AUMs which may be authorized between June 1 - June 30 as "additional spring use" without the involvement of IWP as an interested public in that decision. IWP believes that any use not specifically authorized by the permit for this livestock operation can only be considered through the process of issuing a temporary non-renewable (TNR) use grazing permit on an annual basis

RESPONSE:

The additional spring use is not TNR. TNR occurs when the Total Number of AUM's of Specified Livestock Grazing are harvested. In this case, the additional spring use is AUM's that are available in the permit and are allocated from the 21,462 AUM's that exist in the spring, fall/winter pastures (page 39). See also Term and Condition #9 on page 74. The upper limit for utilization still remains at 50% with the additional spring use.

If the permittees' apply for TNR, you along with the other interested publics will be consulted prior to the authorization.



COMMENT #12

IWP also objects to the hot season use in the summer pastures extending to August 31 on an annual basis. Without the imposition of annual measurable standards of use for stubble height, woody browse utilization, hoof shearing and bank trampling, and specific utilization standards for upland perennial grass species, there can be no assurance that the wetland riparian and streambank riparian habitats which are concentrated within the summer pastures will be protected.

RESPONSE:

Once again, as addressed in the conclusion section of this document and the 1993 evaluation and proposed and final multiple use decisions, short term utilization objectives are in place for this allotment. If the utilization objectives are not met in the summer pastures, the fall back measure of appropriate actions has taken and will continue to take place. Throughout the Re-evaluation period (1995-1998) only one key area exceeded the utilization objective. The following year corrective actions took place.

COMMENT #13

IWP objects to term and condition #10 on page 46 which states "Spring and fall/winter use areas will be identified by NFC and BLM during the grazing application process".

RESPONSE:

The BLM and the permittees' have worked closely since the Stipulation for Dismissal to ensure that Term and Condition #10 is met. Water is the limiting factor for these spring, fall/winter pastures, not the vegetative resource. The carrying capacity for these pastures was based on the identified permanent and seasonal available water sources. (See page 67)

COMMENT #14

IWP objects to the establishment of forage allocation for wildlife through the "reasonable numbers" of wildlife.

RESPONSE:

Objective WL 1.2 of the Paradise-Denio Management Framework Plan Decision specifically designates habitat for reasonable numbers of big game species as the measurement unit for that objective.



COMMENT #15

As part of this process of evaluation, IWP requests that BLM make a "determination" pursuant to 43 CFR 4180 as to whether the fundamentals of Rangeland Health and the Standards and Guidelines are being met, and, if not, that livestock use is the major contributing factor to the failure of meeting these requirements of law.

RESPONSE:

See Conclusion Section of document.

COMMENT #16

IWP objects to the lack of a time frame in the objectives starting on page 48 for 594 acres of riparian and meadow habitat, 21 acres of Aspen habitat, 60 acres of Mahogany habitat, as well as the stream habitat conditions on the North Fork and the East Little Owyhee. Without time objectives as well as annual measurable standards of use, the BLM is at liberty to permit continuing degradation of these resources forever.

RESPONSE:

See response #4 paragraph 2. The allotment specific objectives are re-quantification of the LUP objectives and have been modified to reflect the habitats on the allotment.

COMMENT #17

It is not clear from the Re-Evaluation what the proposed utilization objectives in all summer pastures or on other riparian resources actually is. According to the Appendix #1 which establishes desired stocking rates, the utilization standard for streambank riparian in Antelope #2 is 30% whereas in Rock Springs it is 50%.

RESPONSE:

See page 37-38 for the allotment specific short term utilization objectives. The 30% utilization objective in Antelope #2 is for the East Fork of the Little Owyhee River. The 50% utilization objective in the Rock Springs pasture is for wetland riparian habitats. These will be further clarified in the Final Allotment Evaluation.

COMMENT #18

The BLM must make clear what the standards for use actually are for riparian areas and which will trigger an adjustment in the following season of use, and what that adjustment will be.

RESPONSE:

The short term utilization objectives were spelled out in the 1993 evaluation and decisions and also in this document on pages 37 and 38. The Term and Condition # 6 on page 50 spells out



that when utilization objectives are exceeded in the summer pastures appropriate corrective actions will be taken the following year. The adjustment can be riding, range improvements, allowable use levels dictating livestock removal, or 15 days will be taken from the ending date of the pasture that did not achieve the utilization objective.

#### COMMENT #19

IWP has too much experience dealing with the BLM to accept the statement on page 44 of the document which states: "If it is determined through monitoring that grazing to 08/31 does not result in the attainment of the utilization objectives in all summer pastures, appropriate measures will be take to correct the situation. IWP has no idea what the BLM means by "appropriate measures" or whether any measures will be taken at all.

#### RESPONSE:

Appropriate measures can be additional riding by the permittees', installation of range improvements, early removal of the livestock based on allowable use levels, or removing livestock early. As a term and condition of the grazing permit, the BLM implemented this as a result of over utilization in 1997 and 1998 on the East Fork of the Little Owyhee River.

#### COMMENT #20

IWP also objects to the BLM statement that "Fall/winter use will be taken when plants are dormant, thus the vegetative resource shall not be adversely impacted." This suggest that the trampling of cryptobiotic communities and related soil crusts are not a problem to be considered during fall and winter use on the allotment.

#### RESPONSE:

The vegetative resource is actively growing in the months of March - August. At this time energy is spent in root and shoot development. In the fall/winter months the plants are not growing and their requirements are low. However, some root activity is occurring. After the livestock are removed from the fall/winter use areas, the plant has complete rest the entire growing season to replenish itself.

By trampling the soil crusts, this allows for increased infiltration of moisture which in turns allows for the root systems of plants to take in the moisture. Thus, greater root and shoot development for healthy stands of vegetation.

#### COMMENT #21

IWP also objects to the failure of the BLM to analyze the proposed standards for grazing use of perennial native bunchgrass species when they are in the boot stage of growth. Without annual standards of use during this time frame (and IWP recommends no use during the boot phase for any perennial (bunchgrasses), there can be no assurance that this species will be protected from potentially damaging livestock grazing.



RESPONSE:

Throughout the re-evaluation period, monitoring data has been collected on the upland habitats and the utilization levels and trend data presented in this document do not show a problem. It has been determined through monitoring that WATER is the limiting factor in the spring, fall/winter pastures, not the vegetative resource. Rest and deferment are being incorporated into the grazing system which will increase plant vigor and allow for seeding establishment.

VIII. MANAGEMENT ACTION

A. Livestock

1. Grazing Preference (AUM's) Nevada First Corporation

a.	Total	43,363
b.	Historical Suspended	19,663
c.	Permitted Use	23,700
d.	Authorized	17,570
e.	Suspension	6,130
	- Voluntary Non-Use	
	Spring/fall/winter	399
	- Temporary Suspension Non-Use	
	Summer	5,731 *

\* The 5,731 AUM's held in temporary suspension may be activated during the re-evaluation period. These AUM's are being held in temporary suspension based on the fire rehabilitation efforts and also the possibility of more AUM's being available if utilization levels on streambank/wetland riparian habitats are being achieved.

Grazing Preference (AUM's) Jerry Harper

a.	Total	4,100
b.	Historical Suspended	0
c.	Permitted Use	4,100
d.	Authorized	4,100

2. Season of Use

Spring	03/01 to 05/31
Additional Spring	06/01 to 06/30
Summer	07/01 to 08/31
Fall/Winter	09/01 to 02/28

3. Kind of Livestock - Cow/Calf

4. Percent Federal Range - 100%



5. Grazing

The following grazing system will be implemented for the 2000-2004 grazing seasons.

**NEVADA FIRST CORPORATION**

**SPRING USE (EVERY YEAR)**

<u>Pasture</u>	<u>Livestock Number</u>	<u>Season of Use</u>	<u>AUM's</u>
Fairbanks	2000	03/01 to 05/31	6049
	500	06/01 to 06/30	493
Lake Creek	1500	03/01 to 05/31	4537
	500	06/01 to 06/30	329
<b>TOTAL</b>			<b>11,408</b>

**JERRY HARPER**

Twin Valley	350	03/01 to 03/15	173
	450	03/16 to 03/31	237
	630	04/01 to 04/30	621
	665	05/01 to 06/30	1332
<b>TOTAL</b>			<b>2,363</b>

The maximum spring period of use will be 03/01 to 06/30. All three spring pastures will be used every year. Total scheduled spring use will be up to 13,771 AUM's.

A total of 21,462 AUM's have been calculated based on the identified permanent and seasonal available water sources in the spring, fall/winter pastures.

The carrying capacity for the spring, fall/winter pastures is as follows:

13,773 AUM's for spring use - livestock  
2,516 AUM's for winter use - livestock  
4,776 AUM's for year round use - horses  
397 AUM's non-use pending additional water  
21,462 AUM's total spring, fall/winter

Twelve thousand two hundred ninety five (12,295) AUM's will be authorized annually from 03/01 to 05/31. An additional 1,478 AUM's may be authorized between 06/01 to 06/30 as additional spring use, provided that utilization is less than 50%. In normal years, of the 2,000



head in Fairbanks 1,500 head will be going onto the Forest and of the 1,500 head in Lake Creek 1,000 head will be going onto the Forest. In most years, these livestock will be moved out of the spring pastures on 05/31 and onto the U.S. Forest Service and by 06/30 all livestock will be removed from the spring pastures.

Use in the spring pastures will continue to be based on available water sources. Use will be scheduled based on these water sources and available forage around the water source. Availability of water sources and forage will be determined by BLM and NFC based on the following criteria:

1. Water source(s) and accompanying service area(s) will be scheduled for use two consecutive years. The third year, the water source and service area will be rested.
2. If service area(s) for individual water sources overlap, the water source encompassing the greatest overlap area will be used as the basic forage allocating unit.

#### ADDITIONAL SPRING USE

Upon request by the permittee, additional spring use may be approved by the authorized officer. The authorization will be subject to the availability of sufficient forage in the spring pastures to support the additional use. Additional use, if authorized will be at the scheduled water source(s) for the current year only, with the stipulation that utilization must be less than 50%.

#### SUMMER USE

##### NEVADA FIRST CORPORATION

2000 (EVEN YEARS)

<u>Pasture</u>	<u>Livestock Number</u>	<u>Season of Use</u>	<u>AUM's</u>
Antelope East	1500	06/01 TO 06/10	493 AUM'S
Antelope West	1500	06/11 TO 06/18	395 AUM'S
Antelope West	500	07/01 TO 08/15	756 AUM'S
Antelope East	500	08/16 TO 08/31	263 AUM'S
Calico *			574 AUM'S
Rock Spring Native	1000	06/01 TO 06/10	329 AUM'S
Rock Spring Rehab	1000	06/11 TO 06/18	263 AUM'S
Rock Spring Rehab	500	07/01 TO 08/15	756 AUM'S
Rock Spring Native	500	08/16 TO 08/31	263 AUM'S
		<b>TOTAL</b>	<b>4092 AUM'S</b>

\* Variable livestock number and season of use.



2001 (ODD YEARS)

Antelope East	1500	06/01 TO 06/10	493 AUM'S
Antelope West	1500	06/11 TO 06/18	395 AUM'S
Antelope East	500	07/01 TO 08/15	756 AUM'S
Antelope West	500	08/16 TO 08/31	263 AUM'S
Calico *			574 AUM'S
Rock Spring Native	1000	06/01 TO 06/10	329 AUM'S
Rock Spring Rehab	1000	06/11 TO 06/18	263 AUM'S
Rock Spring Native	500	07/01 TO 08/15	756 AUM'S
Rock Spring Rehab	500	08/16 TO 08/31	263 AUM'S
* Variable livestock numbers and season of use		TOTAL	4092 AUM'S

**JERRY HARPER - Every Year**

<u>Pasture</u>	<u>Livestock #</u>	<u>Season of Use</u>	<u>AUM's</u>
Calico	600	07/01 to 07/07	138 AUM'S
Capital Peak	600	07/08 to 08/15	769 AUM'S
Calico	600	08/16 to 08/31	316 AUM'S
		TOTAL	1,223 AUM'S

Season of use in the summer pastures will be 07/01 to 08/31. Total scheduled summer use will be 5,315 AUM's .

Five thousand seven hundred thirty one (5,731) AUM's will be held in temporary suspension until utilization monitoring, in the summer pastures, indicates that these additional AUM's are available and also the possibility exists for additional AUM's as a result of the rehabilitation efforts.

Every year 2,500 head of livestock will be in the Antelope East, Antelope West, Rock Spring Native and Rock Spring Rehab pastures from 06/01 to 06/18. The limited use in these pastures is for facilitation of the livestock onto the Forest Service. The remaining 1,600 head will be authorized from 07/01 to 08/31.

Calico pasture will continue to be used to facilitate livestock operations from the spring pastures to the Forest Service and to and from spring pastures and summer pastures. The total combined use in this pasture, including scheduled use and working/sorting livestock, should not exceed 1028 AUM's. The livestock numbers and season of use vary year to year. The permittee will notify the BLM prior to using the Calico pasture for the purpose of trailing and processing livestock.



## WINTER USE EVERY YEAR

### NEVADA FIRST CORPORATION

<u>Pasture</u>	<u>Livestock Number</u>	<u>Season of Use</u>	<u>AUM's</u>
Fairbanks	254	11/01 To 02/28	1000 AUM'S
Lake Creek	168	09/01 To 02/28	1000 AUM's

### JERRY HARPER

Twin Valley	104	10/01 to 02/28	516 AUM's
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Fall/winter use within each pasture will be made within specific use areas which are separate from spring use areas. Use within each fall/winter use area will be limited to no more than two consecutive years. The third year the area will be rested. Livestock use will be limited to specific use areas by utilizing natural snow accumulations, and by limiting access to developed waters. While some livestock drift out of the scheduled use area(s) may occur, the low livestock numbers will make these impacts minimal.

Fall/winter use areas by pasture are described as follows:

#### **Twin Valley Spring Pasture**

- Area A      The area serviced by the basin around the Little Humboldt Ranch from the southern pasture boundary north to Four Mile Butte.
- Area B      The area serviced by the North Chimney Burn in the southwest portion of the pasture

#### **Lake Creek Pasture**

The northern portion of this pasture has three use areas within it and the southern portion has one area:

- Area A      The area serviced by the Maiden Spring Pipeline
- Area B      The area serviced by the Lake Creek Reservoir, East Fork Little Owyhee River and Cathcart Cabin.
- Area C      The area serviced by Willow Reservoir and Wild Bill Spring.
- Area D      The area serviced by McCleary #1 and #2 Wells and south to Rodear Flat.



## **Fairbanks Pasture**

The southern portion of this pasture has three use areas within it:

- Area A        The area serviced by private waters, Fairbanks Reservoir, and Pete's Reservoir.
- Area B        The area serviced by private waters along the North Fork of the Little Humboldt River and Chimney Reservoir.
- Area C        The areas east of the North Fork of the Little Humboldt River and various reservoirs in the vicinity of the North Chimney Burn.

Use can be made in a particular fall/winter use area for two consecutive years. The third year, the fall/winter use area will be rested.

## **RATIONALE**

### **Spring Use**

The proposed management action will continue to use each spring pasture every year from 03/01 to 05/31. However, rest within each pasture will be implemented. The authorized spring use will be based on available public and private water sources in these pastures, with the stipulation that a specific use area will not be utilized more than two consecutive years. The third year it will be rested. This rest will allow for an increase in plant vigor and seeding establishment.

Additional spring use, if authorized, will enable the permittee to utilize AUM's held in non-use, and will allow the summer season of use to be adjusted. Additional spring use will be authorized only if utilization is less than 50%.

### **Summer Use**

The summer pastures contain the majority of the wetland riparian and streambank riparian habitats in the allotment.

Grazing use in the summer pastures will continue to end on 08/31.

The Antelope pasture will be split into the East and West Antelope Pastures. The Owyhee Road will be the imaginary split for these pastures. Riding by the permittee will be required to minimize the possible drift over the road. The Rock Spring pasture will also be split into the Rock Spring Native and Rock Spring Rehab Pastures. This pasture is split by an existing fence.



A deferment system will be implemented for the Antelope East and Antelope West pastures and also for the Rock Spring Native and Rock Spring Rehab pastures. On even years the Antelope West and Rock Spring Rehab pastures will be used early for a longer period of time (07/01 to 08/15) with the Antelope East and Rock Spring Native pastures receiving 15 days of later use (08/16 to 08/31). On odd years, Antelope East and Rock Spring Native pastures will be used early for a longer period of time (07/10 to 08/15) with the Antelope West and Rock Spring Rehab pastures receiving 15 days of later use (08/16 to 08/31).

This deferment will allow the vegetative resource a partial growing season rest until it would be utilized. Some regrowth on wetland riparian and streambank riparian habitats will occur once livestock are removed on 08/31 from the summer pastures.

The Calico and Capital Peak pastures will continue to be used every year. The Calico pasture will be used throughout the summer months to facilitate the livestock operations. Capital Peak pasture will be used from 07/08 to 08/15. In the past three years the majority of the livestock have been placed on unfenced private land on the Calico Mountain Range in this pasture. The permittee has herded the livestock away from the public wetland riparian and streambank riparian habitats to eliminate excessive use. The fire rehab objectives have been met for this pasture. Thus, livestock use will be encouraged on the public portions of this pasture. By alternating use on the private land, thus resting the public portions and with use on the public land and resting the private land, rest is being incorporated. This rest will allow for an increase in plant vigor and seedling establishment. Some livestock drift will occur, but the impacts to the resource will be minimal. A continuous commitment by the permittee to ensure that livestock are in the authorized areas of this pasture is essential.

Use in Capitol Peak will end on 08/15.

The Antelope #2 fence as outlined in the Stipulation for Dismissal has not been constructed, but has been re-surveyed and designed to encompass the majority of the public reaches of the East Fork of the Little Owyhee River. Once this riparian pasture is built, livestock use may be authorized on a limited basis.

If it is determined through monitoring that grazing to 08/31 does not result in the attainment of the utilization objectives in all summer pastures, appropriate measures will be taken to correct the situation.

The utilization objectives will be evaluated annually. Adjustments to the season of use will be made until the utilization objectives can be consistently met. This relief measure will be a term and condition of the permit.

### **Fall/Winter Use**

Fall/winter use will be taken when plants are dormant, thus the vegetative resource should not be adversely impacted. Some use may be made on fall and spring green-up. If this does occur, the low livestock numbers along with the large use areas should result in low grazing pressure on the vegetative resource.



Spring use of the vegetation in the winter use areas will be limited to that which is made during trailing to spring use areas.

The vegetative resource is actively growing in the months of March - August. At this time energy is spent in root and shoot development. In the fall/winter months the plants are not growing and their requirements are low. However, some root activity is occurring. After the livestock are removed from the fall/winter use areas, the plant has complete rest the entire growing season to replenish itself.

## TERMS AND CONDITIONS

The terms and conditions must be in conformance with the Standards and Guidelines for the Sierra Front - Northwestern Great Basin Resource Advisory Council, approved by the Secretary of the Interior on February 12, 1997.

1. Salt and/or mineral blocks shall not be placed within one quarter (1/4) mile of springs, streams, meadows, riparian habitats, or aspen stands.
2. The permittee is required to perform normal maintenance on the range improvements as per their signed cooperative agreements/section 4 permits prior to turn out.
3. The permittees' certified actual use report, by pasture, is due 15 days after the end of the authorized grazing period.
4. Livestock use is not authorized in the following enclosures:

a.	Lone Willow Enclosure	T.46N., R.41E., Sec. 1, 6, 7, 12
b.	Mahogany Ridge Enclosure	T.46N., R.41E., Sec. 14, 15, 22, 23
c.	Antelope Spring Enclosure	T.45N., R.42E., Sec. 28, 29, 33
d.	Owyhee Reservoir # 3 Enclosure	T.47N., R.41E., Sec 25
e.	South Cow Camp Enclosure	T.45N., R.42E., Sec. 24
f.	Antelope Spring East Enclosure	T.45N., R.42E., Sec. 33
g.	North Fork of the Little Humboldt River Enclosure	
5. Any livestock owned or controlled by the permittee must be eartagged. The permittee must submit to the BLM as list of private ear tags which will include numbers and colors.
6. If monitoring at the end of the grazing season in the summer pastures indicates that utilization objectives were not met on wetland riparian, streambank riparian, or upland habitats, appropriate corrective actions will be taken the following year. If BLM, NFC, Jerry Harper and interested publics can't agree as to what the "appropriate management action should be, fifteen (15) days will be taken from the ending date of that pasture(s) (all summer pastures) that did not achieve the utilization objective.



7. The permittee will notify the BLM prior to using the Calico Pasture for the purpose of trailing and processing livestock. If monitoring data determines that utilization objectives are exceeded on streambank riparian, wetland riparian or upland habitats, in this pasture, after the livestock are removed onto the Forest Service and summer pastures, the only authorized use after this period will be for trailing livestock through this pasture.
8. No water source and accompanying service area, in the spring, fall/winter pastures, will be scheduled for use more than two years in a row. The third year the area will be rested.
9. Additional spring use will be authorized only if utilization is less than 50% at the time of the request.
10. Spring and fall/winter use areas will be identified by NFC and BLM during the grazing application process.
11. The authorized officer may modify annual grazing authorization as long as the modification is consistent with management objectives and remains within the permitted season of use. Request outside of the permitted season of use will require input from interested publics.
12. Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the authorized officer, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary objects, sacred objects, or objects of cultural patrimony (as defined at 43 CFR 10.2). Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the *immediate* vicinity of the discovery and protect it *from your activities* for 30 days or until notified to proceed by the authorized officer."

B. WILDLIFE

Adjustment to the wildlife population is not warranted. Wildlife populations will remain at the reasonable numbers outlined in the Land Use Plan. Reasonable numbers of wildlife are as follows:

Mule Deer	288 AUM's
Pronghorn	1,233 AUM's
Bighorn Sheep	72 AUM's

RATIONALE:

Analysis of monitoring data indicates that the utilization objectives for upland, wetland riparian and streambank riparian habitats have been met, except for 1997 and 1998. Wildlife use did not contribute to the non-attainment of the objectives. Therefore, a change in the existing wildlife populations or the existing wildlife management, within the Little Owyhee Allotment, is not warranted.



## C. WILD HORSES

1) Maintain AML within a range of 194-298 adult wild horses, as identified in the 1993 Final Multiple Use Decision.

2) At 3 year intervals, gather wild horses. The present population is approximately 450-500; population modeling indicates an approximate population of 600+ by the time the next gather is scheduled in 2000. Remove horses up to five years of age based on present policy (under certain conditions, animals up to nine years of age may be removed). At Bureau discretion, return to the range up to 5% of mares in the 3-5 age class.

3) After the 1997 gather, an estimated 398 horses remained on the allotment. Thus, 4,776 AUMs are being allocated for the wild horses. The allocation of forage is as follows:

Fairbanks -	112 horses or 1344 AUMs
Twin Valley -	169 horses or 2028 AUMs
Lake Creek -	117 horses or 1404 AUMs

## RATIONALE

The Appropriate Management Level range of 194-298 horses in the Little Owyhee HMA was set in the 1993 Final Multiple Use Decision, following a prolonged, six year drought. It was based upon water availability on public land, as this is the limiting resource in the area rather than forage. Although the forage base can sustain the current population given adequate water, a reduction to AML is justified as it is unknown how long the current wet cycle will last. Increases or decreases in forage availability, which may affect numbers of livestock permitted on the range, will have no effect on the wild horse AML.

The Little Owyhee HMA has undergone 3 selective removals in the past 6 years: a partial removal in summer 1992 which removed horses up to 9 years of age from southern Lake Creek and northern Twin Valley pastures, a full gather in the winter of 1993-94 which removed horses up to 5 years of age from the entire HMA and the summer pastures, and another full gather in October 1997 which removed horses up to 9 years of age from the HMA and summer pastures. The horses remaining from the 1992 gather are now at least 16 years old; those remaining from the 1993-94 gather are at least 10 years old. If all younger horses are removed at each gather, when the progressively aging population on the range eventually dies, or a catastrophic event occurs, a population crash will occur.

Population modeling indicates that, under current policy, AML may be reached by 2004 following gathers in 2000 and 2003. At that time, the age structure of the population will be approximately 33% 0-5, 1% 6-9, 1% 10-14, and 65% 15+. Continued modeling until 2010 shows the AML staying within the range, as older horses die and fewer colts are born. If AML is not reached in 2004, it should be reached by 2007. (See appendix 2 and 3)



It should be emphasized that the population model is not precise, and should not be used to make definite predictions regarding population sizes. Variables which can affect the model include imprecise initial age structure of herd due to inaccurate ageing and not being able to gather all horses, and uncertain survival probabilities and foaling rates. Therefore it will be necessary to monitor closely herd size and composition, with an attempt made to determine as accurately as possible the age structure during gathers. It may be necessary to return to the range a limited number of animals in the age classes to be removed.

#### D. STRUCTURAL PROJECTS

1. Prescribed Burns
2. East Fork of the Little Owyhee River Riparian Pasture
3. Lone Willow Pipeline
4. South Cow Camp Pipeline

#### RATIONALE:

The proposed prescribed burn sites have not been specifically identified. However, dense stands of sagebrush with grass/forb understory occur throughout this allotment allowing for a highly successful burn.

Burning the sites, will promote greater grass and forb production which will benefit all resources. Prior to this project, cooperation, consultation, and coordination will occur with all interested publics.

The East Fork of the Little Owyhee River Riparian pasture will encompass the majority of the public reaches of the East Fork of the Little Owyhee River in the Antelope pasture. In the past, this streambank riparian habitat has received moderate to heavy use by livestock. This project will be constructed with 8100 funds and the permittee will be assigned maintenance. This project should be completed this FY.

The Lone Willow and South Cow Camp pipelines will provide additional water to the Rock Spring Rehab/Rock Spring Native and East Antelope Pastures. The Lone Willow Pipeline will be funded and installed by the permittee this FY.

#### E. NOXIOUS WEEDS

In FY2000 it is proposed to complete an inventory of noxious weeds for the Little Owyhee Allotment. Mapping would be conducted using Global Positioning System and data entered into GIS weed data base for the Winnemucca Field Office.



## F. MONITORING

The following types of monitoring data are needed to make a determination of attainment of allotment objectives and achievement of Standards of Rangeland Health.

1. Utilization - Livestock and Wild Horses
2. Trend
3. Actual Use - Livestock and Wild Horses
4. Climatological
5. Stream Survey
6. Lotic/Lentic Riparian Functionality Assessment
7. Water Quality
8. Condition and Trend - Wildlife Habitat

## G. OBJECTIVES

### A. Short Term

1. The objective for utilization of key plant species (CAREX, JUNCUS, POA) in wetland riparian habitats is 50%.
2. The objective for utilization of key streambank riparian plant species (CAREX, JUNCUS, POA, SALIX, ROWO) on the perennial reaches of the East Fork of the Little Owyhee River is 5 inches stubble height by October 31.
3. The objective for utilization of key streambank riparian plant species (CAREX, JUNCUS, POA, SALIX, ROWO) on the North Fork of the Little Humboldt River is 30%.
4. The objective for utilization of key upland plant species will be 50% for STTH2, SIHY, and FEID and it will be 40% for CREPIS, ELCI, POSE, AGSP, EULA5, ORHY and LUPIN.

### B. Long Term

1. Manage, maintain and improve public rangeland conditions to provide forage on a sustained yield basis for livestock with an initial stocking level of 27,800 AUMs.
2. Improve to and maintain the ecological status per key management areas as determined in the Little Owyhee Monitoring Plan.



3. Manage, maintain and improve public rangeland conditions to provide forage on a sustained yield basis for big game, with an initial forage demand of 288 AUMs for mule deer, 1,233 AUMs for pronghorn and 72 AUMs for bighorn sheep.
  - a. Improve to and maintain 2,756 acres in Paradise Valley DY-1, 29,612 acres in Santa Rosa DY-10, 31,678 acres in Santa Rosa D-2, and 44,210 acres in Santa Rosa DS-1 in good or excellent mule deer habitat condition.
  - b. Improve to and maintain 2,490 acres in Mahogany Ridge PS-8, 25,837 acres in Santa Rosa PS-7 and 21,608 acres in Little Owyhee PS-10 to good condition. Improve to and maintain 457,963 acres in Owyhee Desert PY-9, 17,847 acres in Maiden Butte PW-9, 2,306 acres in Evans Lake PW-10, 7,762 acres in Button Lake PW-11, 4,939 acres in Button Lake PS-9, 8,322 acres in Evans Lake PS-11, and 7,469 acres in Bullhead PW-13 in fair or good pronghorn habitat condition.
4. Improve to and maintain 594 acres of riparian and meadow habitat types to ensure species diversity and quality, and to maximize reproduction and recruitment of woody riparian species.
5. Improve to and maintain 21 acres of aspen habitat types to ensure good reproduction and maximize recruitment within the stand.
6. Improve to and maintain 60 acres of mahogany habitat types by allowing for successful reproduction and recruitment in the stand.
7. Improve to or maintain the following stream habitat conditions on the North Fork of the Little Humboldt and the perennial reach of the East Little Owyhee from 48% on the North Fork, unknown on the East Little Owyhee to an overall optimum of 60% or above.
  - 1) Streambank cover to 60% or above.
  - 2) Streambank stability to 60% or above.
  - 3) Maximum summer water temperature below 68 degrees Fahrenheit.
8. Improve or maintain suitable sage grouse strutting, nesting, brood rearing, and/or wintering habitat in good condition.



The following parameters have been found to constitute optimum (good) conditions for sage grouse use:

#### Strutting Habitat

1. Low sagebrush or brush free areas for strutting, and nearby areas of sagebrush having 20-50% canopy cover for loafing.

#### Nesting Habitat

1. Sagebrush between seven (7) and 31 inches in height (optimum= 16 inches)
2. Sagebrush canopy coverage 15-30% (optimum = 27%)
3. 25-35% basal ground cover
4. Average understory height of 6-7 inches

#### Brood Rearing Habitat

##### Early Season

1. Sagebrush canopy cover 10-21% (optimum = 14%)

##### Late Season

1. Meadow areas that are in functioning condition
2. Residual meadow vegetation of no less than 3-6 inches in height

#### Winter Habitat

1. Greater than 20% sagebrush canopy cover
9. Improve to or maintain the water quality of the North Fork Humboldt River and East Little Owyhee River to the state criteria set forth for the following beneficial uses: Livestock drinking water, cold water aquatic life, wading and wildlife propagation and sport fishery.

#### C. Standards and Guidelines of Rangeland Health

1. Soil processes will be appropriate to soil type, climate and land form.
2. Riparian/wetland systems are in properly functioning condition.
3. Water quality criteria in Nevada or California State Law shall be achieved or maintained.



4. Populations and communities of native plant species and habitats for native animal species are healthy, productive and diverse.
5. Habitat conditions meet the life cycle requirements of special status species.

H. Grazing Permit

A term grazing permit will be issued after the completion of the decision process to Nevada First Corporation and Jerry Harper. The term permit will reflect the decision.

IX. FUTURE MONITORING AND GRAZING ADJUSTMENTS

The Winnemucca Field Office will continue to monitor all existing studies and establish additional studies in the Little Owyhee Allotment. The monitoring data will continue to be collected in the future to provide the necessary information for subsequent evaluations. These evaluations are necessary to determine if the allotment specific objectives are being met and if the Standards of Rangeland Health are being achieved under the new grazing management system. In addition, these subsequent evaluations will determine if adjustments are required to meet the established allotment specific objectives and standards for rangeland health.

The Little Owyhee Allotment is scheduled to be re-evaluated in FY 2006. If monitoring data indicates that objectives or standards are not being met/achieved prior to the scheduled re-evaluation, adjustments will be made.

X. NEPA REVIEW

The selected management action for grazing in the Little Owyhee Allotment conforms with the environmental analysis of grazing impacts described in the Final Paradise-Denio Environmental Impact Statement dated September 18, 1981.

The EIS and NEPA Compliance Record are on file in the Winnemucca Field Office, located at 5100 East Winnemucca Blvd., Winnemucca, NV 89445.



Appendix 1

Desired Stocking Rate Calculations

The desired stocking rates for the pastures were determined in accordance with BLM Manual Rangeland Monitoring Analysis, Interpretation, and Evaluation, Technical Reference 400-7.

The following formula was used for calculating desired stocking levels.

$$\frac{\text{ACTUAL USE}}{\text{KMA UTILIZATION}} = \frac{\text{DESIRED ACTUAL USE}}{\text{DESIRED KMA UTILIZATION}}$$

**ANTELOPE #1 / EAST (UPLAND)**

$$1995 \quad \frac{278 \text{ AUM's}}{12\%} \quad \times 50\% = \quad 1158 \text{ AUM's}$$

$$1996 \quad \frac{687 \text{ AUM's}}{28\%} \quad \times 50\% = \quad 1226 \text{ AUM's}$$

$$1997 \quad \frac{1539 \text{ AUM's}}{60\%} \quad \times 50\% = \quad 1282 \text{ AUM's}$$

$$1998 \quad \frac{413 \text{ AUM's}}{64\%} \quad \times 50\% = \quad 322 \text{ AUM's}$$

$$\frac{1158 \text{ AUM's} + 1226 \text{ AUM's} + 1282 \text{ AUM's} + 322 \text{ AUM's}}{4} = 997 \text{ AUM's}$$



**ANTELOPE #2/ WEST (STREAMBANK RIPARIAN - East Fork of Little Owyhee River)**

1995       $\frac{328 \text{ AUM's}}{26\%}$       x 30% = 378 AUM's

1996       $\frac{444 \text{ AUM's}}{25\%}$       x 30% = 532 AUM's

1997       $\frac{701 \text{ AUM's}}{64\%}$       x 30% = 328 AUM's

1998       $\frac{133 \text{ AUM's}}{44\%}$       x 30% = 151 AUM's

$$\frac{378 \text{ AUM's} + 532 \text{ AUM's} + 328 \text{ AUM's} + 151 \text{ AUM's}}{4} = 347 \text{ AUM's}$$

**ANTELOPE #2 / WEST (UPLAND KEY AREA 102)**

1995       $\frac{328 \text{ AUM's}}{10\%}$       x 50% =    1640 AUM's

1996       $\frac{444 \text{ AUM's}}{26\%}$       x 50% =    853 AUM's

1997       $\frac{701 \text{ AUM's}}{30\%}$       x 50% =    1168 AUM's

1998       $\frac{133 \text{ AUM's}}{18\%}$       x 50% =    370 AUM's

$$\frac{1640 \text{ AUM's} + 853 \text{ AUM's} + 1168 \text{ AUM's} + 370 \text{ AUM's}}{4} = 1008 \text{ AUM's}$$



### ROCK SPRINGS (WETLAND RIPARIAN)

$$1997 \quad \frac{1122 \text{ AUM's}}{50\%} \times 50\% = 1122 \text{ AUM's}$$

$$1998 \quad \frac{945 \text{ AUM's}}{50\%} \times 50\% = 945 \text{ AUM's}$$

$$\frac{1122 \text{ AUM's} + 945 \text{ AUM's}}{2} = 1034 \text{ AUM's}$$

### CALICO - UPLAND

$$1995 \quad \frac{553 \text{ AUM's}}{32\%} \times 50\% = 864 \text{ AUM's}$$

$$1996 \quad \frac{632 \text{ AUM's}}{18\%} \times 50\% = 1755 \text{ AUM's}$$

$$1997 \quad \frac{881 \text{ AUM's}}{44\%} \times 50\% = 1000 \text{ AUM's}$$

$$1998 \quad \frac{237 \text{ AUM's}}{24\%} \times 50\% = 494 \text{ AUM's}$$

$$\frac{864 \text{ AUM's} + 1755 \text{ AUM's} + 1000 \text{ AUM's} + 494 \text{ AUM's}}{4} = 1028 \text{ AUM's}$$

### CAPITAL PEAK (WETLAND RIPARIAN)

$$1996 \quad \frac{512 \text{ AUM's}}{16\%} \times 50\% = 1600 \text{ AUM's}$$

$$1997 \quad \frac{434 \text{ AUM's}}{35\%} \times 50\% = 620 \text{ AUM's}$$

$$1998 \quad \frac{735 \text{ AUM's}}{50\%} \times 50\% = 735 \text{ AUM's}$$

$$\frac{1600 \text{ AUM's} + 620 \text{ AUM's} + 735 \text{ AUM's}}{3} = 985 \text{ AUM's}$$



Appendix 2

1997 ESTIMATED AGE STRUCTURE OF HORSES ON RANGE AFTER GATHER (INCLUDES 89 ADDITIONAL SEEN DURING FLIGHT 12/4/97, AGE STRUCTURE BASED ON 1994 RELEASE DATA FOR TWIN VALLEY AND LAKE CREEK)

AGE	Overall	
	M	F
colt	4	1
1	1	-
2	4	5
3	1	4
4	1	2
5	-	1
6	-	2
7	2	1
8	1	1
9	4	14
10	26	33
11	20	16
12	22	14
13	22	15
14	16	16
15	14	10
16	8	3
17	13	11
18	17	7
19	6	5
20	20	10
21+	20	5
Total	222	176



## Appendix 3

### Population Model

The population model used was that of Dr. Stephen Jenkins of UNR. Survival probabilities are those used for the Kamma gather and fertility study in February 1998. Foaling rate is determined by averaging results for six gathers (1983, 84, 85, 92, 94 and 97) of number of colts produced divided by number of mares 3 years old and older. Although some 2 year olds breed, the proportion is small compared to breeding by older mares (5 of 64 2 year old mares were identified as wet in the 1992 gather, 1 of 80 in the 1997 gather). Sex ratio at birth was determined from previous gather data.

#### Projected age structure by year (average of 30 trials)

age	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
0	5	107	100	95	91	79	75	63	64	61	57	53	49	55
1	1	0	101	94	9	84	73	9	60	58	25	44	47	45
2	9	0	0	100	9	8	82	9	9	57	23	17	40	43
3	5	1	0	0	10	9	8	12	9	8	22	15	14	37
4	3	0	1	0	0	10	8	1	11	8	4	14	13	12
5	1	0	0	1	0	0	10	1	1	10	4	2	12	11
6	2	0	0	0	0	0	0	2	1	1	6	3	2	10
7	3	2	0	0	0	0	0	0	2	1	1	6	3	2
8	2	3	2	0	0	0	0	0	0	2	1	1	5	3
9	18	2	3	2	0	0	0	0	0	0	2	1	1	5
10	59	17	2	3	2	0	0	0	0	0	0	2	1	1
11	36	57	17	2	3	2	0	0	0	0	0	0	2	1
12	36	35	55	16	2	3	2	0	0	0	0	0	0	1
13	37	35	34	54	16	2	2	2	0	0	0	0	0	0
14	32	35	34	34	52	15	2	2	2	0	0	0	0	0
15	24	31	34	33	33	48	15	2	2	2	0	0	0	0
16	11	23	30	33	32	31	46	13	1	2	2	0	0	0
17	24	11	22	28	31	30	29	42	13	1	2	1	0	0
18	24	23	10	21	27	29	28	27	40	12	1	2	1	0
19	11	22	21	9	20	25	28	25	26	38	11	1	2	1
20	30	10	21	20	9	18	23	25	24	24	35	11	1	2
21	13	27	9	19	18	8	16	20	23	22	22	33	10	1
22	6	12	24	8	16	16	7	13	18	21	20	20	30	10
23	4	5	10	21	7	13	13	5	12	15	19	18	18	28
24	1	3	4	8	17	5	11	11	5	10	13	17	15	15
25	1	1	3	3	6	11	4	8	9	4	9	12	13	13
Total	398	462	537	604	410	446	482	292	332	357	279	273	279	296
Adults	393	355	437	509	319	367	407	229	268	296	222	220	230	241



Parameters used in population model

gather when population exceeds: 298						
population size after gather: 194						
foals included in AML? NO						
percent to gather: 90						
minimum yrs. between gathers: 3						
trials: 30						
years: 13						
initial calendar year: 1997						
coeff. var. foal mortality: 2						
coeff. var. adult mortality: 1.7						
coeff. var. foaling rate: 0.2						
source of age distribution: supplied by user						
prop. male @ birth: 0.479						
	initial age distribution		survival probability			% removed
age	female	male	female	male	foaling rate	m & f
0	1	4	0.976	0.917	0	100
1	0	1	0.977	0.992	0	100
2	5	4	0.977	0.992	0	100
3	4	1	0.976	0.991	0.685	100
4	2	1	0.975	0.991	0.685	100
5	1	0	0.973	0.991	0.685	100
6	2	0	0.972	0.991	0.685	0
7	1	2	0.971	0.99	0.685	0
8	1	1	0.969	0.99	0.685	0
9	14	4	0.967	0.987	0.685	0
10	33	26	0.965	0.988	0.685	0
11	16	20	0.962	0.986	0.685	0
12	14	22	0.959	0.984	0.685	0
13	15	22	0.955	0.981	0.685	0
14	16	16	0.951	0.978	0.685	0
15	10	14	0.95	0.973	0.685	0
16	3	8	0.94	0.967	0.685	0
17	11	13	0.934	0.959	0.685	0
18	7	17	0.927	0.948	0.685	0
19	5	6	0.919	0.933	0.685	0
20	10	20	0.909	0.914	0.685	0
21	3	10	0.898	0.889	0.685	0
22	1	5	0.886	0.857	0.685	0
23	1	3	0.872	0.816	0.685	0
24	0	1	0.856	0.764	0.685	0
25	0	1	0	0	0.685	0





8-25-99

## United States Department of the Interior

BUREAU OF LAND MANAGEMENT  
Winnemucca Field Office  
5100 East Winnemucca Boulevard  
Winnemucca, Nevada 89445  
702-623-1500

In Reply Refer To:  
NV-22.18  
4160.1

**AUG 25 1999**

CERTIFIED MAIL NO. Z551571456  
RETURN RECEIPT REQUESTED

Nevada First Corporation  
P.O. Box 490  
Winnemucca, NV 89446

### PROPOSED MULTIPLE USE DECISION LITTLE OWYHEE ALLOTMENT

Dear Mr. Bengochea:

The record of Decision of the Paradise-Denio Environmental Impact Statement was issued on 09/18/81. The Paradise-Denio Management Framework Plan was issued on 07/09/82. These documents guide the management of public lands within the Paradise-Denio Resource Area and more specifically within the Little Owyhee Allotment. Monitoring data has been collected on this allotment and in accordance with Bureau policy and regulations, this data has been evaluated in order to determine progress in meeting management objectives and standards for rangeland health for the Little Owyhee Allotment and to determine if management adjustments may be necessary to meet the management objectives and standards.

The following are the multiple use management objectives and standards for rangeland health under which grazing on the Little Owyhee Allotment will be monitored and evaluated.

#### Short Term

1. The objective for utilization of key plant species (CAREX, JUNCUS, POA) in wetland riparian habitats is 50%.
2. The objective for key streambank riparian plant species (CAREX, JUNCUS, POA, SALIX, ROWO) on the perennial reaches of the East Fork of the Little Owyhee River is 5 inches stubble height by October 31.



3. The objective for utilization of key upland plant species will be 50% for STTH2, SIHY, and FEID and it will be 40% for CREPIS, ELCI, POSE, AGSP, EULA5, ORHY and LUPIN.

#### Long Term

1. Manage, maintain and improve public rangeland conditions to provide forage on a sustained yield basis for livestock with an initial stocking level of 27,800 AUM's.
2. Improve to and maintain the ecological status per key management areas as determined in the Little Owyhee Monitoring Plan.
3. Manage, maintain and improve public rangeland conditions to provide forage on a sustained yield basis for big game, with an initial forage demand of 288 AUM's for mule deer, 1,233 AUM's for pronghorn and 72 AUM's for bighorn sheep.
  - a. Improve to and maintain 2,756 acres in Paradise Valley DY-1, 29,612 acres in Santa Rosa DY-10, 31,678 acres in Santa Rosa D-2, and 44,210 acres in Santa Rosa DS-1 in good or excellent mule deer habitat condition.
  - b. Improve to and maintain 2,490 acres in Mahogany Ridge PS-8, 25,837 acres in Santa Rosa PS-7 and 21,608 acres in Little Owyhee PS-10 to good condition. Improve to and maintain 457,963 acres in Owyhee Desert PY-9, 17,847 acres in Maiden Butte PW-9, 2,306 acres in Evans Lake PW-10, 7,762 acres in Button Lake PW-11, 4,939 acres in Button Lake PS-9, 8,322 acres in Evans Lake PS-11, and 7,469 acres in Bullhead PW-13 in fair or good pronghorn habitat condition.
4. Improve to and maintain 594 acres of riparian and meadow habitat types to ensure species diversity and quality, and to maximize reproduction and recruitment of woody riparian species
5. Improve to and maintain 21 acres of aspen habitat types to ensure good reproduction and maximize recruitment within the stand.
6. Improve to and maintain 60 acres of mahogany habitat types by allowing for successful reproduction and recruitment in the stand.



7. Improve to or maintain the following stream habitat conditions on the North Fork of the Little Humboldt and the perennial reach of East Little Owyhee from 48% on the North Fork, unknown on the East Little Owyhee to an overall optimum of 60% or above.
  - 1) Streambank cover to 60% or above.
  - 2) Streambank stability to 60% or above.
  - 3) Maximum summer water temperature below 70 degrees Farenheidt.
8. Improve or maintain suitable sage grouse strutting, nesting, brood rearing, and/or wintering habitat in good condition.

The following parameters have been found to constitute optimum (good) conditions for sage grouse use:

#### Strutting Habitat

1. Low sagebrush or brush free areas for strutting, and nearby areas of sagebrush having 20-50% canopy cover for loafing.

#### Nesting Habitat

1. Sagebrush between seven (7) and 31 inches in height (optimum= 16 inches)
2. Sagebrush canopy coverage 15-30% (optimum = 27%)
3. 25-35% basal ground cover
4. Average understory height of 6-7 inches

#### Brood Rearing Habitat

##### Early Season

1. Sagebrush canopy cover 10-21% (optimum = 14%)

##### Late Season

1. Meadow areas that are in functioning condition
2. Residual meadow vegetation of no less than 3-6 inches in height

#### Winter Habitat

1. Greater than 20% sagebrush canopy cover
9. Improve to and maintain state water quality criteria for North Fork Humboldt River and East Little Owyhee River.



## Standards of Rangeland Health

1. Soil processes will be appropriate to soil type, climate and land form.
2. Riparian/wetland systems are in properly functioning condition.
3. Water quality criteria in Nevada or California State Law shall be achieved or maintained.
4. Populations and communities of native plant species and habitats for native animal species are healthy, productive and diverse.
5. Habitat conditions meet the life cycle requirements of special status species.

### WILDLIFE MANAGEMENT

Analysis of existing management of wildlife habitat does not indicate that current wildlife populations are contributing to the failure in meeting multiple use objectives. Therefore, no change in wildlife use is recommended at this time.

### WILD HORSE MANAGEMENT

Analysis of existing management of wild horse habitat does not indicate that current wild horse populations are contributing to the failure in meeting multiple use objectives. Therefore, no change in the Appropriate Management Level (AML) is recommended at this time. The AML was set in the Final Multiple Use Decision dated March 26, 1993.

### LIVESTOCK DECISION

Based upon the evaluation of monitoring data for the Little Owyhee Allotment, consultation with the permittee's and other interested publics and recommendations from my staff, it is my proposed decision for livestock to change the management:

#### FROM: (DESCRIPTION OF EXISTING USE)

1. Grazing Preference (AUM's)
  - a. Total 47,463 AUM's
  - b. Historical Suspended 19,663 AUM's
  - c. Permitted Use 27,800 AUM's
  - d. Authorized 17,295 AUM's
  - Voluntary Non-Use 7,382 AUM's
  - Conservation Non-Use 3,123 AUM's
2. Season of Use

Spring Use	03/01 to 06/30
Summer Use	07/01 to 08/31
Fall/Winter Use	09/01 to 02/28



3. Kind and Class of Livestock  
Cattle - Cow/Calf
4. Percent Federal Range - 100%
5. Grazing System

### **Spring Pastures**

Lake Creek, Twin Valley Springs and Fairbanks

The maximum spring period of use is 03/01 to 06/30. The scheduled spring use will be up to 11,080 AUM's. All three spring pastures are used every year. Use in the spring pastures is based on available water sources. Use is scheduled based on these water sources and available forage around the water source. Availability of water sources was determined by BLM and permittee based on the following criteria:

1. No water source and accompanying service areas will be scheduled for use more than two years in a row. The third year, the area will be rested.
2. If service areas for individual water sources overlap, the water source encompassing the greatest overlap area will be used as the basic forage allocating unit.

Upon request by the permittee, additional spring use may be approved by the authorized officer. The authorization will be subject to the verification of the availability of sufficient forage and water in the spring pastures to support the additional use. Additional use, if granted will be at the scheduled water sources for the current year only, with the stipulation that 70% of the authorized water sources for that year must contain sufficient water to support the additional use and utilization must be less than 50%.

Additional spring use will be used to shorten the duration of use in one or more of the summer pastures.

### **Summer Pastures**

Antelope, Rock Springs, Calico and Capital Peak

The season of use in these pastures is 06/01 to 08/31. Total scheduled use will be 3,215 AUM's.

Livestock will be trailed through the Antelope #1 pasture on odd years, and the Rock Spring pasture on even years onto the Forest Service. The Capitol Peak pasture will be used from 07/28 to 08/15 every year. The Calico pasture will be used every year from 08/16/ to 08/31. The Calico pasture will also be used for short period throughout the summer season as a livestock processing area, and to trail livestock between pastures.



## Fall/Winter Pastures

Lake Creek, Twin Valley Springs and Fairbanks

The season of use in these pastures range from 09/01 - 02/28 to 11/01 to 02/28. Total scheduled use will be 3,000 AUM's.

Fall/winter use within each pasture will be made within specific use areas which are separate from spring use areas. Use within each fall/winter use areas will be limited to no more than two consecutive years, The third year the area will be rested.

### TO: GRAZING SYSTEM TO BE IMPLEMENTED

1. Grazing Preference (AUM's) Nevada First Corporation
  - a. Total 43,363
  - b. Historical Suspended 19,663
  - c. Permitted Use 23,700
  - d. Authorized 17,570
  - e. Suspension 6,130
    - Voluntary Non-Use  
Spring/fall/winter 399
    - Temporary Suspension Non-Use  
Summer 5,731 \*

\* The 5,731 AUM's held in temporary suspension may be activated during the re-evaluation period. These AUM's are being held in temporary suspension based on the fire rehabilitation efforts and also the possibility of more AUM's being available if utilization levels on streambank/wetland riparian habitats are being achieved.

#### Grazing Preference (AUM's) Jerry Harper

- a. Total 4,100
  - b. Historical Suspended 0
  - c. Permitted Use 4,100
  - d. Authorized 4,100
2. Season of Use
    - Spring 03/01 to 05/31
    - Additional Spring 06/01 to 06/30
    - Summer 06/01 to 08/31
    - Fall/Winter 09/01 to 02/28
  3. Kind of Livestock - Cow/Calf
  4. Percent Federal Range - 100%
  5. Grazing



The following grazing system will be implemented for the 2000-2004 grazing seasons.

## NEVADA FIRST CORPORATION

### SPRING USE (EVERY YEAR)

<u>Pasture</u>	<u>Livestock Number</u>	<u>Season of Use</u>	<u>AUM's</u>
Fairbanks	2000	03/01 to 05/31	6049
	500	06/01 to 06/30	493
Lake Creek	1500	03/01 to 05/31	4537
	500	06/01 to 06/30	329
<b>TOTAL</b>			<b>11,408</b>

## JERRY HARPER

Twin Valley	350	03/01 to 03/15	173
	450	03/16 to 03/31	237
	630	04/01 to 04/30	621
	665	05/01 to 06/30	1332
<b>TOTAL</b>			<b>2,363</b>

The maximum spring period of use will be 03/01 to 06/30. All three spring pastures will be used every year. Total scheduled spring use will be up to 13,771 AUM's.

A total of 21,462 AUM's have been calculated based on the identified permanent and seasonal available water sources in the spring, fall/winter pastures.

The carrying capacity for the spring, fall/winter pastures is as follows:

13,773 AUM's for spring use - livestock  
2,516 AUM's for winter use - livestock  
4,776 AUM's for year round use - horses  
397 AUM's non-use pending additional water  
21,462 AUM's total spring, fall/winter

Twelve thousand two hundred ninety five (12,295) AUM's will be authorized annually to from 03/01 to 05/31. An additional 1,478 AUM's may be authorized between 06/01 to 06/30 as additional spring use, provided that utilization is less than 50%. In normal years, of the 2,000 head in Fairbanks 1,500 head will be going onto the Forest and of the 1,500 head in Lake Creek 1,000 head will be going onto the Forest. In most years, these livestock will be moved out of the spring pastures on 05/31 and onto the U.S. Forest Service and by 06/30 all livestock will be removed from the spring pastures.

Use in the spring pastures will continue to be based on available water sources. Use will be scheduled based on these water sources and available forage around the water source.



Availability of water sources and forage will be determined by BLM and NFC based on the following criteria:

1. Water source(s) and accompanying service area(s) will be scheduled for use two consecutive years. The third year, the water source and service area will be rested.
2. If service area(s) for individual water sources overlap, the water source encompassing the greatest overlap area will be used as the basic forage allocating unit.

**ADDITIONAL SPRING USE**

Upon request by the permittee, additional spring use may be approved by the authorized officer. The authorization will be subject to the availability of sufficient forage in the spring pastures to support the additional use. Additional use, if authorized will be at the scheduled water source(s) for the current year only, with the stipulation that utilization must be less than 50%.

**SUMMER USE**

**NEVADA FIRST CORPORATION**

2000 (EVEN YEARS)

<u>Pasture</u>	<u>Livestock Number</u>	<u>Season of Use</u>	<u>AUM's</u>
Antelope East	1500	06/01 TO 06/10	493 AUM'S
Antelope West	1500	06/11 TO 06/18	395 AUM'S
Antelope West	500	07/01 TO 08/15	756 AUM'S
Antelope East	500	08/16 TO 08/31	263 AUM'S
Calico *			574 AUM'S
Rock Spring Native	1000	06/01 TO 06/10	329 AUM'S
Rock Spring Rehab	1000	06/11 TO 06/18	263 AUM'S
Rock Spring Rehab	500	07/01 TO 08/15	756 AUM'S
Rock Spring Native	500	08/16 TO 08/31	263 AUM'S
		<b>TOTAL</b>	<b>4092 AUM'S</b>

\* Variable livestock number and season of use



2001 (ODD YEARS)

Antelope East	1500	06/01 TO 06/10	493 AUM'S
Antelope West	1500	06/11 TO 06/18	395 AUM'S
Antelope East	500	07/01 TO 08/15	756 AUM'S
Antelope West	500	08/16 TO 08/31	263 AUM'S
Calico *			574 AUM'S
Rock Spring Native	1000	06/01 TO 06/10	329 AUM'S
Rock Spring Rehab	1000	06/11 TO 06/18	263 AUM'S
Rock Spring Native	500	07/01 TO 08/15	756 AUM'S
Rock Spring Rehab	500	08/16 TO 08/31	263 AUM'S
TOTAL			4092 AUM'S

\* Variable livestock number and season of use

**JERRY HARPER - Every Year**

<u>Pasture</u>	<u>Livestock #</u>	<u>Season of Use</u>	<u>AUM's</u>
Calico	600	07/01 to 07/07	138
Capital Peak	600	07/08 to 08/15	769
Calico	600	08/16 to 08/31	316
TOTAL			1,223

Season of use in the summer pastures will be 07/01 to 08/31. Total scheduled summer use will be 5,315 AUM's .

Five thousand seven hundred thirty one (5,731) AUM's will be held in temporary suspension until utilization monitoring, in the summer pastures, indicates that these additional AUM's are available and also the possibility exists for additional AUM's as a result of the rehabilitation efforts.

Every year 2,500 head of livestock will be in the Antelope East, Antelope West, Rock Spring Native and Rock Spring Rehab pastures from 06/01 to 06/18. The limited use in these pastures is for facilitation of the livestock onto the Forest Service. The remaining 1,600 head will be authorized from 07/01 to 08/31.

Calico pasture will continue to be used to facilitate livestock operations from the spring pastures to the Forest Service and to and from spring pastures and summer pastures. The total combined use in this pasture, including scheduled use and working/sorting livestock, should not exceed 1028 AUM's. The livestock numbers and season of use vary year to year. The permittee will notify the BLM prior to using the Calico pasture for the purpose of trailing and processing livestock.



# WINTER USE EVERY YEAR

## NEVADA FIRST CORPORATION

<u>Pasture</u>	<u>Livestock Number</u>	<u>Season of Use</u>	<u>AUM's</u>
Fairbanks	254	11/01 To 02/28	1000 AUM'S
Lake Creek	168	09/01 To 02/28	1000 AUM's

## JERRY HARPER

Twin Valley	104	10/01 to 02/28	516 AUM's
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Fall/winter use within each pasture will be made within specific use areas which are separate from spring use areas. Use within each fall/winter use area will be limited to no more than two consecutive years. The third year the area will be rested. Livestock use will be limited to specific use areas by utilizing natural snow accumulations, and by limiting access to developed waters. While some livestock drift out of the scheduled use area(s) may occur, the low livestock numbers will make these impacts minimal.

Fall/winter use areas by pasture are described as follows:

### Twin Valley Spring Pasture

- Area A      The basin around the Little Humboldt Ranch from the southern pasture boundary north to Four Mile Butte.
- Area B      The area serviced by Milligan Creek in the North Chimney Rehab (southwest portion of pasture).

### Lake Creek Pasture

The northern portion of this pasture has three use areas and the southern portion has one use area within it:

- Area A      The area serviced by the Maiden Spring Pipeline
- Area B      The area serviced by the Lake Creek Reservoir, East Fork Little Owyhee River and Cathcart Cabin.
- Area C      The area serviced by Willow Reservoir and Wild Bill Spring.
- Area D      The area serviced by McCleary Wells #1 and #2 south toward Rodear Flat.

### Fairbanks Pasture

The southern portion of this pasture has three use areas within it:

- Area A      The area serviced by private waters, Fairbanks Reservoir, and Pete's Reservoir.



Area B The area serviced by private waters along the North Fork of the Little Humboldt River and Chimney Reservoir.

Area C The areas east of the North Fork of the Little Humboldt River and various reservoirs in the vicinity of the North Chimney Burn.

Use can be made in a particular fall/winter use area for two consecutive years. The third year, the fall/winter use area will be rested.

## **RATIONALE**

### **Spring Use**

The proposed management action will continue to use each spring pasture every year from 03/01 to 05/31. However, rest within each pasture will be implemented. The authorized spring use will be based on available public and private water sources in these pastures, with the stipulation that a specific use area will not be utilized more than two consecutive years. The third year it will be rested. This rest will allow for an increase in plant vigor and seeding establishment.

Additional spring use, if authorized, will enable the permittee to utilize AUM's held in non-use, and will allow the summer season of use to be adjusted. Additional spring use will be authorized only if utilization is less than 50%.

### **Summer Use**

The summer pastures contain the majority of the wetland riparian and streambank riparian habitats in the allotment.

Grazing use in the summer pastures will continue to end on 08/31.

The Antelope pasture will be split into the East and West Antelope Pastures. The Owyhee Road will be the imaginary split for these pastures. Riding by the permittee will be required to minimize the possible drift over the Owyhee Road. The Rock Spring pasture will also be split into the Rock Spring Native and Rock Spring Rehab Pastures. This pasture is split by an existing fence.

A deferment system will be implemented for the Antelope East and Antelope West pastures and also for the Rock Spring Native and Rock Spring Rehab pastures. On even years the Antelope West and Rock Spring Rehab pastures will be used early for a longer period of time (07/01 to 08/15) with the Antelope East and Rock Spring Native pastures receiving 15 days of later use (08/16 to 08/31). On odd years, Antelope East and Rock Spring Native pastures will be used early for a longer period of time (07/10 to 08/15) with the Antelope West and Rock Spring Rehab pastures receiving 15 days of later use (08/16 to 08/31).

This deferment will allow the vegetative resource a partial growing season rest until it would be utilized. Some regrowth on wetland riparian and streambank riparian habitats will occur once livestock are removed on 08/31 from the summer pastures.

The Calico and Capital Peak pastures will continue to be used every year. The Calico pasture will be used throughout the summer months to facilitate the livestock operations. Capital Peak



pasture will be used from 07/08 to 08/15. In the past three years the majority of the livestock have been placed on unfenced private land on the Calico Mountain Range in this pasture. The permittee has herded the livestock away from the public wetland riparian and streambank riparian habitats to eliminate excessive use. By alternating use on the private land, thus resting the public portions and with use on the public land and resting the private land, rest is being incorporated. This rest will allow for an increase in plant vigor and seedling establishment. Some livestock drift will occur, but the impacts to the resource will be minimal. A continuous commitment by the permittee to ensure that livestock are in the authorized areas of this pasture is essential.

Use in Capitol Peak will end on 08/15.

The Antelope #2 fence as outlined in the Stipulation for Dismissal has not been constructed, but has been re-surveyed and designed to encompass the majority of the public reaches of the East Fork of the Little Owyhee River. Once this project is built, livestock use may be authorized on a limited basis.

If it is determined through monitoring that grazing to 08/31 does not result in the attainment of the utilization objectives in all summer pastures, appropriate measures will be taken to correct the situation.

The utilization objectives will be evaluated annually. Adjustments to the season of use will be made until the utilization objectives can be consistently met. This relief measure will be a term and condition of the permit.

#### **Fall/Winter Use**

Fall/winter use will be taken when plants are dormant, thus the vegetative resource should not be adversely impacted.

Some use may be made on fall and spring green-up. If this does occur, the low livestock numbers along with the large use areas should result in low grazing pressure on the vegetative resource. Spring use of the vegetation in the winter use areas will be limited to that which is made during trailing to spring use areas.

The vegetative resource is actively growing in the months of March - August. At this time energy is spent in root and shoot development. In the fall/winter months the plants are not growing and their requirements are low. However, some root activity is occurring. After the livestock are removed from the fall/winter use areas, the plant has complete rest the entire growing season to replenish itself.



## TERMS AND CONDITIONS

The terms and conditions must be in conformance with the Standards and Guidelines for the Sierra Front - Northwestern Great Basin Resource Advisory Council, approved by the Secretary of the Interior on February 12, 1997.

1. Salt and/or mineral blocks shall not be placed within one quarter (1/4) mile of springs, streams, meadows, riparian habitats, or aspen stands.
2. The permittee is required to perform normal maintenance on the range improvements as per their signed cooperative agreements/section 4 permits prior to turn out.
3. The permittees' certified actual use report, by pasture, is due 15 days after the end of the authorized grazing period.
4. Livestock use is not authorized in the following enclosures:
  - a. Lone Willow Enclosure T.46N., R.41E., Sec. 1, 6, 7, 12
  - b. Mahogany Ridge Enclosure T.46N., R.41E., Sec. 14, 15, 22, 23
  - c. Antelope Spring Enclosure T.45N., R.42E., Sec. 28, 29, 33
  - d. Owyhee Reservoir # 3 Enclosure T.47N., R.41E., Sec 25
  - e. South Cow Camp Enclosure T.45N., R.42E., Sec. 24
  - f. Antelope Spring East Enclosure T.45N., R.42E., Sec. 33
  - g. North Fork of the Little Humboldt River Enclosure
5. Any livestock owned or controlled by the permittee must be eartagged. The permittee must submit to the BLM as list of private ear tags which will include numbers and colors.
6. If monitoring at the end of the grazing season in the summer pastures indicates that utilization objectives were not met on wetland riparian, streambank riparian or upland habitats, appropriate corrective actions will be taken the following year. If BLM, NFC, Jerry Harper and interested publics can't agree as to what the "appropriate management action should be, fifteen (15) days will be taken from the ending date of that pasture(s) (all summer pastures) that did not achieve the utilization objective.
7. The permittee will notify the BLM prior to using the Calico Pasture for the purpose of trailing and processing livestock. If monitoring data determines that utilization objectives are exceeded on streambank riparian, wetland riparian and upland habitats, in this pasture, after the livestock are removed onto the Forest Service and summer pastures, the only authorized use after this period will be for trailing livestock through this pasture.
8. No water source and accompanying service area, in the spring, fall/winter pastures, will be scheduled for use more than two years in a row. The third year the area will be rested.
9. Additional spring use will be authorized only if utilization is less than 50% at the time of the request.
10. Spring and fall/winter use areas will be identified by NFC and BLM during the grazing application process.



11. The authorized officer may modify annual grazing authorization as long as the modification is consistent with management objectives and remains within the permitted season of use. Request outside of the permitted season of use will require input from interested publics.
12. "Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the authorized officer, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary objects, sacred objects, or objects of cultural patrimony (as defined at 43 CFR 10.2). Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the *immediate* vicinity of the discovery and protect it *from your activities* for 30 days or until notified to proceed by the authorized officer."

## GRAZING PERMIT

A ten year grazing permit will be issued to Nevada First Corporation upon completion of the decision process. A term grazing permit, for the period of the base property lease, will also be issued to Jerry Harper. The permits will reflect this decision.

## AUTHORITY:

The authority of this decision is contained in Title 43 of the Code of Federal Regulations, which states in pertinent parts:

4100.0-8 "The authorized officer shall manage livestock grazing on public lands under the principles of multiple use and sustained yield, and in accordance with applicable land use plans. Land use plans shall establish allowable resources uses (either singly or in combination), related levels of production or use to be maintained, areas of use, and resource condition goals and objectives to be obtained. The plans also set forth program constraints and general management practices needed to achieve management objectives. Livestock grazing activities and management actions approved by the authorized officer shall be in conformance with the land use plan as defined at 43 CFR 1601.0-5(b)."

4110.3 "The authorized officer shall periodically review the permitted use specified in a grazing permit or grazing lease and shall make changes in the permitted use as needed to manage, maintain or improve rangeland productivity, to assist in restoring ecosystems to properly functioning condition, to conform with land use plans or activity plans, or to comply with the provisions of subpart 4180 of this part. These changes must be supported by monitoring, field observations, ecological site inventory or other data acceptable to the authorized officer."

4130.3-1(a) "The authorized officer shall specify the kind and number of livestock, the period(s) of use, the allotments(s) to be used, and the amount of use, in animal unit months, for every grazing permit or lease. The authorized livestock grazing use shall not exceed the livestock carrying capacity of the allotment."

4130.3-3 "Following consultation, cooperation, and coordination with the affected lessees or permittees, the State having lands or responsible for managing resources within the area, and the interested public, the authorized officer may modify terms and conditions of the permit or lease when the active grazing use or related management practices are not meeting the land use plan, allotment management plan or other activity plan, or



management objectives, or is not in conformance with the provisions of subpart 4180 of this part. To the extent practical, the authorized officer shall provide to affected permittees or lessees, States having lands or responsibility for managing resources within the affected area, and the interested public an opportunity to review, comment and give input during the preparation of reports that evaluate monitoring and other data that are used as a basis for making decisions to increase or decrease grazing use, or to change the terms and conditions of a permit or lease."

4160.1(a) "Proposed decisions shall be served on any affected applicant, permittee or lessee, and any agent and lien holder of record, who is affected by the proposed actions, terms or conditions, or modification relating to applications, permits and agreements (including range improvement permits) or leases, by certified mail or personal delivery. Copies of proposed decisions shall also be sent certified to the interested public."

4160.2 "Any applicant, permittee, lessee or other interested public may protest the proposed decision under 4160.1 of this title in person or in writing to the authorized officer within 15 days after receipt of such decision."

4180.1 "The authorized officer shall take appropriate action under subparts 4110, 4120, 4130, and 4160 of this part as soon as practicable but not later than the start of the next grazing year upon determining that existing grazing management needs to be modified to ensure that the following conditions exist."

- (a) Watersheds are in, or are making significant progress toward, properly functioning physical condition, including their upland, riparian-wetland, and aquatic components; soil and plant conditions support infiltration, soil moisture storage, and the release of water that are in balance with climate and landform and maintain or improve water quality, water quantity, and timing and duration of flow.
- (b) Ecological processes, including the hydrologic cycle, nutrient cycle, and every flow, are maintained, or there is significant progress toward their attainment, in order to support healthy biotic populations and communities.
- (c) Water quality complies with State water quality standards and achieves, or is making significant progress toward achieving, established BLM management objectives such as meeting wildlife needs.
- (d) Habitats are, or are making significant progress toward being restored or maintained for Federal threatened and endangered species, Federal Proposed, Category 1 and 2 Federal candidate and other special status species.



Protest:

Any applicant, permittee, lessee or other interested public may protest the livestock grazing portion of this proposed multiple use decision under Sec 43 CFR 4160.1, in person or in writing to:

Colin P. Christensen  
AFM Renewable Resources  
Bureau of Land Management  
Winnemucca District Office  
5100 E. Winnemucca Blvd.  
Winnemucca, NV 89445

The protest must be filed within 15 days of receipt of this decision. The protest, if filed, should clearly and concisely state the reason(s) as to why the proposed decision is in error.

Subsequent to the protest period, a final multiple use decision will be issued specifying the appeal procedures.

#### FUTURE MONITORING AND GRAZING ADJUSTMENTS

The Winnemucca District will continue to monitor the Little Owyhee Allotment. The monitoring data will continue to be collected in the future to provide the necessary information for subsequent evaluations. These evaluations are necessary to determine if the allotment specific objectives are being met and the Standards of Rangeland health are being achieved under the new grazing management strategy. In addition, these subsequent evaluations will determine if adjustments are required to meet the established allotment specific objectives and standards.

The Little Owyhee Allotment is scheduled to be re-evaluated in FY 2006.

Sincerely yours,



Colin P. Christensen  
Assistant Field Manager  
Renewable Resources



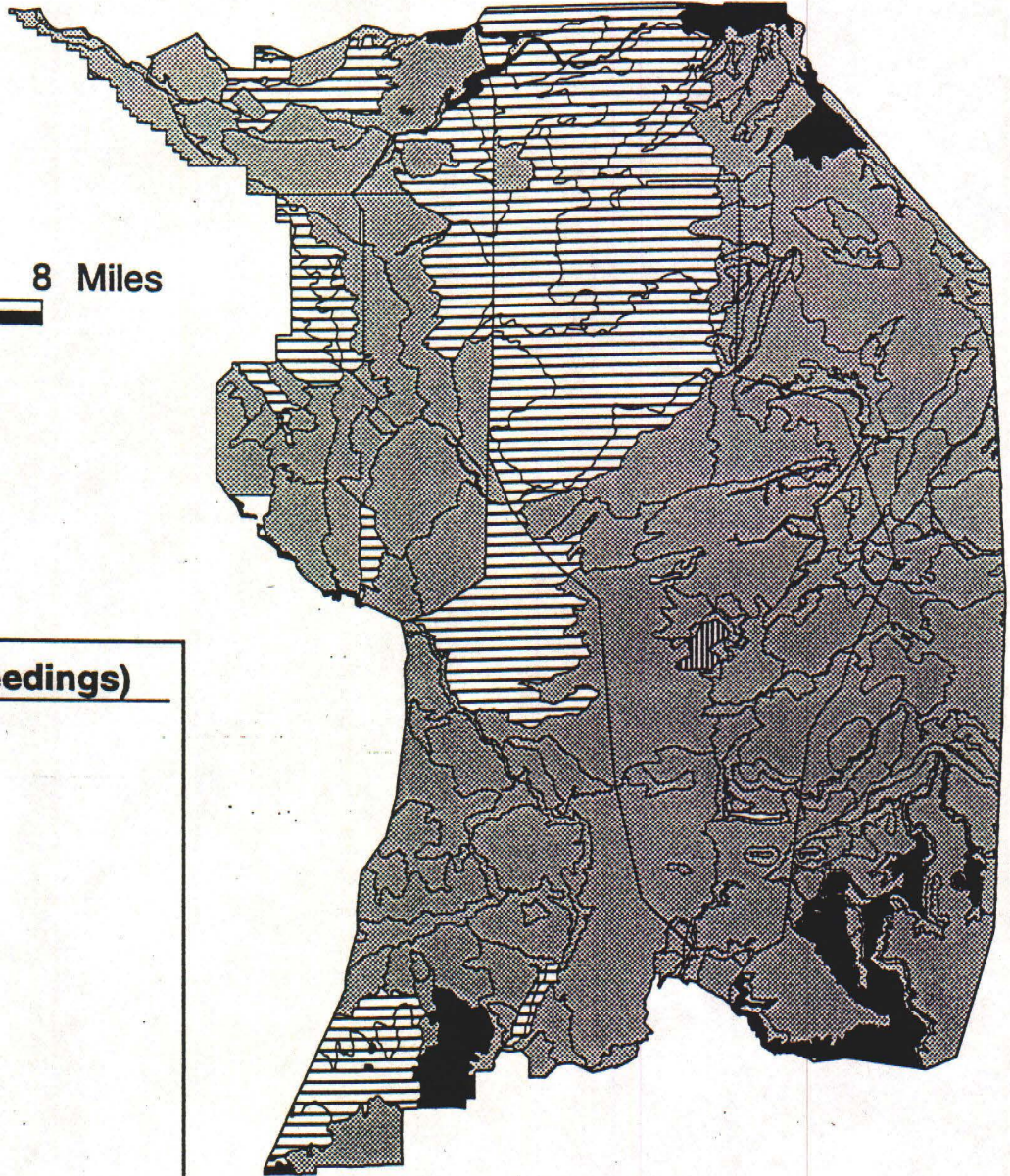
cc	Charley Amos	Z551571457
	James Bonavia	Z551571458
	Humboldt County Commissioners	Z551571459
	RCI	Z551571460
	Sierra Club	Z551571466
	NRDC	Z551571467
	NDOW - Fallon	Z551571468
	NDOW - Winnemucca	Z551571469
	USFWS	Z551571470
	USFS	Z551571471
	WHOA	Z551571472
	NCPWH	Z551571473
	Nevada Cattlemen's Assoc.	Z551571474
	Idaho Watersheds Project	Z551571475
	Desert Bighorn Council	Z551571476
	Trout Unlimited	Z551571477
	Jerry Harper	Z551571478



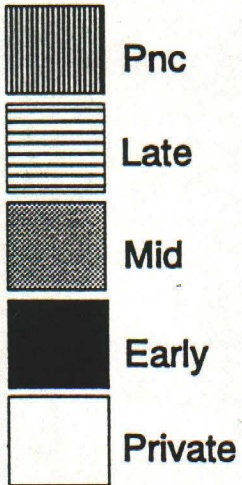
# Little Owyhee Allotment

## General Ecological Status

4 0 4 8 Miles



### Native Veg. / (No Seedlings)



Seral Stage	Count	Total Acres
PNC	4	1572.0000
LATE	200	150606.0000
MID	780	379077.0000
EARLY	52	26444.0000

