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Bullhead Allotment Monitoring Plan

(Draft)

November 1984

Paradise/Denio Resource Area
Winnemucca District Office
Bureau of Land Management

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Tables:

I. Introduction

The purpose of this plan is to describe the monitoring program that will be implemented in the Bullhead Allotment.

The geographical center of the Bullhead Allotment is approximately 40 air miles northeast of Winnemucca, Nevada.

The topography varies greatly throughout the allotment from relatively level greasewood flats in the southwest corner to mountainous terrain (Snowstorm Mountains) on the east side of the allotment.

There are a wide variety of species and types of vegetation. Generally, the vegetation in the lower elevations is characteristic of the shadscale, bud sagebrush, and sagebrush vegetative complexes. Grass species associated with these complexes are squirreltail, Sandberg bluegrass, Thurber needlegrass, and Indian ricegrass. The vegetative types in the higher elevations are predominately big sagebrush, grass, aspen grass, dry and wet meadows; grass bluebunch wheatgrass, Idaho fescue, and Thurber needlegrass. Of particular interest is the occurrence of the hybrid bunchgrass (Agrositanion saundersii (Saunder's wheatgrass). This grass is a hybrid of bluebunch wheatgrass and squirreltail, and is quite abundant in the Dry Hills and Kelly Spring areas.

Land ownership within the allotment is:

BLM - Winnemucca District	=	89,775 acres
BLM - Elko District	=	55,259 acres
Private	=	25,440 acres
Total		170,456 acres

140,000 ac Pub.

The Paradise-Denio Unit Resource Analysis (URA) identified the following resources which should be considered in the management of this allotment: fisheries, watershed, wild horses, livestock grazing, riparian areas, wildlife habitat, recreation, mining, and cultural resources.

II. Background/Public Involvement/Interdisciplinary Approach

Monitoring studies were established in the Bullhead Allotment in 1981. Utilization studies were the first method established in 1981 by the BLM and the permittee, Nevada Vaca, Inc. Some of these studies were moved in 1984, and additional utilization plots established. Key areas and trend plots were also established in 1984 by the BLM and Resource Concepts, Inc. (RCI).

Public involvement included the involvement by the permittee, Nevada Vaca in 1981 and Resource Concepts, Inc., a private consulting firm from Carson City representing the permittee, SECO, Inc.

CRMP committee #1 approved a plan for the Bullhead Allotment on July 23, 1982, which included objective #17, "Establish a monitoring system for all objectives" for the Bullhead Allotment.

This monitoring plan will be written as an interdisciplinary document considering livestock, watershed, wildlife and wild horse resource values.

Participation of public land users and other interest parties will be encouraged during all planning and initiation of monitoring activities.

III. Historical Use

Bullhead Allotment Actual Use for 1980

Date	Number	Days	AUMs	Pasture
03/06 to 03/12	304 C	7	71	
03/13	405 C	1	13	
03/14 to 03/16	543 C	3	54	
03/17	672 C	1	22	
03/18 to 03/31	812 C	14	379	
04/01 to 04/17	1,188 C	17	673	
04/18 to 05/23	1,588 C	36	1,906	
05/24 to 08/154	1,615 C	82	4,414	
08/16 to 09/11	1,248 C	27	1,123	
09/12 to 09/26	829 C	15	415	
09/27 to 11/07	343 C	41	469	
11/08 to 11/13	135 C	6	27	
11/14 to 11/15	42 C	2	3	
11/16 ----	24 C	1	1	
			9,570	

Bullhead Allotment Actual Use for 1981

Date	Number	Days	AUMs		Pasture
03/01 to 03/14	400 C	14	187	-	Seeding
03/15 to 03/17	1,314 C	3	131	-	Dry Hills
03/18 to 05/14	1,478 C	27	2,808	-	Dry Hills
05/15 to 08/24	1,587 C	100	5,290	-	Summer Pastures/Burn
08/25	1,272 C	1	42	-	Summer Pastures/Burn
08/26 to 09/27	1,089 C	32	1,162	-	Summer Pastures/Burn
09/28 to 10/02	1,016 C	5	169	-	Summer Pastures/Burn
10/03 to 10/09	358 C	7	84	-	Summer Pastures/Burn
10/10 to 10/11	148 C	2	10	-	Summer Pastures/Burn
10/12	24 C	1	1	-	Summer Pastures/Burn
			9,884		

Bullhead Allotment Use for 1982

No Livestock Use

Bullhead Allotment ACtual Use for 1983

Date	Number	Days	AUMs		Pasture
04/15 to 05/30	890 C	16	475	-	Dry Hills
05/01 to 06/30	780 C	60	1,560	-	Dry Hills
07/01 to 07/25	780 C	25	650	-	First Creek
07/26 to 09/30	778 C	65	1,686	-	Kelly Burn
10/01 to 10/18	778 C	18	467	-	Bullhead Seeding
			4,838		

Bullhead Allotment Actual Use for 1984

Date	Number	Days	AUMs		Pasture
03/24 to 4/14	160 C	26	139	-	Dry Hills
04/15 to 04/21	421 C	7	98	-	Dry Hills
04/22 to 06/17	537 C	56	1,002	-	Dry Hills
03/25 to 04/20	243 C	27	219	-	Bullhead Seeding
04/21 to 04/24	354 C	4	47	-	Bullhead Seeding
04/25 to 06/17	428 C	53	756	-	Bullhead Seeding
10/08 to 10/29	854 C	22	448*	-	Bullhead Seeding
06/18 to 06/30	965 C	13	418	-	Dry Hills
07/01 to 07/31	960 C	31	960	-	Kinney Creek
08/10 to 08/15	810	15	405	-	Kinney Creek
08/16 to 09/30	860	45	1,290	-	Kelly Burn
12/06 to 01/15	424 C	40	565	-	Dry Hills
12/06 to 01/15	260 C	40	347	-	Rabbit
03/01 to 02/28	Wild Horses		3,092	-	Entire Allotment
			9,786		except Kelly Burn/Seeding

*Trespass cattle, spent approximately 28% of time and animals on private meadows used in conjunction with seeding.

Bullhead Allotment Actual Use for 1985
(Summary - Detailed Info in District Studies File)

Date	Number	Days	AUMs	Pasture
04/16 to 07/02			3,306	First Creek
07/02 to 09/05			495	Kinney Creek
07/02 to 09/05			495	Kelly Creek (Upper)
01/17 to 02/28				Rabbit
03/01 to 02/28	Wild Horses		1553	Entire Allotment except Kelly Burn/Seed

Mule deer, pronghorn antelope, and bighorn sheep have made historical use of the Bullhead Allotment. Although bighorn sheep do not presently occur in the allotment provisions have been made through CRMP to provide forage to meet the future AUM demand of a reintroduction. (Refer to Section V.) Forage was also provided to meet the AUM demand of reasonable numbers of mule deer and pronghorn as shown in Section V of this plan. For more information, see the Paradise URA Step III for the Bullhead Allotment.

IV. Allotment Issues

Major issues concerning the Bullhead Allotment that were established by the CRMP #1 are listed below. These issues are limited to resource problems that can be effected by grazing management and that can be evaluated through a monitoring system.

A. List of Major Problems/Issues

1. Heavy use in summer area by livestock and wild horses.
2. Proper long-term stocking rate and season of use.
3. Present condition of riparian habitats.
4. Watershed problems, South Fork Little Humboldt, First Creek, Snowstorm Creek.
5. Lack of range management and water developments.
6. Provisions for wildlife populations.
7. Possible sage grouse areas.
8. Wild horses unmanaged, uncontrolled numbers.

V. Allotment Management Objectives

Objectives developed by the CRMP committee and Bullhead AMP are listed below. These are objectives which monitoring can be used to evaluate. They are limited to resource problems affected by grazing, are measurable within a reasonable time frame, do not conflict with each other, are feasible and capable of accomplishment.

A. Establish proper initial and long-term stocking rate, season of use, and pasture schedule for livestock.

B. Increase forage availability from 8,350 AUMs to 12,050 AUMs by 1992 through use of the rest-rotation grazing system for livestock.

C. Improve the fisheries habitat from poor to good condition on:

a. South Fork, Little Humboldt River
b. Pole Creek
c. First Creek

D. Maintain and improve wildlife and fisheries habitat to a good condition on:

a. Kelly Creek
b. Kinney Creek
c. Snowstorm Creek
d. Winters Creek

E. Improve aspen stands to a good ecological condition.

F. Manage rangeland habitat and forage condition to sustain sage grouse and reasonable numbers of wildlife demand as follows:

a. Deer - 1,029 AUMs
b. Antelope - 101 AUMs
c. Bighorn Sheep - 370 AUMs

G. Protect and preserve wild horses as a self-sustaining healthy population. Set an initial level of 600 AUMs/ Key winter Species

Table II shows studies to be used on Key Management areas established and the specific monitoring objective for each area. Interim, short-term and long-term objectives are shown for each study. Items listed in this table are explained as follows.

Interim, Short-term and Long-term Objectives

Time period for each study is listed below.

Interim - 5 years
Short-term - 10 years
Long-term - 35 years

1. Ecological Site and Ecological Status

Each key area will be evaluated by qualified personnel to determine the ecological status according to the Ecological Inventory Method (USDI 1983a). Each site will be verified by the BLM soils and ecological site crew in correlation with the SCS during the condition classification survey.

2. Key Plant Species

These are plant species that serve as indicators of use on associated plant species. Key species are cited in this table by Data Element Dictionary Symbols which are identified as follows:

AGSP - bluebunch wheatgrass (Agropyron spicatum)

SIHY - bottlebrush squirreltail (Sitanion hystrix)

STTH 2 - Thurber needlegrass (Stipa thurberiana)

~~PUTR 2 - antelope bitterbrush (Purshia tridentata)~~

CREPI - hawksbeard (Crepis)

AMELA - serviceberry (Amelanchier)

POTR 5 - aspen (Populus tremuloides)

~~PRVI - common chokecherry (Prunus virginiana)~~

5. Allotment Categorization

The Selective Management categorization process in the Paradise-Denio Resource Area has identified the Bullhead Allotment as an "I" allotment. In compliance with the Rangeland Improvement Policy, this allotment is ranked number 2 concerning analysis component No. 2 (Ranking Investments).

C. Intensity and Types of Studies

All studies will comply with the "Nevada Rangeland Monitoring Handbook" (September 1984), the "Winnemucca District Coordinated Monitoring Plan" (November 1984), and BLM Manuals.

1. Climatological Data

Climatological data will be obtained through the National Oceanic and Atmospheric Administration station in Paradise Valley, Nevada. A rain can will also be established at the Bullhead Ranch.

2. Actual Use

Actual use data will be submitted by the permittee at the end of the grazing season, with all pertinent data.

3. Trend

Trend data will be collected using the quadrat frequency method.

4. Utilization

utilization data will be collected using the key forage plant method. Cages will be placed on the key areas for calibration purposes.

5. Livestock Distribution

Distribution patterns will be plotted on a map by driving, walking, and riding the area of use as deemed necessary.

6. Condition

Ecological status will be determined initially in 1985, 1986, and 1987, using the Ecological Inventory Method (USDI 1983a).

7. Wild Horse Numbers

Aerial census of the Little Owyhee/Snowstorm Herd Use Area will be done every third year at a minimum. An animal condition survey will be done concurrently.

8. Wildlife Studies

Wherever possible wildlife habitat studies will be coordinated with range, and wild horse and burro resources during the key area selection process. Ecological condition status, utilization and trend data will be shared as will the workload. In instances where wildlife key areas and studies must be established separate from range these studies will be established in accordance with the Wildlife Habitat Studies Program Procedures for the Winnemucca District and associated BLM Manuals.

VII. Schedule for Conducting Studies

Table III shows when each study will be read during the interim time period.

A. Utilization

1. Interim - read wherever the pasture is used by livestock, wildlife, or wild horses at the end of the scheduled grazing use, or as needed to differentiate between animal users.

2. Short-term - studies will be read until allowable utilization levels have been achieved for a full grazing cycle. Then studies will be read every other year during critical growing periods, or when the pasture is used.

3. Long-term - if allowable utilization levels have not been achieved, continue short-term scheduling. After objectives have been achieved, read studies during critical growing periods, when the pasture is used.

B. Frequency

1. Interim - all studies will be read every year for the first three years, then every third and fifth year.

2. Short-term - read every third and fifth year.

3. Long-term - read every third and fifth year until an upward trend is indicated. After short-term period objectives have been accomplished, monitor every five years.

C. Ecological Status

Read when frequency data indicates a significant change in trend. Ecological status should be sampled only in rested pastures when feasible. When not feasible, production can be adjusted based on utilization.

D. Actual Use Records

Actual use records will be submitted annually by operators.

E. Climatological Data

Data will be computed annually from NOAA documentation and a rain can location at the Bullhead Ranch.

VIII. Schedule for Conducting Allotment Evaluation

A. Evaluation Schedule

Evaluation schedules of monitoring data will be based on Resource Area priorities. A basic schedule is shown below, specific dates are to be filled in on the approval of this plan.

1. Interim: Evaluate on the third year and at the end of the first five years.

1987 (year 3)

1989 (year 5)

2. Short-term: Evaluate at the eight and tenth year.

1992 (year 8)

1994 (year 10)

3. Long-term: After interim and short-term, evaluate every five years.

1999 (year 15)

2004 (year 20)

2009 (year 25)

2014 (year 30)

2019 (year 35)

B. Evaluation Process

Monitoring data will be summarized in accordance with the Coordinated District Monitoring Plan when completed by person(s) gathering the data and included into the appropriate section of the Bullhead Study file. The summarized data will be analyzed and interpreted by the monitoring specialist or by those persons selected by the Area Supervisor Range Conservationist. Computer program OBJECT will be used to determine significant changes in percent frequency. Analysis and interpretation will be submitted as a short narrative to the Supervisory Range Conservationist and Staff Monitoring Coordinator. The Supervisory Range Conservationist will submit a recommendation of further action (if needed) to the Area Manager.

Analysis will be based on the attainment of key area objectives, in relation to overall allotment objectives, identifying which objectives were not met and identifying why the objectives were not met (if known).

Subsequent analysis and changes to the grazing system or Monitoring Plan will be made on a case by case basis, as directed by the Area Manager and Supervisory Range Conservationist in consultation with the affected permittees.

C. Schedule

As discussed in the previous section, data will be evaluated each year that data is gathered. This will provide guidance for a year to year effort to improve management. In 1989 a formal management decision for the Bullhead Allotment should be issued. Evaluation will continue as long as data is collected as discussed in Section VIII.

D. Management Alternatives Table IV for Variances

Table IV provides possible management actions available to the BLM, when monitoring indicates objectives are met or not met on the allotment.

IX. Coordination of Work Force and Authority to Initiate Plan

The Paradise-Denio Resource Area monitoring specialist or those persons appointed by the Area Manager and Supervisory Range Conservationist shall be responsible for the coordination and carrying out of this plan.

Costs as far as manpower and supplies needed for monitoring, processing of data, and evaluation of monitoring results should be projected at the beginning of each fiscal year. Actual costs of monitoring should then be computed at the end of the fiscal year. The information should be presented on Form NV-0920-6630-8 to aid in planning monitoring activities for the allotments.

Monitoring and evaluation are authorized under various laws, including The Taylor Grazing Act of June 28, 1934, as amended; The Federal Land Policy and Management Act of October 21, 1976, as amended; The Public Rangelands Improvement Act of October 25, 1978; and implementing regulations of The National Environmental Policy Act of 1969. See also BLM Manual Section 1734 and 43 CFR 4100.

Table I. Monitoring Studies Location and Base Data

Key Area #	Utilization Plot Only	Plot Name	Location	Ecological Site	Ecological Status
DH2	-	Eden Valley	T. 40 N., R. 42 E., Sec. 29 SE		
DH2	-	Spring Nature	T. 40 N., R. 43 E., Sec. 29 NENE		
DH3	-	Kelly Creek	T. 40 N., R. 43 E., Sec. 2 SESE		
DH4	-	Northern Dry Hills	T. 40 N., R. 42 E., Sec. 16 NW		
-	DH5	Southern Dry Hills	T. 39 N., R. 42 E., Sec. 3 NWNW		
CR1	-	Castle Ridge	T. 41 N., R. 45 E., Sec. 31 NENE		
-	BS1	Kelly Ranch	T. 39 N., R. 43 E., Sec. 15 SWNE		
BS2	-	Bullhead Seeding	T. 39 N., R. 43 E., Sec. 17 SWNE		

DH - Dry Hills Pasture
CR - Castle Ridge Pasture
BS - Bullhead Seeding (Kelly Creek Seeding)

Table II. Key Management Area Objectives

Key Area #	Key Species	Allowable 1/ Use Levels	Desired Ecological Status	Interim (5 years) Frequency Trend	Short-term (10 years) Frequency Trend	Short-term (10 years) Ecological Status Obj.	Long-term (10 years) Frequency Trend	Long-term (10 years) Ecological Status Obj
DH1	SIHY	40%						
DH2	STTH2	40%						
	AGSP	50%						
DH3	STTH2	40%						
	AGSP	50%						
DH4	SIHY	40%						
	ORHY	50%						
CR1	STTH2	40%						
	SIHY	40%						
BS2	AGCR	50%						

1/ Desired ecological status has been coordinated between range, wild horses, and wildlife specialists.

Table III. Frequency and Utilization Schedule

Year	1	2	3	4	5	6	7	8	9	10
Calendar Year	85	86	87	88	89	90	91	92	93	94
DH2	T x	T x	x	T x	x	x	T	x	T	x
DH2	T x	T x	x	T x	x	x	T	x	T	x
DH3	T x	T x	x	T x	x	x	T	x	T	x
DH4	T x	T x	x	T x	x	x	T	x	T	x
DH5	x	x	x	x	x			x		x
CR1	T x	T x	T x	x	T x		T x		T x	
BS1	x	x	x	x	x		x		x	
BS2	T x	T x	T x	x	T x		T x		T x	

x - utilization

T - frequency

TABLE IV. POSSIBLE MANAGEMENT ACTIONS THROUGH MONITORING EVALUATION

Evaluation Period[1]	Livestock Distribution[2]	Climate[3]	Utilization Objectives[4]	Frequency Objectives[1]	Ecological Status Objectives[1]	Management Actions[5]
Interim	Good	Favorable	AUL	N/A	N/A	May indicate understocking. Adjust livestock numbers or periods-of-use.
	Poor	Favorable	AUL	N/A	N/A	Indicates poor distribution. Change distribution patterns through range improvements, saltings, etc.
	Good	Unfavorable	AUL	N/A	N/A	Indicates unfavorable climatic conditions. If conditions exist for more than 2 years adjust livestock numbers or periods-of-use until climatic conditions, range condition, and utilization are favorable.
	Good	Favorable	AUL	N/A	N/A	May indicate overstocking. Adjust livestock numbers or periods-of-use.
Short-term and Long-term	Good	Favorable	AUL	Met	Met	Indicates understocking. Adjust livestock numbers or periods-of-use.
	Poor	Favorable	AUL	Met	Met	Indicates poor distribution. Change distribution patterns through range improvements, salting, etc.
	Poor	Favorable	AUL	Met	Met	Indicates poor distribution. Change distribution patterns.
	Good	Unfavorable	AUL	Not Met	Not Met	Indicates unfavorable climatic conditions. If conditions exist for more than two years, adjust livestock numbers or periods-of-use until monitoring indicates conditions are more favorable.
	Good	Favorable	AUL	Not Met	Not Met	May indicate overstocking. Adjust livestock numbers or periods-of-use.
	Good	Favorable	AUL	Not Met	Not Met	Trend and condition objectives not being met, for unknown reasons. Reevaluate monitoring procedures and/or intensify monitoring.

[1] Specific time frames and objectives are outlined in Section VI of this plan.

[2] Distribution is identified as "good" (livestock well distributed throughout pasture) and as "poor" (livestock concentrated near riparian, watering sites, on flats, etc.).

[3] Climate is identified as "favorable" or "unfavorable." Favorable and unfavorable conditions can be derived from deviations in normal temperature and precipitation patterns.

[4] AUL - less than the allowable use levels on any key species as shown in the monitoring plan.
AUL - greater than the allowable use levels on any key species as shown in the monitoring plan.

[5] This column shows the conclusions that can be derived from the combination of monitoring results from the other columns, as well as what management actions could be used to help the range meet monitoring objectives.

Table 1. Monitoring Studies Locations and Baseline Data — Bullhead 1

KEY AREA NO. (PASTURE)	KEY AREA NAME	LOCATION	TYPE OF STUDY(S)	ECOLOGICAL SITE[1]	ECOLOGICAL STATUS[2]
0201 (Dry Hills)	DH1	T.42N., R.42E., Sec. 29 SE SE	Trend Utilization	024x02N (loamy 5-8" p.z.)	No Data
0202 (Dry Hills)	DH2	T.40N., R.43E., Sec. 29 NE NE	Trend Utilization	025x19N (loamy 8-10" p.z.)	36% Mid-Seral
0203 (Dry Hills)	DH3	T.39N., R.43E., Sec. 2 SE SE	Trend Utilization	025x19N (loamy 8-10" p.z.)	55% Late Seral
0204 (Dry Hills)	DH4	T.40N., R.42E. Sec. 16 NW SE	Trend Utilization	024x20N (droughty loam 8-10" p.z.)	30% Mid-Seral
0205 (Dry Hills)	DH5	T.39N., R.42E., Sec. 3 NW NW	Utilization	N/A	N/A
0301 (First Creek)	First Creek Basin	T.41N., R.44E., Sec. 36 NE NE	Trend Utilization	025x19N (loamy 8-10" p.z.)	No Data
0302 (First Creek)	County Line	T.41N., R.44E., Sec. 23 SE NE	Trend Utilization	025x19N (loamy 8-10" p.z.)	No Data
0303 (First Creek)	Kelly Spring	T.40N., R.43E., Sec. 22 SW NE	Utilization	N/A	N/A
0402 (Kelly Burn)	Snowstorm Mountains	T.40N., R44E., Sec. 24 SW NW	Trend Utilization	025x12N (loamy slope 10-16" p.z.)	41% Mid-Seral *This site will be moved - poor location.
0403 (Kelly Burn)	Winter's Creek	T.40N., R.45E., Sec. 18 SE SE	Trend Utilization	025x12N (loamy slope 10-16" p.z.)	49% Mid-Seral

[1] Ecological sites listed here can be referenced to SCS Ecological Site Descriptions (SCS 1983)
[2] Ecological status is referred to here in terms of the percent potential natural plant community (PNC) present on the site

Table 1. Monitoring Studies Locations and Baseline Data — Bullhead 2

KEY AREA NO. (PASTURE)	KEY AREA NAME	LOCATION	TYPE OF STUDY(S)	ECOLOGICAL SITE[1]	ECOLOGICAL STATUS[2]
0501 (Bull Seed)	Kelly Ranch	T.39N.,R.43E Sec. 15 SW NE	Utilization	N/A	N/A
0502 (Bull Seed)	Private Native	TG.39N.,R.43E. Sec. 17 SE SW	Utilization	N/A	N/A
0503 (Bull Seed)	Upper	T.39N.,R.43E., Sec. 17 SW NE	Trend Utilization	No Data	No Data
0601 (Kinney)	Crows Nest	T.40N.,R.44E., Sec. 16 NE SE	Trend Utilization	025x27N (loamy 12-16" p.2.)	38% Mid-Seral
0602 (Kinney)	Aspen	T.40N.,R.44E., Sec. 22 NE	Trend Utilization	Aspen Woodland	No Data
0801 (Rabbit)	Rabbit Creek	T.38N.,R.43E., Sec. 5 NE NW	Trend Utilization	024x20N (droughty loam 8-10" p.2.)	26% Early Seral
0802 (Rabbit)	Kelly Creek	T.38N.,R.43E., Sec. 8 NE NW	Trend Utilization	024x6N (dry floodplain 6-10" p.2.)	69% Late Seral
0901 (Snowstorm)	Winter's Ridge	T.40N.,R.45E., Sec. 15 SW SW	Trend Utilization	025x9N (south slope 12-14" p.2.)	No Data
0902 (Snowstorm)	Pole Creek	T.40N.,R.45E., Sec. 29, SE SE	Trend Utilization	No Data	No Data

[1] Ecological sites listed here can be referenced to SCS Ecological Site Descriptions (SCS 1983)
[2] Ecological status is referred to here in terms of the percent potential natural plant community (PNC) present on the site

Table 2. Key Management Area Objectives

Bullhead 1

KEY AREA NUMBER	KEY SPECIES[1]	ALLOWABLE USE LEVELS[2]	DESIRED ECOLOGICAL STATUS[3]	INTERIM (5 YEARS) FREQUENCY TREND[4]	SHORT TERM (10 YEARS) FREQUENCY TREND	SHORT TERM (10 YEARS) ECOLOGICAL STATUS OBJECTIVES[4]	LONG TERM (35 Years) FREQUENCY TREND	LONG TERM (35 Years) ECOLOGICAL STATUS OBJECTIVES
0201	$ARSP_5$ SIHY	30 40	Mid-Seral	Static (If ORHY appears in frequency study, reevaluate objectives.	Same as interim.	Maintain current SIHY composition reevaluate objectives if ORHY appears.	Same as interim.	Same as short term.
0202	$STTH_2$ SIHY	40 40	Mid-Seral	Static (If AGSP appears in frequency study, reevaluate objectives.	Same as interim.	Maintain key species composition.	Same as interim.	Same as short term.
0203	$STTH_2$ SIHY	40 40	Late Seral	Static (Show no reduction in perennial grasses or forbs).	Upward (Show increase in AGSP and $STTH_2$.	Increase AGSP to 5% and $STTH_2$ to 15%.	Static. (Show no reduction in perennial grasses or forbs.	Maintain key species and perennial forb composition.
0204	ORHY SIHY	50 40	Mid-Seral	Static (if AGSP of $STTH_2$ appear reevaluate objectives).	Same as interim.	Maintain key species composition.	Same as interim.	Maintain SIHY, ORHY and perennial forb composition.
0205	SIHY	40	Utilization Study Only					

[1]Plant abbreviation codes are used here. These codes are identified in the Plant List (See Appendix).

[2]Allowable use levels are the objectives established for utilization. They are derived from the Paradise-Denio Grazing Environmental Impact Statement (BLM 1981).

[3]This is the Seral stage that would have the greatest value for all resources (livestock, wild horses, and wildlife).

[4]Frequency identified as static or upward. If an important plant forage species appears on a study that previously was not recorded, then all monitoring objectives for that key area should be reevaluated.

Table 2. Key Management Area Objectives

Bullhead 2

KEY AREA NUMBER	KEY SPECIES[1]	ALLOWABLE USE LEVELS[2]	DESIRED ECOLOGICAL STATUS[3]	INTERIM (5 YEARS) FREQUENCY TREND[4]	SHORT TERM (10 YEARS) FREQUENCY TREND	SHORT TERM (10 YEARS) ECOLOGICAL STATUS OBJECTIVES[4]	LONG TERM (35 Years) FREQUENCY TREND	LONG TERM (35 Years) ECOLOGICAL STATUS OBJECTIVES
0301	AGSP	50		No Data (Present location not evaluated)	No Data		No Data	
	CREPI	50						
	ELCI	50						
0302	AGSP	50		No Data (Present location not evaluated)	No Data		No Data	
	CREPI	50						
	ELCI	50						
0303	AGSP	50	Utilization Study Only					
	ORHY	50						
	SIHY	40						
0402	AGSP	50		(This study location will be moved from its present location. No objectives will be set until the future site has been evaluated.)				
	ELCI	50						
	FEID	40						
	SYOR	40						
0403	FEID	40	Late Seral	Upward (Show increase in FEID; if AGSP appears, reevaluate objectives).	Same as interim.	Maintain perennial forb composition. Increase FEID to 6%.	Same as interim.	Maintain perennial forb composition. Increase FEID to 10%.
	SIHY	40						
	SYOR	40						

[1]Plant abbreviation codes are used here. These codes are identified in the Plant List (See Appendix).

[2]Allowable use levels are the objectives established for utilization. They are derived from the Paradise-Denio Grazing Environmental Impact Statement (BLM 1981).

[3]This is the Seral stage that would have the greatest value for all resources (livestock, wild horses, and wildlife).

[4]Frequency identified as static or upward. If an important plant forage species appears on a study that previously was not recorded, then all monitoring objectives for that key area should be reevaluated.

Table 2. Key Management Area Objectives

Bullhead 3

KEY AREA NUMBER	KEY SPECIES[1]	ALLOWABLE USE LEVELS[2]	DESIRED ECOLOGICAL STATUS[3]	INTERIM (5 YEARS) FREQUENCY TREND[4]	SHORT TERM (10 YEARS) FREQUENCY TREND	SHORT TERM (10 YEARS) ECOLOGICAL STATUS OBJECTIVES[4]	LONG TERM (35 Years) FREQUENCY TREND	LONG TERM (35 Years) ECOLOGICAL STATUS OBJECTIVES
0501	AGCR	50	Utilization Study Only					
0502	SIHY	40	Utilization Study Only					
0503	AGCR	50	Seeding	No Data (Present location not evaluated)	No Data		No Data	
0601	CREPI FEID SIHY	50 40 40	Mid-Seral	Static (Show no decrease in grasses or perennial forb composition.	Same as interim.	Maintain grasses and perennial forbs.	Same as interim.	Maintain grasses and perennial forbs.
0602	FEID POTR$_5$	40 40		No Data (Present location not evaluated)	No Data		No Data	

[1]Plant abbreviation codes are used here. These codes are identified in the Plant List (See Appendix).
[2]Allowable use levels are the objectives established for utilization. They are derived from the Paradise-Denio Grazing Environmental Impact Statement (BLM 1981).
[3]This is the Seral stage that would have the greatest value for all resources (livestock, wild horses, and wildlife).
[4]Frequency identified as static or upward. If an important plant forage species appears on a study that previously was not recorded, then all monitoring objectives for that key area should be reevaluated.

Table 2. Key Management Area Objectives

Bullhead 4

KEY AREA NUMBER	KEY SPECIES[1]	ALLOWABLE USE LEVELS[2]	DESIRED ECOLOGICAL STATUS[3]	INTERIM (5 YEARS) FREQUENCY TREND[4]	SHORT TERM (10 YEARS) FREQUENCY TREND	SHORT TERM (10 YEARS) ECOLOGICAL STATUS OBJECTIVES[4]	LONG TERM (35 Years) FREQUENCY TREND	LONG TERM (35 Years) ECOLOGICAL STATUS OBJECTIVES
0801	$ARSP_5$ SIHY	30 40	Mid-Seral	Upward (Show increase in ORHY; if $STTH_2$ or AGSP appear, reevaluate.	Same as interim.	Increase ORHY to 2%.	Same as interim.	Increase ORHY to 5%.
0802	ELCI	50	Late Seral to PNC.	Upward (Show increase in ELCI; if AGSM appears, reevaluate objectives).	Same as interim.	Increase ELCI to 40%.	Same as interim.	Increase ELCI to 45%.
0901	AGSP ELCI	50 50		No Data (Present location not evaluated)	No Data		No Data	
0902	AGSP ELCI FEID	50 50 40		No Data (Present location not evaluated)	No Data		No Data	

[1]Plant abbreviation codes are used here. These codes are identified in the Plant List (See Appendix).
[2]Allowable use levels are the objectives established for utilization. They are derived from the Paradise-Denio Grazing Environmental Impact Statement (BLM 1981).
[3]This is the Seral stage that would have the greatest value for all resources (livestock, wild horses, and wildlife).
[4]Frequency identified as static or upward. If an important plant forage species appears on a study that previously was not recorded, then all monitoring objectives for that key area should be reevaluated.

Table 3. Frequency and Utilization Schedule Bullhead 1

KEY AREA NO.	YEAR 1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
FREQUENCY	Based on phenology stages of key and associated species, frequency studies should generally be read from May to July, allowing for seasonal variation and site location.										
0201	X	X	X		X			X		X	
0202	X	X	X		X			X		X	
0203	X	X	X		X			X		X	
0204	X	X	X		X			X		X	
0301		X	X	X		X			X		X
0302		X	X	X		X			X		X
0402	X	X	X		X			X		X	
0403	X	X	X		X			X		X	
0503		X	X	X		X			X		X
0601	X	X	X		X			X		X	
0602		X	X	X		X			X		X
0801	X	X	X		X			X		X	
0802	X	X	X		X			X		X	
0901		X	X	X		X			X		X
0902		X	X	X		X			X		X

UTILIZATION

Utilization will be read whenever the allotment/pasture is scheduled to be grazed. Utilization checks and use pattern mapping should be done when the livestock are removed or the end of the growing season, whichever comes first, or both if time and manpower permit.