

BUREAU OF LAND MANAGEMENT Ely Field Office 702 North Industrial Way, HC 33 Box 33500 Ely, Nevada 89301-9408

> In Reply Refer To: 4400 (NV-042)

4/11

APR 1 1 2000

Goshute Basin Allot.

Dear Interested Public:

The Ely Field Office has completed a Final Evaluation for the Goshute Basin Allotment located within the Cherry Creek Herd Management Area (HMA). The Final Goshute Basin Allotment Evaluation was conducted in accordance with the direction set forth in the Washington Office Instruction Memorandum No. 86-706, and is based on monitoring data primarily collected between 1991 and 1998.

The allotment evaluation process is used to evaluate livestock, wild horse and wildlife use. The purpose is to determine if existing multiple uses are meeting the allotment specific and land use plan objectives as described in the Egan Resource Area Resource Management Plan and Final Environmental Impact Statement (RMP/FEIS), Egan Resource Area Record of Decision (ROD), Rangeland Program Summary (RPS), and Standards and Guidelines for the Northeastern Great Basin Area. This evaluation process will also be used in determining the appropriate management levels (AMLs) for wild horses within the Goshute Basin Allotment portion of the Cherry Creek HMA.

The Draft Goshute Basin Allotment Evaluation was sent to the affected permittees as a scoping procedure for consultation, cooperation, and coordination on December 1, 1999. There will be a 30 day comment period for the final evaluation. Please submit your written comments to Mark Lowrie, Rangeland Management Specialist, Bureau of Land Management/Ely Field Office, HC 33 Box 33500, Ely, NV. 89301. If you have any questions during your review of the evaluation, please call Mr. Lowrie at (775) 289-1888.

Sincerely, Adminstration

James M. Perkins Assistant Field Manager Renewable Resources

Enclosure
 Final Goshute Basin Allotment Evaluation

Mailing List Final Goshute Basin Allotment Evaluation

APR 11 2000

Wendy Paris (Bertrand Paris & Sons) Stephen & Vicki Nye (Indian Creek Ranch Partnership) Carol Sherman (Permit Leasee) Commission for the Preservation of Wild Horses Mr. Curt Baughman, Nevada Div. Of Wildlife Nevada Cattlemen's Association Nevada Department of Agriculture Mr. Steve Foree, Nevada Div. Of Wildlife Mr. John McLain, Resource Concepts, Inc. U.S. Fish & Wildlife Service

FINAL GOSHUTE BASIN ALLOTMENT (0402) EVALUATION SUMMARY

I. INTRODUCTION

APR 11 2000

A. Evaluation/Decision and Planning Process

The allotment evaluation process is used to evaluate livestock grazing use, wild horse use and wildlife use. The purpose of this evaluation is also to determine if existing multiple uses are meeting the allotment specific and land use plan objectives as described in the Resource Management Plan/Environmental Impact Statement and Record of Decision for the Egan Resource Area, the Rangeland Program Summary, and the Standards for the Northeastern Great Basin Area or the Mojave-Southern Great Basin Area (Refer to the Allotment Objective Flow Chart, Appendix II and the Public Consultation Process Chart, Appendix III).

The Resource Management Plan/Environmental Impact Statement and Record of Decision for the Egan Resource Area were issued in September 1984 and February 1987, respectively. The Egan Rangeland Program Summary was issued in May of 1988. These documents guide the management of public lands within the Goshute Basin Allotment. The Egan Resource Area Record of Decision states in pertinent part:

"Monitoring studies will be used to determine if adjustments in livestock numbers are necessary...All vegetation will be managed for those successional stages which would best meet the objective of this proposed plan..." (short term objective) "Future adjustments in livestock use will be based on data provided through the rangeland monitoring program." (long term objective).

"Implementation [of the range management program] will take place through coordination, consultation, and cooperation. Actions could include, but will not be limited to, change in seasons-of-use, change in livestock numbers, correction of livestock distribution problems, alteration of the number of wild horses, development of range improvements, and taking site specific measures to achieve improvements in wildlife habitat."

B. NEPA Compliance and Conformance

Proposed actions associated with the evaluation process are analyzed through the NEPA process. Management actions or practices developed through the evaluation process are reviewed to determine if they are in conformance with the land use plan decisions to determine if the actions fall within the scope of the range of alternatives identified in either the resource management plans and environmental impact statements or the grazing environmental impact statements and to determine conformance with NEPA.

C. Allotment Information

Wendy Paris (Bertrand Paris and Sons) and Greg Johnson (Indian Creek Ranch) are the current permittees of record for the Goshute Basin Allotment (0402). Wendy Paris grazes sheep. She owns the base property for the grazing permit and is the authorized representative. The permit is in the name of Bertrand Paris and Sons. Greg Johnson grazes cattle. The base property (Indian Creek Ranch) is owned by Indian Creek Ranch Partnership. The permit is in the name of Indian Creek Ranch. Stephen and Vicki Nye, of the Indian Creek Ranch Partnership, are the current authorized representatives for the Indian Creek Ranch. Sonya Hesterlee and Brett and Karen Spahan leased the base property and grazing permit from Greg Johnson from March 1998 to February 1999. Ralph Vance leased the grazing permit from Greg Johnson from April 1992 to December 1996.

An Allotment Management Plan (AMP) has not been initiated for the allotment. The allotment is entirely within the Cherry Creek Wild Horse Herd Management Area (HMA). The allotment is also covered in the Goshute Creek Habitat Management Plan (HMP).

The main evaluation period covered seven years, from 1991 - 1998. In order to provide background information, many other earlier years of rangeland monitoring data are included in this evaluation.

II. INITIAL STOCKING LEVEL

For an explanation of the process for changing authorized grazing use, refer to Appendix I, page 39.

A. Livestock Use

The permitted use for livestock grazing in the allotment is 633 AUMs, with 516 AUMs held in historical suspended non-use, for a total permitted use of 1,149 AUMs. Of the 633 AUMs permitted use, 534 AUMs are sheep use while 99 AUMs are cattle use. The kind and class of livestock is cattle (cow/calf) and sheep (ewe/lamb). The period of use is 7/16 through 10/05 for sheep and 7/01 through 9/01 for cattle. Grazing use is authorized at 100% federal range. The existing operations summer up to 1,850 head of sheep and 70 head of cattle. The three year average stocking rate (1979 - 1981) used in the Egan Resource Management Plan (RMP) and Final Environmental Impact Statement (EIS), as well as the Egan Rangeland Program Summary (RPS), is 440 AUMs. Table 1 lists the permitted use summary for the allotment.

	Current	Historical	Total
Permittee	Permitted Use	Suspended Non-use	Permitted Use
G. Johnson	99 AUMs	81 AUMs	180 AUMs
W. Paris	534 AUMs	435 AUMs	969 AUMs
Total	633 AUMs	516 AUMs	1,149 AUMs

Table 1. Goshute Basin Permitted Use

B. Wild Horse Use

The Goshute Basin Allotment is entirely within the Cherry Creek Wild Horse Herd Management Area (HMA) (Map C). The Rangeland Program Summary objective for this allotment is to provide habitat and forage for 2 wild horses (27 AUMs) within the Cherry Creek HMA.* The Proposed Egan Resource Management Plan and Final Environmental Impact Statement (RMP/EIS) (1984) established an interim management level of 11 wild horses for the entire Cherry Creek HMA. This number was based on the 1982 - 1983 wild horse population level. The Egan Rangeland Program Summary level of 2 wild horses for the Goshute Basin Allotment is the allotment's proportionate share of the 11 wild horses identified in the RMP/EIS. Since these interim management levels were established, there have been only two wild horse censuses conducted in which any wild horses were observed in the HMA (1987 and 1988). The 1987 census was a ground count of animals. All other censuses conducted since 1984 have resulted in zero wild horses observed over the entire Cherry Creek HMA. Ground observations made during the same period have resulted in no wild horses observed within the HMA. Resource specialists from the Ely Field Office have noted very infrequent wild horse sign (tracks, trails, droppings, or evidence of grazing) in either the Goshute Basin Allotment or the Cherry Creek HMA from 1991 through 1998. The February 1987 ground count census was conducted after a wild horse removal in the adjacent Elko District Cherry Creek North HMA, which lies just to the north of Ely's Cherry Creek HMA across the Elko/White Pine County line. There were 16 wild horses observed in the Cherry Creek HMA just south of the county line, but were never observed in the Cherry Creek HMA subsequent to the census and completion of the removal. These wild horses probably moved into the Cherry Creek HMA during the helicopter removal to elude capture and returned to the Cherry Creek North HMA after the removal was completed The February 1989 census resulted in three horses observed in the Cherry Creek HMA. At the time, it was assumed they were wild horses. But they could have been domestic horses, since there was domestic horse use permitted for the area in which they were observed (Cherry Creek Allotment).

The overall consensus of resource specialists in the Ely Field Office is that wild horses commonly use the land area in Elko County and very seldom drift into the Ely District. A summary of the wild horse census data for the allotment and HMA is provided in the wild horse actual use section on page 15 of this evaluation.

* The 2 wild horses yearlong within the Cherry Creek HMA is no longer a valid AML. The Interior Board of Land Appeals June 7, 1989 decision (IBLA 88-591, 88-638, 88-648, 88-679) ruled in part:

"An AML established purely for administrative reasons because it was the level of wild horse use at a particular point in time cannot be justified under the statute." The IBLA further ruled that AML must be established through monitoring "in terms of the optimum number which results in a thriving natural ecological balance and avoids deterioration of the range."

C. Wildlife Use

1. Reasonable numbers (from Land Use Plan (LUP)).

The RPS objective for this allotment is to provide forage and habitat for reasonable numbers of wildlife, i.e., 148 AUMs for mule deer.

2. Key or Critical Management Areas

The Bureau of Land Management has not identified any specific key or critical management areas for wildlife within the Goshute Basin Allotment. The Nevada Division of Wildlife considers Goshute Canyon to be a key area for summering mule deer, upland game, and nongame wildlife. Much of upper Goshute Canyon is within the Goshuste Basin Allotment. The Goshute Basin Allotment is also critical watershed habitat for the Bonneville cutthroat trout, which lives in that portion of Goshute Creek within the Cherry Creek Allotment.

III. ALLOTMENT PROFILE

A. EXISTING MANAGEMENT PRACTICES

The Goshute Basin Allotment is grazed in common by one sheep permittee and one cattle permittee. Sheep graze the allotment in late summer and fall while cattle graze in summer and early fall.

Wendy Paris and Bertrand Paris have made consistent sheep grazing use of the allotment. Ewes with lambs have grazed the allotment seven of the last eight years, from 1991 - 1995 and during 1997 and 1998. During the eight year period sheep numbers ranged from 925 to 1850 ewes. Sheep typically enter the allotment as snow melts in June or July and leave the allotment in late September or early October. Sheep enter and leave the allotment from the Medicine Butte Allotment to the west. Normally, sheep stay on the allotment during the grazing period. Minor sheep use has been documented on the Indian Creek Allotment to the northeast.

Sheep have been herded in the allotment and are able to graze the steeper slopes that are characteristic of the area. Sheep use has also been concentrated on the fragile riparian areas in the middle portions of the allotment. Cattle have been licensed to graze the allotment during

1992, 1993, and 1995. Cows with calves have grazed from June through late September. Numbers of cows ranged from 33 to 75 head. Cows enter and leave the allotment from the Indian Creek Allotment to the northeast. Because of steep and rugged topography, forage availability, and generally hot conditions, cattle tend to congregate on the riparian meadows and seep areas in the allotment.

Unauthorized cattle drift during summer from the Indian Creek Allotment and the Cherry Creek Allotment (Carry Canyon) to the Goshute Basin Allotment has been common during the evaluation years. The Indian Creek drift fence separating the Goshute Basin and Indian Creek Allotments has generally not been maintained and currently requires repair. The main gate is often left open.

The Indian Creek drift fence, approximately one mile in length, was constructed in 1972. The main purpose of the fence was to implement a habitat management plan objective of protecting the Bonneville cutthroat trout in Goshute Creek. The fence was thus intended to control cattle drift from the Indian Creek Allotment into the critical watershed area of the Goshute Basin Allotment. Fence materials were supplied by BLM and labor was contracted to complete the construction. The fence was originally built as a combination permanent/let down fence with let down panels so that snow damage would be minimal during winter.

B. DESCRIPTION

The Goshute Basin Allotment (0402), a category "M" allotment encompassing approximately 5,060 federal acres and 120 private acres, is located in White Pine County, Nevada, approximately 58 air miles north of Ely and 13 air miles north of Cherry Creek, Nevada. The allotment is situated in the northern portion of the Ely District in the Cherry Creek Mountains. Map A illustrates the location of the allotment within the Ely District and Map B shows the allotment boundaries. The allotment is characterized by a high broad basin which funnels into a narrow canyon. Much of the allotment is characterized by steep slopes. The allotment boundary is unfenced with the exception of a combination permanent/let down fence on the northeast boundary (see Map B). The northeast boundaries of the allotment are unfenced and border the Cherry Creek Allotment (0403). The west and southwest boundaries of the allotment are also unfenced and border the Medicine Butte Allotment (0501). Elevations in the allotment range from about 7,300 feet in eastern portions of the allotment to 10,500 feet in the west of the allotment.

Temperature and precipitation in the allotment are typical of mountainous areas of the Great Basin. Summer temperatures are warm to hot while winter temperatures frequently drop below zero. Average annual precipitation is estimated at between 14 and 20 inches. Heavy accumulations of snow combined with spring rains and rapid snow melting in spring have caused periodic flooding in the lower watershed and mountain bench area. Four small riparian exclosures, constructed in 1989, together protect approximately 2 acres of springs and riparian habitat within the allotment. The exclosures were constructed by BLM to protect riparian habitat at the headwaters of Goshute Creek. There are several other riparian areas (generally spring/seep areas) in the allotment that are not protected. There are currently several areas in the allotment where wyethia (Wyethia amplexicaulis), or mule's ear, has replaced more favorable grass and forb species. The invaded areas occur both in the uplandsand immediately next to spring/seep areas. Stinging nettle and rudbeckia (cone flower) have replaced more favorable plant species in riparian areas.

The primary range sites on the allotment are as follows:

- 1. Low sagebrush/bluebunch wheatgrass needlegrass (028BY037NV)
- 2. Mountain big sagebrush/mountain brome needlegrass (028BY029NV)
- 3. Mountain big sagebrush/bluebunch wheatgrass (028BY070NV)
- 4. Mountain big sagebrush/bluebunch wheatgrass needlegrass (028BY085NV)
- Curlleaf mountain mahogany/mountain big sagebrush/bluebunch wheatgrass needlegrass (028BY032NV)

Stands of aspen, white fir, mountain mahogany, limber pine, bristlecone pine, pinyon pine, and juniper occur as mixed stands or stands of single species.

C. GOSHUTE CANYON WILDERNESS STUDY AREA (WSA)

The designation of the Goshute Canyon WSA (NV-040-015) came in October of 1987 with the filing of the Final Wilderness Environmental Impact Statement (EIS). The entire WSA is comprised of 35,594 acres of public land with one 15 acre patented mining claim inholding near the southern boundary. The WSA occurs in the Cherry Creek Mountain Range in both White Pine and Elko Counties. Elevations range from 6,000 to 10,000 feet. The recommendation for the Goshute Canyon WSA is to designate 22,225 acres as wilderness and release 13,369 acres for uses other than wilderness. Generally, exceptionally high wilderness values, strong public interest, and limited amounts of competing resource uses were the reasons for recommending a portion of the WSA as wilderness. Approximately 3,000 acres of the Goshute Canyon WSA that is recommended for wilderness (Map D). Many of the spring sources that are the headwaters of Goshute Creek also occur within the recommended portion of the WSA and within the Goshute Basin Allotment.

In relationship to grazing, the Final Wilderness EIS concluded that there would be no impacts to grazing facility maintenance in that portion of the Goshute Basin Allotment within the designated wilderness area. The EIS also found that minor impacts on construction of new projects are possible due to designated wilderness management limitations.

In 1970 the BLM designated 7,650 acres in Goshute Basin as the Goshute Canyon Natural Area. It was designated as such because of its unique scenery, geology, vegetation, and zoology. It was also designated as such in order to protect the Bonneville cutthroat trout, which was then on Nevada's endangered species list. The Goshute Canyon Natural Area was included in the 1991 Nevada BLM Statewide Wilderness Report. Nearly the entire Goshute Basin Allotment is within the Natural Area. As a result of passage of the Federal Land Policy and Management Act (FLPMA) in 1976, all designated BLM natural areas became candidates for wilderness designation known as "Instant Study Areas" (ISA). ISAs are currently under the same protection and management guidelines as Wilderness Study Areas. Thus the entire Goshute Basin Allotment is now managed under the current Wilderness Study Area Interim Management Guidelines.

D. ALLOTMENT SPECIFIC OBJECTIVES (Northeastern Great Basin Area Standards)

STANDARDS

Standard 1. Upland Sites:

Upland soils exhibit infiltration and permeability rates that are appropriate to soil type, climate, and land form.

As indicated by:

Indicators are canopy and ground cover, including litter, live vegetation and rock, appropriate to the potential of the site.

a. Applicable Land Use Plan (RMP/ROD) Objectives:

"Establish utilization limits to maintain watershed cover, plant vigor and soil fertility in consideration of plant phenology, physiology, terrain, water availability, wildlife needs, grazing system and aesthetic values." (Egan ROD, p.44)

b. Applicable Rangeland Program Summary Objective:

Maintain or enhance native vegetation with utilization not to exceed Nevada Rangeland Monitoring Handbook (NRMH) levels on key species. Maintain or improve the current ecological condition of the native range.

Standard 2. Riparian and Wetland Sites:

Riparian and wetland areas exhibit a properly functioning condition and achieve state water quality criteria.

As indicated by:

Stream side riparian areas are functioning properly when adequate vegetation, large woody debris, or rock is present to dissipate stream energy associated with high water flows. Elements indicating properly functioning condition such as avoiding accelerating erosion, capturing sediment, and providing for groundwater recharge and release are determined by the following measurements as appropriate to the site characteristics: Width/depth ratio; Channel roughness; Sinuosity of stream channel; Bank stability; Vegetative cover (amount, spacing, life form); and Other cover (large woody debris, rock).

Natural springs, seeps, and marsh areas are functioning properly when adequate vegetation is present to facilitate water retention, filtering, and release as indicated by plant species and cover appropriate to the site characteristics.

Chemical, physical, and biological water constituents are not exceeding the state water quality standards.

a. Applicable Land Use Plan (RMP/ROD) Objectives:

"Establish utilization limits to maintain watershed cover, plant vigor and soil fertility in consideration of plant phenology, physiology, terrain, water availability, wildlife needs, grazing systems and aesthetic values." (Egan ROD, p.44)

b. Applicable Rangeland Program Summary Objectives:

"Improve or maintain the habitat condition of meadows and riparian areas from fair to good or better condition for mule deer, sage and blue grouse."

"Utilization levels will not exceed 55 percent on perennial grasses and grass-like species and 45 percent on shrubs along stream riparian areas and mesic meadows."

"Improve habitat condition to good or better as needed to protect Bonneville cutthroat trout (Category 1) species habitat."*

* The Bonneville cutthroat trout is currently a Nevada BLM Sensitive Species, and is also under U.S. Fish and Wildlife Service review for possible listing as a threatened species.

Standard 3. Habitat:

Habitats exhibit a healthy, productive, and diverse population of native and/or desirable plant species, appropriate to the site characteristics, to provide suitable feed, water, cover and living space for animal species and maintain ecological processes. Habitat conditions meet the life cycle requirements of threatened and endangered species.

As indicated by:

Vegetation composition (relative abundance of species);

Vegetation structure (life forms, cover, height, or age classes);

Vegetation distribution (patchiness, corridors);

Vegetation productivity; and Vegetation nutritional value.

a. Applicable Land Use Plan (RMP/ROD) Objectives:

1) Livestock

"All vegetation will be managed for those successional stages which would best meet the objective of this proposed plan." (Egan Resource Area Record of Decision (ROD), p.3)

2) Wild Horses

b. Wild horses - Wild horses will be managed at a total of 11 animals within the Cherry Creek HMA. (Egan ROD, p. 6)*

"Future adjustments in wild horse numbers will be based on data provided through the rangeland monitoring program." (Egan ROD, p. 6). Actual wild horse numbers will be determined by this evaluation based upon monitoring data in order to maintain a thriving natural ecological balance and prevent deterioration of the range.

* The 11 wild horses yearlong in the Cherry Creek HMA is no longer a valid Appropriate Management Level (AML). The Interior Board of Land Appeals June 7, 1989 decision (IBLA 88-591, 88-638, 88-648, 88-679) ruled in part: "An AML established purely for administrative reasons because it was the level of wild horse use at a particular point in time cannot be justified under the statute." The IBLA further ruled that the AML must be established through monitoring "in terms of the optimum number which results in a thriving natural ecological balance and avoids deterioration of the range."

3) Wildlife

"Habitat will be managed for "reasonable numbers" of wildlife species as determined by the Nevada Department of Wildlife." (Egan ROD, p. 6)

"Reintroductions of big game species will be accomplished in cooperation with the Nevada Department of Wildlife, where such reintroductions would not conflict with existing uses and if sufficient forage is available." (Egan ROD, p.6)

"Forage will be provided for "reasonable numbers" of big game as determined by the Nevada Department of Wildlife." (Egan ROD, p.8)

b. Applicable Rangeland Program Summary Objectives:

1) Livestock

Provide forage for up to 440 AUMs of livestock use.

Maintain or enhance native vegetation with utilization not to exceed Nevada Rangeland Monitoring Handbook (NRMH) levels on key species. Maintain or improve the current ecological condition of the native range.

2) Wild Horses

"Initially mange rangeland habitat to support an Appropriate Management Level (AML) of 2 horses in the Goshute Basin Allotment as part of the Cherry Creek HMA. Provide for up to 27 AUMs of wild horse use." (The AML of 2 wild horses identified in the RPS is no longer a valid AML - See asterisk note on pages 3 and 4 for reasons why).

Maintain or enhance native vegetation with utilization not to exceed Nevada Rangeland Monitoring Handbook (NRMH) levels on key species. Maintain or improve the current ecological condition of the native range.

3) Wildlife

"Manage rangeland habitat and forage condition to support reasonable numbers of wildlife, as follows: mule deer 148 AUMs."

"Protect sage grouse breeding complexes."

"Manage stands of white fir to late seral stage and aspen to early to mid seral stage for blue grouse."

"Improve habitat condition to good or better as needed to protect Bonneville cutthroat trout (Category 1) species habitat."

Standard 4. Cultural Resources:

Land use plans will recognize cultural resources within the context of multiple use.

E. HABITAT MANAGEMENT PLAN (HMP) OBJECTIVES

The following HMP Objectives from the Goshute Creek Habitat Management Plan (WHA-N4-S1; 1980) are pertinent to the Goshute Basin Allotment:

1. Increase bank cover and riparian zone vegetation for all riparian habitat.

5. Fence seriously damaged aspen stands, provide for herders to keep sheep out of these areas, cut invading white fir in aspen stands.

8. Remove cattle use, design and implement a rest-rotation grazing plan for sheep, fence damaged areas, spring sources and riparian areas where necessary.

10. Water bar the upper basin road.

F. ALLOTMENT SPECIFIC OBJECTIVES (Short Term and Long Term).

The Egan land use plan provides the direction to manage resources on a planning area basis. This land use plan provides guidance for making sound decisions for a variety of land uses within the planning area. The allotment specific objectives are a quantification of Northeastern Great Basin Area standards and land use plan objectives down to site specific objectives. The allotment specific objectives are clearly consistent and in conformance with the land use plan and standards. The short and long term allotment specific objectives are included in Appendices V, VI, and VII of this evaluation beginning on page 46. Refer also to the Allotment Objective Flow Chart in Appendix II.

1. Livestock

a. The short term objective will be accomplished through managing the allowable use levels by season of use, stocking levels, and/or other management practices to maintain or improve the desired vegetation community throughout the allotment.

b. The long term objective is to manage for the most appropriate seral stage to provide desired quantity, quality, and variety of forage in order to meet the requirements for livestock forage production.

2. Wild Horses

a. The short term objective will be accomplished through managing the allowable use level (AUL) to improve or maintain the desired vegetation community.

b. The long term objective is to manage for the most appropriate seral stage to provide desired quantity, quality, and variety of forage in order to meet the requirements of the wild horses.

3. Mule Deer

a. The short term objective is to limit use on key browse species listed for mule deer to 50% or less yearlong.

b. The long term objective is to maintain mule deer summer and migratory range in at least good habitat condition.

4. Riparian Areas

a. The short term objective is to manage the allowable use levels on lentic and lotic riparian areas, seeps and sub-irrigated meadows on combined key grasses and grass - like species by season of use, rotation system, stocking levels and/or other management practices to achieve the desired riparian vegetation conditions. "Utilization levels will not exceed 55 percent on perennial grasses and grass-like species and 45 percent on shrubs along stream riparian areas and mesic meadows."

b. The long term objective is to manage all lentic and lotic habitat for proper functioning condition.

G. THREATENED AND ENDANGERED ANIMALS

The federally threatened bald eagle winters in the vicinity of the allotment each winter with numbers of birds varying with winter intensity to the north. The federally endangered peregrine falcon can be observed on the allotment during any month of the year.

The Nevada BLM sensitive Bonneville cutthroat trout lives in Goshute Creek in the Cherry Creek Allotment. The Endangered Species Act of 1973 and BLM Manual 6830 mandated BLM to improve habitat to prevent the Bonneville cutthroat trout from going on the threatened and endangered list. The U.S. Fish and Wildlife Service is currently conducting a 90 day (starting December 8, 1998) review of the Bonneville cutthroat trout for possible listing as a threatened species. A history of the Bonneville cutthroat trout in Goshute Creek is presented in Appendix X.

H. THREATENED AND ENDANGERED PLANTS

There are no known threatened or endangered plant species on the allotment.

I. KEY SPECIES IDENTIFICATION

Key forage plants for cattle, sheep, and mule deer for the native range of this allotment are as follows:

Cattle - grasses & grasslike plants

AGSP (Agropyron spicatum),Bluebunch wheatgrassSTIPA (Stipa spp.),NeedlegrassORHY (Oryzopsis hymenoides),Indian ricegrassPOA (Poa spp.),BluegrassOther riparian grasses & grasslike species

Sheep - grasses & grasslike plants

AGSP (Agropyron spicatum),Bluebunch wheatgrassSTIPA (Stipa spp.),NeedlegrassORHY (Oryzopsis hymenoides),Indian ricegrassPOA (Poa spp.),BluegrassOther riparian grasses and grasslike species

Sheep - shrubs & trees

ARAR (Artemisia arbuscula),	Low sagebrush
ARNO (Artemisia nova),	Black sagebrush
SYAL (Symphoricarpos albus),	Common snowberry

Mule deer - all categories

ARTRV (Artemisia tridentata v.), PUTR (Purshia tridentata), POTR (Populus tremuloides), PRVI (Prunus virginiana), SYAL (Symphoricarpos albus), All native mesic riparian species Mountain big sagebrush Bitterbrush Quaking aspen Chokecherry Common snowberry

IV. MANAGEMENT EVALUATION

A. Purpose

The purpose of this evaluation is to assess whether current management practices are meeting the multiple use objectives for the allotment and to determine the appropriate stocking level and management system for domestic livestock and appropriate management level for wild horses.

B. Summary of Studies Data

All rangeland monitoring information and field data sheets are available for public review in the Ely Field Office.

1. Key Area Summary - Livestock

Because of steep topography, the primary livestock grazing area occurs in the middle third of the allotment, at lower elevations. The middle third of the allotment is characterized by rolling, broken, hilly topography with both mild and steep slopes. Three key areas have been established within the primary grazing area (Map E). Key area GB-01 was established in October of 1993 in a low sagebrush/bluebunch wheatgrass plant community in T. 25N., R. 63E., Section 8, SE1/4 (028BY037NV). Key area GB-02 was established in October of 1995 in a low sagebrush/small rabbitbrush/perennial grass plant community in T. 26N., R. 63E., Section 26, SE1/4 SW1/4 (028BY037NV). Key area GB-03 was established in September of 1998 in a mountain big sagebrush/snowberry/perennial grass plant community in T. 25N., R. 63E., Section 4, NE 1/4 (028BY029NV).

Utilization cages have been placed at each of the key grazing areas to show the current annual growth of key forage species. Key forage plant method utilization transects have been completed at the key area locations and at other locations throughout the middle third of the allotment periodically since 1975. In recent years, key forage plant method transects have been completed for five years of grazing use, during 1993 and from 1995 - 1998. Full use pattern maps (UPM data) were drawn for livestock use of the allotment in October of 1993 and 1995. Trip log observations have also been documented during 1983, 1990, 1992, and 1997. Ecological status studies, cover studies, and observed apparent trend studies have also been completed at the key areas of the allotment. Proper functioning condition (PFC) assessments have been completed at riparian areas. Nevada water resources inventory forms and photographs supplement the PFC data.

Actual use information, licensed use, wildlife existing use, and precipitation studies round out the allotment specific monitoring for the Goshute Basin Allotment.

2. Livestock Actual Use

Very limited actual use data exists for the Goshute Basin Allotment from 1991 through 1998. Sonya Hesterlee, Ralph Vance, or Greg Johnson did not submit any cattle grazing actual use reports for that period. Bertrand Paris & Sons submitted actual use forms for sheep grazing for the summer of 1993 and the summer and fall of 1994 and 1998. Reported actual sheep use is as follows:

Table 2. Reported Actual Sheep Use Data - Goshute Basin Allotment

	A	AUMs		
Year	Cattle	Sheep	Total AUMs	
1993	<0>	237	237	
1994	<0>	363	363	
1998	<0>	347	347	

3. Livestock Licensed Use

Licensed use for sheep and cattle in the Goshute Basin Allotment from 1991 through 1998 is illustrated in Table 3.

Table 3. - Licensed Use (AUMs) for Sheep/Cattle in the Goshute Basin Allotment From 1991 - 1998.

		AUMS			
Year	Sheep	Cattle	Total	Non-use	
1991	541	<0>	541	92	
1992	489	101	590	43	
1993	404	99	503	130	
1994	497	<0>	497	136	
1995	529	99	628	<0>	
1996	<0>	<0>	<0>	633	
1997	346	<0>	346	287	
1998	347	<0>	347	286	

Licensed use averaged 493 AUMs total use for seven years in which there was licensed use.

4. Wild Horse Actual Use

As stated on page three of this evaluation, the wild horse specialist and other resource specialists from the Ely Field Office have documented very little wild horse use of the Goshute Basin Allotment. An occasional wild horse or two may drift onto the allotment for short periods of

time during summer, coming from the Cherry Creek North Herd in Elko County.

Censused wild horse numbers for both the Goshute Basin Allotment and the Cherry Creek Herd Management Area (Ely District) are shown in Table 4. Only adult wild horses were counted during each census. No foals were observed. Census flights were flown in February, May, June, July, August, and September.

 Table 4. - Wild Horse Census Data, Goshute Basin Allotment

		Number of Wild Horses		
<u>Date</u>	Source	Goshute Basin	Entire HMA	
1985	Aerial census	0.		
1987	Ground count*	0	16	
1989	Aerial census	0	3	
1991	Aerial census		0	
1992	Aerial census	0	0	
1993	Aerial census	0	0	
1994	Aerial census		0	

* The post - gather census summary indicated that the 16 wild horses located in the HMA were probably pushed into the Ely District by gather operations in Elko County.

5. Wildlife Existing Use

Following is the current wildlife use on the allotment as estimated by the BLM area wildlife biologist in conjunction with the Nevada Division of Wildlife (NDOW).

Sage Grouse and Blue Grouse

The Goshute Basin allotment has provided nesting\brooding habitat for sage and blue grouse over the years of the evaluation and historically. Numbers of birds, particulary sage grouse, have declined in recent years due to an overall decline in the numbers of sage grouse that breed on valley leks and then fly to the basin to nest and brood. No sage grouse breeding complexes (leks) have been found on the allotment. Nesting and brooding habitat conditions have declined somewhat due to excessive use of riparian habitats and upland dry meadows.

Mule deer

Between 30-40 resident mule deer utilize habitats on the allotment from April 1 through November 30, approximately 70 AUMs of use. The Goshute Basin Allotment can be important to numbers of deer that migrate in the fall from the northern portion of the Cherry Creek Mountain Range.

Rocky Mountain Elk

In July of 1995, five elk were observed at Dry Canyon Spring on the Indian Creek Allotment. There have been periodic sightings of elk on the Goshute Basin Allotment since the mid 1980's. Elk scat and tracks were observed in the summer of 1995 on the north end of the allotment. No other observations of elk have been documented. The allotment has no management objectives for elk.

The Wells Resources Area of the Elko BLM Field Office completed an elk amendment to their land use plan in 1996 which identified the north end of the Cherry Creek Mountain Range as a high elk potential area. Elk will be released in the Elko portion of the Cherry Creek Mountains once the allotment evaluations are complete for this area. Elk are expected to pioneer into the Ely District portion of the Cherry Creeks and occupy habitats on both summer range and winter range. Elk are expected to use the Goshute Basin Allotment and other allotments. A total of 148 elk were released on Spruce Mountain in 1996. Spruce Mountain is approximately 20 miles north of the White Pine County line.

The Cherry Creek Range is located within Nevada Division of Wildlife (NDOW) hunt unit 121. The current elk population estimate is 20 elk. The Draft White Pine Elk Management Plan has proposed an elk population objective of 550 elk for this unit. NDOW considers the Cherry Creek Range a high priority area for elk augmentations.

6. Summary of Wildlife Studies

To determine wildlife habitat condition ratings for mule deer, pronghorns and Rocky Mountain Elk the following methods are utilized. The methods include frequency of occurrence, vertical cover, total plant cover/percent plant composition (by cover), biomass or production and browse age and form class. For more detailed information refer to BLM Manual 6630, Big Game Studies.

Two wildlife studies have been established on the allotment (Map F). These studies include frequency, cover, phenology, density and utilization. The results of the studies are as follows:

GB#1 T.25N., R.63E., Sec. 08 SWNE

This permanent frequency study was established in 1979. The study location chosen is an area that domestic livestock and wildlife both utilize. The study was established to monitor mule deer summer habitat condition. When initially established, the study rated as fair habitat condition for mule deer. The study was reread in 1986 and rated in a fair condition. In 1990 and 1994 the study rated in good habitat condition for mule deer. The last reading in 1994, demonstrated a significant increase at a .95 CI (confidence interval) utilizing the Bureau's Wildive computer program of western wheatgrass, bluebunch wheatgrass, and a perennial forb, eriogonum.

This permanent study will be utilized to determine habitat condition for elk once they are augmented into this portion of the Cherry Creek Mountain Range.

GB#2 T.25N., R.63E., Sec. 04 NESW

This permanent frequency study was established in 1985. The study location was placed in an area that both domestic livestock and wildlife utilize. The study was established to monitor mule deer summer habitat condition. When initially established, the study rated in fair condition for mule deer summer habitat. The study was reread in 1990 and 1994 and rated in a good habitat condition for mule deer. The last reading in 1994 demonstrated a static trend with a slight loss of forbs possibly due to the dry conditions that this area of Nevada was experiencing at the time of the reading.

This permanent study will also be utilized to determine habitat condition for elk once they are augmented into this portion of the Cherry Creek Mountain Range.

7. Precipitation Data

Data from the National Oceanic and Atmospheric Administration recording station at Ely, Nevada, is being used for this evaluation. This data is reported to and summarized by the Office of the State Climatologist, University of Nevada, Reno. Precipitation data will be used to calculate a yield index for each year (Sneva et al. 1983). The yield index will be used to adjust the utilization levels for above or below normal precipitation (compared to the long term average). In calculating the yield index, the first step is to calculate the crop yield (effective precipitation). For the Intermountain Big Sagebrush Region this includes precipitation from September through June. The crop yield is then divided by the normal crop yield (average of 30 total years of data at the Ely Station) to determine the precipitation index for each year. The yield index is then calculated using the linear regression equation Y = -23 + 1.23X, where Y is the yield index and X is the precipitation index. Table 5 shows the yield indices for the Ely Station for the years 1993 through 1998.

Table 5. - Yield Indices, Ely Station

Year	Yield Index
1993	1.15
1994	0.84
1995	1.60
1996	0.58
1997	0.89
1998	1.21

8. Utilization data

a. Key Area Utilization

Key forage plant method utilization transects were conducted in the allotment in October of 1993, October of 1995, September of 1996, August of 1997, and September of 1998. Utilization transects were conducted in the middle third of the allotment, which is the primary grazing area, characterized by the mildest slopes and provides the best access for cattle and sheep grazing. Utilization transects were conducted at the key area locations and at other locations throughout the middle third of the allotment. Transects were conducted at both upland sites and at riparian spring/seep areas. Utilization was measured for key perennial grasses and grass-like species, black sagebrush, and snowberry.

Results of the key forage plant method (KFPM) utilization transects completed in the allotment are indicated in Table 6. A complete analysis is presented in Appendix IX.

In 1993, the use level is based on an average of four KFPM transects read for bluebunch wheatgrass/needlegrass in the primary grazing area of the allotment. Use of bluebunch wheatgrass was recorded at 66% on one transect.

In 1995, the use level is based on an average of three KFPM transects read for bluebunch wheatgrass in the primary grazing area of the allotment. Use of bluebunch wheatgrass was recorded at 70% on one transect. Use of combined riparian species was recorded at 79% on one transect.

In 1996, the use level is based on an average of four KFPM transects read for bluebunch wheatgrass in the primary grazing area of the allotment.

In 1997, the use level is based on an average of two KFPM transects read for bluebunch wheatgrass in the primary grazing area of the allotment. Use of combined grsses was recorded at 64% on one transect.

In 1998, the use level is based on an average of two KFPM transects read for bluebuch wheatgrass in the primary grazing area of the allotment. Use of combined grasses was recorded at 60% on one transect.

Table 6. - Key Forage Plant Method Transects, Goshute Basin Allotment

Year	Use Leve
1993	59%
1995	58%
1996	33%
1997	49%
1998	42%

The following range notes were made on utilization forms for the years 1995 - 1998:

In 1995, use of combined riparian species (bluegrass, sedge, barley) was 63% at the riparian complex (2 springs) located about 2.6 miles past the first utilization cage in the allotment. Trampling of the area was documented. Four photographs were taken.

Use of riparian vegetation was 79% at a riparian complex on the south side of the track in the northeast portion of the allotment. Much bare soil and erosion were indicated. Lots of trampling of the spring areas was documented. An abundance of sheep sign was present. Sheep had been eating wyethia. Four photographs were taken.

On the north side of the track, use was 57% of riparian vegetation at another riparian complex. Trampling was documented and both sheep and cow sign were present. Again, four photographs were taken.

In 1996, the 33% use level resulted from unauthorized drift cattle use. No licensed use occurred in the allotment in 1996.

In 1997, an abundance of stinging nettle and cone flower was documented around Big Camp-Exclosure.

In 1998, sheep use was documented on sedge in a main spring area on the northeast side of the allotment. Use of sedge was 50% in the main spring area. At two spring sources southeast of the track, areas of wyethia with nothing else growing were present. Substantial erosion was evident. Cheatgrass was present. An abundance of bare soil was documented and the area was in a downward trend. Two photographs were taken. An abundance of wyethia was again present at a study site 1.0 miles south of key area GB-02. It was growing without other species present. On the north side of Big Camp exclosure, heavy use of riparian species was documented. A salt tire had been placed 20 feet from the exclosure in the middle of the riparian area.

b. Utilization Pattern Mapping

Use patterns were mapped for the allotment in October of 1993 and October of 1995. Use patterns were mapped for summer use by cattle and summer/fall use by sheep. Results by use class, acres, and percent of total acres mapped are listed by year in Table 7.

 Table 7. - Use Pattern Mapping Summary - Acres and (Percent of Mapped Acres) by Use

 Class for the Goshute Basin Allotment.

	Slight	Light	Moderate	Heavy	Severe	Not
Year	(0 - 20%)	(21 - 40%)	(41 - 60%)	(61 - 80%)	(81 - 100%)	Mapped
1993	3286(66%)	223(05%)	1308(26%)	150(03%)	<0>	<0>
1995	3564(70%)	447(09%)	943(18%)	160(03%)	<0>	<0>

The heavy use in 1993 occurred near key area GB-01 in the southwest of the allotment, near key area GB-02 in the northeast of the allotment, and in the middle of the allotment near riparian enclosures. The heavy use in 1995 occurred near key area GB-02 in the northeast of the allotment.

c. Trip log observations

The following observations were reported by the Ely Field Office Wildlife Biologist for those areas in or immediately around the riparian area enclosures that were constructed in the allotment in 1989.

October 20, 1983 - Heavy sheep and cattle use near burn in center (headwaters of Goshute Creek). Elderberry grazed up to five feet high by cattle.

September 18, 1990 - Heavy use by sheep surrounding enclosure #1 (Big Camp, or Big Springs), heavy sheep use inside and outside enclosure #3 (Roadside Spring), and heavy sheep use outside of enclosure #4 (Little Camp Spring).

October 21, 1992 - Heavy use by sheep surrounding enclosure #1, heavy use by sheep and cattle outside of enclosure #3, and heavy sheep use and some cattle use outside enclosure #4. Very heavy sheep and cattle use was observed on the north side of the basin on meadow areas. One spring to the west of the road was heavily trampled, with grass grazed to the ground. Heavy use of bitterbrush was noted on the north side of the drift fence in the Indian Creek Allotment.

July 8, 1997 - Moderate to heavy use of annuals and aspen by sheep in lower portion (pond side) of Big Camp exclosure (fence in disrepair at the time). Trampling along streambanks. At least 5-6 aspen saplings tall enough to withstand grazing. Moderate use by sheep inside first lower exclosure (fence down on west side). Little or no use by sheep inside second lower exclosure, due to area being wet. Moderate utilization on grass and forbs by sheep at a spring to the southwest of Big Camp Spring. In the north portion of the allotment, in meadows to the west and east of the track, use by sheep was light to moderate with some trampling; conditions were improved compared to cattle only use in 1996, at least to date.

9. Observed Apparent Trend

Observed apparent trend (OAT) studies were conducted at key areas GB-01 and GB-03 in September of 1998 and at GB-02 in October of 1995, September of 1996, and September of 1998. The results of the studies are indicated in Table 8.

Table 8. Observed Apparent Trend Studies - Goshute Basin Allotment

Date	Key Area	Indicated Trend
10/1995	GB-02	Static (not apparent)
09/1996	GB-02	Static (not apparent)
09/1998	GB-01	Static (not apparent)
09/1998	GB-02	Static (not apparent)
09/1998	GB-03	Upward

Range notes from the 1996 study at key area GB-02 indicated a fairly stable soil, the presence of mule's ear wyethia, lupine, and green rabbitbrush, and a fairly productive perennial bunchgrass component.

Range notes from the 1998 observed apparent studies indicated the following:

GB-01 - Rated at high end of static trend. Minimal cheatgrass present, < 1% of plant community. Nearby bare soil present at head of small gully. Broom snakeweed fairly common in area. Very stable, gravelly soil. No compaction or trampling of soil. No plant pedestalling. Would be in upward trend without gully problem.

GB-02 - Wyethia is very common throughout gullies in the area.

GB-03 - Rated at low end of upward trend. Few invasive species are present. Mountain big sagebrush is very productive and shades out some perennial grasses. There is a good diversity of perennial grasses present.

10. Ecological Status

Ecological status estimates the stage of succession at a given range site, by measuring plant species composition, production, and other factors and comparing it to the composition of the Potential Natural Community (PNC) or climax for that site. This is estimated as a percentage of PNC; Classifications include Early Seral, or poor, (0 - 25%); Mid Seral, or fair, (26 - 50%); Late Seral, or good, (51 - 75%); And Potential Natural Community (PNC), or excellent, (76 - 100%).

Ecological status has been determined for the three key grazing areas of the allotment during September of 1998. The results are presented in Table 9.

Table 9. Ecological Condition Status for Native Key Areas, Goshute Basin Allotment.

Key <u>Area</u>	Allotment Area	Range Site	Veg Type	Ecological <u>Status</u>
GB-01 Trend n	Southwest ot apparent	028BY037NV	Arar8/Agsp	Late Seral (good)
GB-02 Trend n	Northeast ot apparent	028BY037NV	Arar8/Agsp	Mid Seral (fair)
GB-03 Trend n	Lower middle ot apparent	028BY029NV	Arva/Brca5	Late Seral (good)

11. Cover Studies

Two types of cover studies have been completed in the Goshute Basin Allotment, as follows:

1. Ground cover studies.

2. Canopy/Basal cover studies.

The results of the ground cover studies completed in the Goshute Basin Allotment are presented in Table 10 as follows:

Table 10. Ground Cover, Goshute Basin Allotment

Study Area	Ground Cover	
Key area GB-01	Vegetation	43.5%
	Bare Ground	22.5%
	Litter	24.5%
	Rock	09.5%
Key area GB-02	Vegetation	47.0%
	Bare Ground	17.0%
	Litter	22.5%
	Rock	13.5%
Key area GB-03	Vegetation	62.5%
	Bare Ground	04.5%
	Litter	32.5%
	Rock	00.5%

The results of the Canopy/Basal cover studies completed in the Goshute Basin Allotment are as follows:

Key Area GB-01

Total cover of all vegetation = 31.28 feet (of 100 feet). Vegetation composition by percent along the 100 foot transect is as follows: (T = trace).

<u>Species</u> <u>Percer</u>	t Composition	
Bluebunch wheatgrass	06%	
Bluegrass	06%	
Needlegrass	03%	
Low sagebrush	81%	
Unidentified forb	03%	the second s
Elderberry	T	Narowan Shine Shine And Adv. Shine Shine And Adv.

The following range notes were made on the line intercept form:

Cheatgrass was not counted (single stemmed species). Cheatgrass was present but not common. Muttongrass together with one other bluegrass were counted together as bluegrass. Present in the area but not found in the transect were ricegrass, ryegrass, big sagebrush, snowberry, mahogany, and fir. There is no problem with compaction or trampling. No pedestalling of plants. Soils stable with good litter present. Soil very gravelly. cryptogams not present.

Key Area GB-02

Total cover of all vegetation = 30.30 feet (of 100 feet). Vegetation composition by percent along the 100 foot transect is as follows: (T = trace).

Species	Percent Co	mposition
Bluebunch wh	eatgrass	Т
Bluegrass	1 C 1	07%
Squirreltail		Т
Black sagebru	sh	86%
Lupine		07%
Phlox		Т
Gilia		Т

The following range notes were made on the line intercept form:

A basal measurement of cured lupine was taken. No trampling or compaction problems. Very stable, rocky soil. No erosion. Soil damp from late summer rain. Sheep eating cured lupine. No cryptogams present. Present but not encountered in the transect was buckwheat.

Key Area GB-03

Total cover of all vegetation = 43.96 feet (of 100 feet). Vegetation composition by percent along the 100 foot transect is as follows: (T = trace).

Species	Percent Composition		
Bluegrass			11%
Ryegrass			02%
Big sagebrush			68%
Snowberry			18%
Wild rose			Т

The following range notes were made on the line intercept form:

Perennial grass growing beneath sagebrush is typically tall & slender - typically 2 to 5 stemmed plants that form semi-continous mat beneath sagebrush. Some measurements are estimates of several slender stalked plants taken together. Bluegrass is abundant in the understory. Sagebrush is very productive - tall & thick. Present but not encountered in the transect were ricegrass, bluebunch wheatgrass, basin wild rye, needlegrass, rubber rabbitbrush, chokecherry, and desert peach. An abundance of litter is present. Compaction or trampling no problem. The nearby small channel is in good vegetative condition. No cryptogams are present. A 1/2 acre area with a good ricegrass component has been used slight or less by sheep.

12. Riparian Data

Several Proper Functioning Condition Studies were accomplished for riparian areas in the Goshute Basin Allotment in August of 1995. The results of the studies by riparian area are as follows:

Date of survey	- 8/2/1995
Location of survey	- T. 25N., R. 63E., Section 8, NE 1/4 NE 1/4
Site designation	 681R (Unnamed spring of 1/8 acre in southwest portion of the allotment)
Final riparian rating	- Functional at risk with trend not apparent (lentic area)
Survey remarks	- Water flow estimated at 1-2 gpm. Detrimental effects of livestock usage will worsen as cattle and sheep impact the soil and vegetation.

A Nevada Water Resources Inventory Report was done for this spring in August of 1981. The report measured the flow of water at the spring source as 2.0 gpm. Remarks taken from the report indicated improvement was needed, sheep were ruining the source area, and the source needed to be fenced.

Date of survey Location of survey Site designation

Final riparian rating Survey remarks

- 8/2/1995
- T. 25N., R. 63E., Section 4, SW 1/4 NW 1/4
- 677 (Unnamed spring of 1/6 acre in the central portion of the allotment)
- Proper functioning condition (lentic area)
- Water flow estimated at 1-2 gpm. This is an enclosed spring with the enclosure in good condition and diverse vegetation growing inside the enclosure.

A Nevada Water Resources Inventory Report was also done for this spring area in August of 1981, before the protective exclosure was constructed. The report estimated the flow of water at the spring source at < 0.1 gpm. Remarks taken from the report indicated the source was badly trampled and degraded and needed protection.

Date of survey	- 8/1/1995
Location of Survey	- T. 25N., R. 63E., Section 4, NW 1/4
Site designation	- 675 & 676 (Middle Goshute Creek - lotic stream)
Final riparian rating	- Functional at risk with trend not apparent
Survey remarks	- Water flow estimated at 20 or greater gpm.
Date of survey	- 8/2/1995
Location of survey	- T. 25N., R. 63E., Section 4, NW 1/4 NW 1/4
Site designation	 - 675 (Unnamed spring of 1/8 acre in the central portion of the allotment)
Final riparian rating	- Proper functioning condition
Survey remarks	- Water flow estimated at 5 or greater gpm. This is an enclosed spring still subject to erosion during high runoff events.

The Nevada Water Resources Inventory Report done for this spring in August of 1981 estimated the flow of water at < 1 gpm.

Date of survey	- 8/2/1995	
Location of survey	- T. 25N., R. 63E., Section 4, SW 1/4 NW 1/4	
Site designation	 676 (Unnamed spring of 1/8 acre in the central portion of the allotment) 	
Final riparian rating	- Proper functioning condition	
Survey remarks	- Water flow estimated at 15 or greater gpm. This is an enclosed spring, still subject to erosion where the spring riparian vegetation borders the middle Goshute fork.	

The Nevada Water Resources Inventory Report done for this spring in August of 1981 estimated the flow of water at 4 gpm.

Date of survey	- 8/2/1995
Location of survey	- T. 25N., R. 63E., Section 4, NE 1/4 NW 1/4
Site designation	- 684 (Unnamed spring of 1/4 acre in the central portion of the allotment)
Final riparian rating	- Proper functioning condition
Survey remarks	- Water flow estimated at 1-2 gpm. This is an enclosed spring with the enclosure in good shape. Past hoof action was noted in the enclosure.

The Nevada Water Resources Inventory Report done for this spring in August of 1981 measured the flow of water at 0.03 gpm. Remarks taken from the report indicated the source was heavily grazed, badly degraded by trampling, and needed improvement by fencing.

- Date of survey Location of survey Site designation Final riparian rating Survey remarks
- 8/1/1995
- T. 26N., R. 63E., Section 34, NW 1/4 SW 1/4
- 691 & 693 (Headwaters of Goshute Creek lotic stream)
- Functional at risk with an upward trend
- Water flow estimated at 5 or greater gpm. In the higher reaches of the survey area vegetative cover capable of protecting banks and dissipating energy during high flows varied along the stream length. Possibility exists for a "blow out." A headcut was present in the lower reaches of the stream.

The Nevada Water Resources Inventory Report done for the spring associated with the stream above in August of 1981 measured the flow of water at less than 1 gpm. Remarks taken from the report indicate the area was trampled.

Date of survey Location of survey Site designation	 8/1/1995 T. 26N., R. 63E., Section 34, NE 1/4 SW 1/4 692 (unnamed spring area of 2 acres in the central portion of the allotment)
Final riparian rating Survey remarks	 Proper functioning condition Water flow estimated at 1-2 gpm. The area was in very good condition with varied riparian species present. Some hoof action and hummocking were noted.

The Nevada Water Resources Inventory Report done for this spring area in August of 1981 measured the flow of water at < 1 gpm. Remarks taken from the report indicated some trampling was noted.

Date of survey	- 8/1/1995
Location of survey	- T. 26N., R. 63 E., Section 35, SW 1/4 NW 1/4
Site designation	 694 (Unnamed spring in the north central portion of the allotment)
Final riparian rating	- Functional at risk with a downward trend
Survey remarks	 Water flow estimated at < 1 gpm (no visible flow). Considerable trampling was apparent all the way down the wash to the larger channel.

The Nevada Water Resources Inventory Report done for this spring area in August of 1981 measured the flow of water at 1.0 gpm. Remarks taken from the report indicated the area was trampled; however, no improvement was needed.

Date of survey Location of survey Site designation Final riparian determination Survey remarks

- 8/1/1995
- T. 26N., R. 63E., Section 35, NW 1/4 NE 1/4
- 695 (Unnamed spring in the north portion of the allotment)
- Final riparian determination Functional at risk with a downward trend (very steep)
 - Water flow estimated at 3 gpm. Severe trampling was noted throughout the meadow to the point of uprooting and harming vegetation.

The Nevada Water Resources Inventory Report done for this area in August of 1981 measured water flow at 0.63 gpm. Remarks taken from the inventory report indicated the source was degraded, heavily trampled, and grazed.

Date of survey Location of survey Site designation Final riparian rating Survey remarks

- 8/1/1995
- T. 26N., R.63E., Section 35, NW 1/4 NW 1/4
- 696 (Unnamed spring in the north portion of the allotment)
- Nonfunctional with a downward trend
- Water flow estimated at > than 1 gpm. Heavy early season grazing and considerable trampling have contributed to sloughed banks, compacted soils, and shrinking meadows. Two more identical spring areas were noted up the wash to the north.

The Nevada Water Resources Inventory Report done for this area in August of 1981 estimated the water flow at < 0.1 gpm. Remarks taken from the report indicated a small wet spring, badly trampled.

Date of survey Location of survey Site designation Final riparian rating Survey remarks

- 8/1/1995
- T. 26N., R. 63E., Section 35, NW 1/4 NW 1/4
- 697 (Unnamed spring in the north portion of the allotment)
- Functional at risk with a downward trend
- Water flow estimated as standing water only. Moderately heavy grazing has contributed to potential washout of upper meadow and degradation of lower spring vegetation.

The Nevada Water Resources Inventory Report done for this area in August of 1981 estimated the water flow at < 0.1 gpm. Remarks taken from the report indicated no flow at the source which was badly trampled. An exclosure was needed.

C. Other Information Pertinent to the Evaluation

1. Goshute Task Force

The Goshute Task Force was formed in January 1982 to make recommendations concerning multiple use management of the Goshute Creek/Watershed. The task force consisted of several Ely Field Office resource specialists. Several meetings were held to discuss resource issues/conflicts and a field tour of the area was made in August of 1982, with Nevada State Office resource specialists in attendance. In coordination with the State Office, the Goshute Task Force made ten recommendations to the Egan Resource Area Manager for better management of the Goshute Basin Allotment (upper watershed) in September 1982. The area manager concurred with seven of the ten recommendations. The seven recommendations are listed in Appendix X.

2. Habitat Management Plan

A Habitat Management Plan (HMP) was written for the Goshute Creek Wildlife Habitat Area (WHA) in 1968, revised in 1971, and again revised in 1980. The 1971 revision was prepared by the Ely Field Office BLM Natural Resource Specialist with assistance from and in cooperation with the Nevada Department of Fish & Game (NDFG). The Regional Supervisor for NDFG signed that document. The 1980 revision was prepared by Ely Field Office BLM Wildlife Biologists, again with assistance and in cooperation with the Nevada Division of Wildlife (NDOW). An original copy of the HMP was mailed to NDOW and never returned. It was accepted by resource specialists in the Ely Field Office that the NDOW Regional Supervisor concurred in the document.

The Goshute Creek Wildlife Habitat Area covers approximately 7,600 acres of public land comprised of Goshute Creek, Goshute Creek Canyon, and the associated watershed. The entire Goshute Basin Allotment of approximately 5,000 public land acres is within the "upper watershed" of the Goshute Basin Wildlife Habitat Area. Goshute Creek originates from several small springs located in the Goshute Basin Allotment.

The main purpose of the most recent 1980 revision of the HMP was to update management objectives in relation to wildlife habitat needs, particularly to improve and maintain quality habitat to support a healthy population of a unique species of trout found in Goshute Creek, the Bonneville cutthroat trout (Salmo clarki utah).

The multiple use objectives from the 1980 revision of the HMP that are pertinent to the Goshute Basin Allotment are listed on page 10 of this evaluation. The HMP included additional information on livestock management in the WHA. That section is listed in Appendix X of this evaluation.

3. Other Studies

Numerous other field tours and resource studies have been accomplished for the Goshute Basin Watershed, Goshute Creek, the Goshute Basin Habitat Management Area, or the Goshute area in general over the past twenty years. The files containing these resource tours and evaluations are available for public review in the Ely Field Office. A large file of photographic evidence also exists and is available for public review. Agencies and individuals that have been involved in the tours and studies for this high profile area include the Ely District Bureau of Land Management, the Nevada State Office Bureau of Land Management, The Nevada Division of Wildlife, the American Fisheries Society, the U.S. Forest Service, and livestock operators from the local area. When the Egan Resource Area Resource Management Plan was being developed for the resource area in 1983, the following groups or persons identified the Goshute area as having critical resource management problems:

American Fisheries Society - Bonneville Chapter White Pine County Game Board The Wildlife Society - Nevada Chapter Desert Fisheries Council Dr. Robert Benke - Colorado State University Nevada Division of State Parks The Nevada Division of Wildlife

A list of field tours and/or resource studies accomplished for the Goshute area is included in Appendix X. These particular studies are included in the appendix because of the more direct bearing they have on the management of the Goshute Basin Allotment.

V. CONCLUSIONS

Standards for Grazing Administration

The following is a summary of the analysis of monitoring data which evaluates the management practices in place during the evaluation period to determine if management practices are in conformance with the Northeastern Great Basin Standards.

Goshute Basin Allotment Monitoring Data:

Key forage plant method utilization transects, utilization pattern mapping, ecological condition, cover studies, observed apparent trend, and various trip log reports were used to determine attainment of standards in the uplands. Proper functioning condition studies, utilization studies, and trip log reports were used to determine attainment of standards for spring, seep, and riparian areas.

Standard 1. Upland Sites:

"Upland soils exhibit infiltration and permeability rates that are appropriate to soil type, climate, and land form."

Findings - Key area soil factors as presented in range site descriptions:

The soils in the Goshute Basin Allotment are derived from either limestone or quartzite parent material. The erosion susceptibility for these soils varies from moderate to severe. Those soils with slopes greater than 25% and all those derived from quartzite are in a severe class. Those soils with slopes less than 25% that are derived from limestone are in a moderate class.

The soils of key areas GB-01 and GB-02 are moderately deep and well drained. Subsoils generally interfere with deep root development. These soils normally have a high percentage of gravels, cobbles, rocks or stones on the surface which occupy plant growing space, yet help to conserve soil moisture. Infiltration of water is restricted once these soils are wetted. Pedestalling of grass plants is common during the winter due to frost heaving. Loss of the surface layer results in decreased productivity of the site.

The soils of key area GB-03 are moderately deep to deep and are well drained. The available water holding capacity is moderate to high. The surface layer is medium textured. Snowmelt is added to the soil moisture supply. Runoff from this site is slow and the potential for sheet and rill erosion is low to moderate depending on slope.

Findings - Current resource conditions related to upland sites standard:

Key areas of the allotment and other areas that have been monitored within the primary grazing area have shown limited production of key forage species during some of the evaluation years. These areas have been heavily utilized by livestock, particularly cattle, in 1993 and 1995. Utilization has exceeded Nevada Rangeland Monitoring Handbook (NRMH) levels. Heavy livestock use was also reported in 1976, 1990, 1992, and 1997 for those grazing areas near the headwaters of Goshute Creek. Heavy utilization has resulted in reduced live vegetation, canopy cover, ground cover, and litter that is not appropriate to the potential of the site.

Rangeland monitoring studies accomplished in September of 1998 indicate that the amount of vegetative canopy and ground cover is appropriate for the site at three upland key areas of the allotment. Two key areas have been rated in late seral (good) ecological condition with trend not apparent. One key area has been rated in mid seral (fair) ecological condition with trend not apparent. The observed apparent trend studies of 1995, 1996, and 1998 indicate generally static trend. Trampling and compaction of soils are not a problem at any of the three key areas. Microphytes (lichens and mosses) were not present at any key area. The three key areas are on slopes from 5 - 15%. Most of the allotment is characterized by steeper slopes, with a greater erosion and runoff hazard.

Mule's ear wyethia has invaded several grazing areas of the allotment. Other undesirable plant species that have invaded native uplands or riparian areas include rudbeckia, nettle, and lupine. The root systems of the invasive annuals do not contribute to soil stability as well as perennial native species. Bare ground and gullies have been photographed and identified as problems in the north portion of the allotment. The watershed condition is not being maintained in consideration of plant phenology, physiology, terrain, water availability, wildlife needs, grazing systems, and aesthetic values.

Conclusion: Standard not achieved. Existing grazing management and levels of grazing use within the Goshute Basin Allotment are significant factors in failing to achieve this objective. Refer to the Technical Recommendation section of the evaluation for those proposed actions or practices to be applied to ensure significant progress toward fulfillment of the standards and toward conformance with the guidelines.

Standard 2. Riparian and Wetland Sites:

"Riparian and wetland areas exhibit a properly functioning condition and achieve water quality criteria."

Findings:

Several riparian areas in the allotment have been rated as functioning at risk with trend not apparent or a downward trend. One riparian area has been rated as non-functional. Riparian areas have been used heavily during the evaluation years. Utilization limits established to maintain watershed cover have been exceeded. Trampling of springs has been documented. Bare soil is present in and around spring/seep areas. Adequate vegetation has not been present to facilitate water retention, filtering, and release, and to dissipate stream energy during high water flows. Riparian grazing areas next to fenced exclosures have been used heavily in 1983, 1990, 1992, and 1993. Proper functioning condition survey remarks for some of the spring/seep areas in the allotment indicate severe trampling, sloughed banks, compacted soils, shrinking meadows, potential blowouts, degraded vegetation, headcuts, and erosion hazards. Nevada Water Resource Inventory Reports indicate a history of heavy grazing impacts to riparian areas.

Conclusion: Standard not achieved. Existing grazing management and levels of grazing use within the Goshute Basin Allotment are significant factors in failing to achieve this objective. Refer to the technical Recommendation section of the evaluation for those proposed actions or practices to be applied to ensure significant progress toward fulfillment of the standards and toward conformance with the guidelines.

Standard 3. Habitat:

"Habitats exhibit a healthy, productive, and diverse population of native and/or desirable plant species, appropriate to the site characteristics, to provide suitable feed, water, cover and living

space for animal species and maintain ecological processes. Habitat conditions meet the life cycle requirements of threatened and endangered species."

Findings:

The presence of widespread invasive species, the presence of areas of bare soil, and heavy utilization all indicate that vegetation cover, composition, and production (particularly in riparian areas) are not appropriate for this allotment. Suitable feed is not being provided for animal species, because of lack of production and heavy utilization, particularly at riparian areas. Riparian areas are generally not in proper functioning condition. These conditions indicate that watershed condition in Goshute Basin Allotment is in less than good condition for protection of the Nevada BLM sensitive Bonneville cutthroat trout in Goshute Creek.

Ecological condition studies completed at three key areas of the allotment in 1998 indicate the areas are in late seral (good) or mid seral (fair) ecological condition with generally good diversity and vigor of native species. Production at all three key areas was less than normal for a favorable year. Production at key area GB-01 was 81% of normal, at key area GB-02 was 49% of normal, and at key area GB-03 was 60% of normal. Rangeland trend is not apparent at all three key areas.

Conclusion: Standard not achieved. Existing grazing management and levels of grazing use within the Goshute Basin Allotment are significant factors in failing to achieve this objective. Refer to the Technical Recommendation section of the evaluation for those proposed actions or practices to be applied to ensure significant progress toward fulfillment of the standards and toward conformance with the guidelines.

Standard 4. Cultural Resources:

A cultural resources report will be completed to address any potential impacts to cultural resources from grazing during the term permit renewal process.

Allotment Specific Objectives

Allotment Specific Objectives are referred to by number from III. C., and Appendix V.

1. Livestock Short/Long Term Objective

Objective Not Met

Rationale: Utilization data for both the upland range and riparian areas in the Goshute Basin Allotment indicates changes in management practices are needed to bring utilization within allowable levels and maintain or improve the desired vegetation community and habitat conditions throughout the allotment. Livestock distribution has not been adequate. Heavy livestock use of riparian areas over the years is causing negative impacts to those areas. Utilization pattern mapping, key forage plant method transects, monitoring notes accompanying transects, and trip log observations all show heavy or severe use by livestock within the primary grazing area of the allotment. Livestock utilization has exceeded Nevada Rangeland Monitoring Handbook (NRMH) levels at key areas and within the primary grazing area of the allotment.

Ecological status data shows two key upland areas of the allotment are in late seral (good) ecological condition and one key upland area is in mid seral (fair) condition. Cover is appropriate for the site at these key areas. However, the findings for Standards No. 1 and 2 above document heavy utilization, erosion hazards, and a resource problem with invasive species both in the uplands and at riparian areas. The presence of widespread invasive species indicates that vegetation composition is not appropriate for this allotment. The above findings also document overgrazing and degradation of riparian areas.

2. Wild Horse Short/Long Term Objectives

Objective Not Applicable

Rationale:. There is no history of wild horses grazing the allotment, and they have never been censused in the allotment. A determination of "Met" or "Not Met" cannot be made for this objective. As stated on page 3, the 2 wild horses yearlong in the Cherry Creek HMA is no longer a valid Appropriate Management Level (AML). This evaluation will determine a new optimum number of wild horses which results in a thriving ecological balance and avoids deterioration of the range.

3. Mule Deer Short/Long Term Objectives

Objective Not Met

Rationale: All native mesic riparian species including grasses and grass-like species have been identified as key species for mule deer. The grasses and grass-like species in the spring/seep areas and subirrigated meadows of the allotment were consistently overutilized by livestock during the evaluation years leaving these areas in less than good habitat condition. As indicated by the Wildlife Long Term/Short Term Objectives Table (Appendix VI) the allotment uplands are currently in good habitat condition.

4. Riparian Short/Long Term Objectives

Objective Not Met

Rationale: Of twelve riparian areas monitored in 1995 for proper functioning condition, five areas were rated at proper functioning condition (PFC - four sources were within exclosures), two areas were rated as functioning at risk (FAR) with trend not apparent, one area was rated as FAR with an upward trend, three areas were FAR with a downward trend, and one area was
non-functional with a downward trend. The Riparian and Wetland Sites Standard has not been achieved. The allowable use levels on grasses and grass - like species at the lentic and lotic areas have been exceeded. The duration and intensity of grazing has resulted in negative impacts to the riparian areas.

VI. TECHNICAL RECOMMENDATIONS

A. Issues identified on the Goshute Basin Allotment

1. Standards for grazing administration are not being achieved. Allotment specific objectives are not being met. Habitat Management Plan (HMP) objectives for spring sources, riparian objectives, and livestock management are not being met.

2. Allowable use levels on key species have been exceeded by livestock on key upland areas of the allotment, at riparian areas (spring/seep areas) and next to enclosed springs (headwaters of Goshute Creek). Cattle have made negative impacts to the riparian areas.

3. Inadequate distribution has been a problem on the allotment. Cattle grazing has concentrated on the riparian areas during summer and sheep to a lesser degree have spent excess time near riparian areas. The sheep herders have placed salt too near the headwaters of Goshute Creek.

4. The presence of invasive plant species in the allotment, particularly mule's ear wyethia, and to a lesser degree rudbeckia (cone flower), nettle, and lupine, indicates that plant communities are not of an appropriate composition.

5. The allotment is the key watershed for Goshute Creek, home of the Bonneville cutthroat trout. Several springs in the allotment are the headwaters of the creek. The habitat requirements of the Bonneville cutthroat trout are not being provided for.

6. Seven out of twelve riparian areas are not meeting proper functioning condition. Riparian areas have been overutilized by livestock.

7. A formal rest and/or rotation system for sheep grazing has never been implemented on the allotment.

8. The final White Pine County Elk Management Plan lists Management Area 121 (including the Goshute Basin Allotment) as high priority for augmentation, allowing an increase from the current estimated 20 elk to 550 elk. Elk could also be introduced in the Cherry Creek Mountains on the Elko side near the allotment as a result of the Wells Elk Amendment.

9. Recommendations from the HMP of 1968 and 1980, Management Framework Plan (MFP) of 1979, and Goshute Task Force of 1982 have never been implemented.

10. Rangeland studies accomplished through the years have found poor watershed condition

resulting from steep slopes and lack of cover, leading to erosion or the potential for severe erosion.

11. Approximately one half of the allotment is within the Goshute Canyon Wilderness Study Area and almost the entire allotment is within the Goshute Canyon Natural Area/ISA.

12. The fence separating the Goshute Basin and Indian Creek Allotments has not been maintained and gates have been left open, allowing cattle to drift into the Goshute Basin Allotment. Cattle have also drifted into the allotment from Carry Canyon, in the Cherry Creek Allotment.

B. Short Term Recommendations

1. Terminate the cattle grazing permit on the allotment or establish a deferred or rotation system for cattle use in this allotment.

Option A - Terminate the cattle grazing permit outright and eliminate the 99 AUMs from the Indian Creek Ranch term grazing permit.

Option B - Maintain the 99 AUMs on the Indian Creek Ranch term grazing permit. Establish a rotation grazing schedule whereby cattle would be authorized to graze the allotment one year out of four years. The allotment would receive complete grazing rest the other three years. Indian Creek Ranch would thus take voluntary non-use for the three years of rest.

Option C - In addition to option B, Indian Creek Ranch could take voluntary non-use of some amount of the 99 AUMs the year that grazing is authorized on the allotment.

2. Maintain the current season of use for cattle grazing as 07/01 through 09/01, or change the season of use to 07/01 through 08/15.

Option A - Maintain the current season of use for cattle authorized use as 07/01 through 09/01.

Option B - Change the season of use to 07/01 through 08/15, in effect creating a six weeks grazing period which would allow for forage regrowth in August and September.

<u>Guideline:</u> These management actions are related to Guidelines 1.1, 2.1, 2.4, 3.1, and 3.2. These guidelines will be applied to achieve the standards for multiple use.

Rationale: All three main Standards for grazing administration are not being achieved. Three of four allotment specific objectives are not being met. One objective is no longer appropriate. Recent monitoring data as well as historical data and recommendations indicate a need to remove cattle use from the Goshute Basin Allotment. Allowable use levels on key species both on uplands and on riparian areas have been exceeded during the evaluation years, as indicated by key forage plant transects, use pattern mapping, trip log utilization, and rangeland notes taken from utilization forms. Plant species production is well below normal for each of the three key upland areas of the allotment. Cattle have concentrated on the spring/seep riparian areas and have made negative impacts, resulting in increased erosion and erosion potential and the replacement of more favorable forage species with wyethia, cone flower, nettle, and lupine. Of twelve riparian areas monitored for proper functioning condition in August of 1995, two areas were found to be functioning at risk (FAR) with trend not apparent, three areas were FAR with a downward trend, and one area was FAR with an upward trend. One riparian area was non-functional with a downward trend. Proper functioning condition survey remarks for some of the spring/seep areas in the allotment indicate severe trampling, sloughed banks, compacted soils, shrinking meadows, potential blowouts, degraded vegetation, headcuts, and erosion hazards. Nevada Water Resource Inventory Reports indicate a history of heavy grazing

impacts to riparian areas. The allotment has a history of erosion problems and the fragile watershed needs to be managed and protected in consideration of the habitat requirements of the Bonneville cutthroat trout.

The Goshute Task Force of 1982 (see page 23) set a goal of removing the 99 AUMs cattle use in the Goshute Basin Allotment. The original Habitat Management Plan (HMP) of 1968 (see page 24) and subsequent revisions written for the Goshute Creek Wildlife Habitat Area recommended removing cattle use from the Goshute Basin Allotment. The Management Framework Plan (see page 26) of 1979 recommended limiting grazing use in the Goshute Basin to sheep. Numerous other field tours and resource studies accomplished over the years (see page 27) also recommended eliminating cattle use from the basin.

3. Adjust the sheep livestock stocking level for the allotment from the existing 534 AUMs to 331 AUMs. Stocking level calculations are located in Appendix VIII. Maintain the existing season of use for sheep 7/16 to 10/05. Establish a rest rotation grazing system for sheep in the allotment.*

* This Technical Recommendation has already been implemented as a result of a grazing agreement between BLM and Wendy Paris which was signed on February 14, 2000. See Appendix XIII for a copy of the signed agreement.

<u>Guideline:</u> This management action is related to Guidelines 1.1, 2.1, 2.4, 3.1, 3.2, and 3.3. These guidelines will be applied to achieve the standards for multiple use.

<u>Rationale:</u> All three main Standards for grazing administration are not being achieved. Three of four allotment specific objectives are not being met. One objective is no longer appropriate. Utilization data for the upland range in the Goshute Basin Allotment indicates a reduction to the livestock permitted use is required to bring utilization within allowable levels. Allowable use levels on key species both on uplands and on riparian areas have been exceeded during the evaluation years, as indicated by key forage plant transects, use pattern mapping, trip log utilization, and rangeland notes taken from utilization forms. A need to provide rest for the plant communities of the allotment is identified throughout this evaluation. Decreasing livestock use to bring animals in balance with the carrying capacity of the allotment would benefit vegetative condition by increasing plant cover, promoting increased plant production and vigor, promoting plant species diversity, stimulating seedling establishment, increasing plant litter and organic matter, reducing the erosion hazard, and providing for a better age class distribution of plant species.

Flexibility in the season of use for sheep will be provided for to take into account annual fluctuations in climate.

4. Initiate a new cooperative agreement for maintenance of the Indian Creek Drift Fence so the fence can be maintained and cattle can be prevented from drifting into the Goshute Basin Allotment from the Indian Creek Allotment. Sheep can thus be prevented from drifting into the Indian Creek Allotment from the Goshute Basin Allotment.

Option A - Require the three grazing permittees (Paris, Herterlee, and Lear) to perform maintenance on the fence prior to turnout and establish satisfactory maintenance as a term and condition of each operator's permit and prerequisite for livestock turnout each grazing year.

Option B - Initiate a new cooperative agreement and require fence maintenance. Fence maintenance would not be a term and condition of the grazing permits and would not be a prerequisite for livestock turnout.

<u>Guideline:</u> This management action is related to Guidelines 1.1, 2.1, 2.4, 3.1, 3.2, and 3.3. These guidelines will be applied to achieve the standards for multiple use.

<u>Rationale:</u> Monitoring data indicates that the Indian Creek drift fence has commonly not been maintained and cattle drift into the Goshute Basin Allotment from the Indian Creek Allotment has been a trespass problem and has contributed to resource problems in the allotment. Gates left open have also contributed to cattle drift and resource problems. Sheep have also drifted into the Indian Creek Allotment from the Goshute Basin Allotment.

5. Establish a wild horse Appropriate Management Level for the Goshute Basin Allotment at zero (0) animals.

<u>Guideline:</u> This management action is related to Guidelines 1.1, 2.1, 3.2, and 3.3. These guidelines will be applied to achieve the standards for multiple use.

<u>Rationale:</u> Since interim management levels were established for wild horses in the Cherry Creek HMA in 1984, there have been only two censuses conducted in which any wild horses were observed in the HMA (1987 and 1989). All other censuses conducted since 1984 have resulted in zero wild horses observed over the entire HMA. No wild horses have ever been censused in the Goshute Basin Allotment and ground observations confirm no wild horse use within the allotment.

6. Require all salt for sheep to be placed at least 100 yards away from any water source. Sheep camps or bedding grounds would not be located near riparian areas, spring sources, or near the enclosed springs at the southern headwaters to Goshute Creek.*

* These terms and conditions have already been incorporated into the grazing agreement with Wendy Paris. See #2 above and Appendix XIII.

C. Long Term Recommendations

The following long term recommendations should be implemented. The recommended project will be initiated when time, funding, and manpower allows.

1. Repair the exclosures that were constructed in 1988 to protect spring areas that are key watershed habitat for the Bonneville cutthroat trout.

2. Construct a drift fence in Carry Canyon separating the Goshute Basin and Cherry Creek Allotments. This would prevent cattle from drifting into the Goshute Basin Allotment each summer from Carry Canyon.

3. Initiate land treatments in the allotment in order to stabilize eroded areas. The eroded areas are generally in the northeast of the allotment and are typically 10 acres or less. Mule's ear wyethia or bare soil are present. These areas should be seeded and mulched with weed free hay or other sterile organic matter to prevent further erosion. Only relatively mild slopes can realistically be treated. Mule's ear wyethia might be burned or otherwise treated in combination with the above treatment. Treatments must comply with wilderness study area criteria.

D. Additional Monitoring Data Required

Continue to conduct ecological condition, cover, and frequency trend studies as needed. Continue to conduct use pattern mapping, key forage plant method utilization transects, and observed apparent trend studies.

Conduct proper functioning condition assessment studies on riparian areas of the allotment as time, priorities, and manpower allow.

Continue to monitor livestock, wild horse, and wildlife actual use. Continue to conduct aerial census of the Cherry Creek HMA to document wild horse numbers, observations, and movements.

Establish new wildlife studies in summer range to monitor habitat for mule deer and elk.

APPENDIX I CHANGES IN AUTHORIZED GRAZING USE

The amount of grazing use authorized by the BLM is based on the amount of available forage as established in the land use plans, activity plans or decision by the Bureau of Land Management (BLM) and is expressed in animal unit months (AUMs). This is referred to as permitted use. Permitted use is specified in grazing permits or grazing leases. It includes all authorized use, including livestock use, and any suspended use. Active use or authorized grazing use made by a permittee annually may include a portion or all of permitted use. Active use may also vary by grazing year and could be less than the permitted use. Changes could include an increase or decrease in permitted use and/or modification to management practices.

The BLM periodically reviews the permitted use specified in a grazing permit or lease to determine if permitted use is in conformance with the land use plan. In Nevada, the evaluation process is the process used to determine if existing multiple uses for allotments including livestock grazing are meeting or making progress towards meeting land use plan objectives, Rangeland Program Summary objectives and land use plan decisions, in addition to the standards and guidelines for grazing administration. (Refer to Appendix II Allotment Objective Flow Chart). If changes are needed to permitted use or management practices they are made based on consistency with multiple use management objectives and the standards for grazing administration. The allotment evaluation presents the standards and land use plan objectives which are evaluated. The Technical Recommendations section of the allotment evaluation presents the land use plan objectives in addition to the standards for grazing administration. The guideline(s) that apply to each recommendation are also identified for each technical recommendation.

Changes to permitted use are implemented through a documented agreement or by decision. BLM consults with the affected permittee, and the interested publics prior to making changes to permitted use. (Refer to Appendix <u>III</u> Public Consultation Process).

Where permitted use is reduced it is no longer held in suspended use. Any reduction in permitted use is no longer reflected on the grazing permit or grazing billing. Suspended use will only be shown on grazing permits and decisions for the purpose of representing historical suspended use and active use which is temporarily withheld. Historical suspended use is the suspended use which was shown on term permits and grazing billings prior to August 21, 1995. Any changes made to permitted use where permitted use has been reduced will be based on meeting or making progress toward meeting land use plan objectives and the standards for grazing administration.

Monitoring information is used to determine if allotment specific objectives and standards are being met. Any changes in permitted use and/or the terms and conditions of the grazing permit are supported by monitoring, field observations, ecological site inventory or other data acceptable to the authorized officer. Monitoring is conducted in accordance with procedures and methodologies identified in BLM and Interagency Technical References and the Nevada Rangeland Monitoring Handbook.

ALLOTMENT OBJECTIVE FLOW CHART



43

APPENDIX

APPENDIX III

Public Consultation Process For Ely District Allotment Evaluations



4

APPENDIX IV

NORTHEASTERN GREAT BASIN AREA RESOURCE ADVISORY COUNCIL STANDARDS AND GUIDELINES

STANDARDS:

STANDARD 1. UPLAND SITES:

Upland soils exhibit infiltration and permeability rates that are appropriate to soil type, climate, and land form.

As indicated by:

> Indicators are canopy and ground cover, including litter, live vegetation and rock, appropriate to the potential of the site.

GUIDELINES:

1.1 Management practices will maintain or promote upland vegetation and other organisms and provide for infiltration and permeability rates, soil moisture storage, and soil stability appropriate to the ecological site within management units.

1.2 When grazing practices alone are not likely to restore areas of low infiltration or permeability, land management treatments should be designed and implemented where appropriate.

1.3 Management practices are adequate when significant progress is being made toward this standard.

STANDARD 2. RIPARIAN AND WETLAND SITES:

Riparian and wetland areas exhibit a properly functioning condition and achieve state water quality criteria.

As indicated by:

> Stream side riparian areas are functioning properly when adequate vegetation, large woody debris, or rock is present to dissipate stream energy associated with high water flows. Elements indicating properly functioning condition such as avoiding accelerating erosion, capturing sediment, and providing for groundwater recharge and release are determined by the following measurements as appropriate to the site characteristics:

Width/depth ratio; Channel roughness; Sinuosity of stream channel; Bank stability; Vegetative cover (amount, spacing, life form); and Other cover (large woody debris, rock).

> Natural springs, seeps, and marsh areas are functioning properly when adequate vegetation is present to facilitate water retention, filtering, and release as indicated by plant species and cover appropriate to the site characteristics.

> Chemical, physical, and biological water constituents are not exceeding the state water quality standards.

GUIDELINES:

2.1 Management practices will maintain or promote sufficient vegetation cover, large woody debris, or rock to achieve proper functioning condition in riparian and wetland areas. Supporting the processes of energy dissipation, sediment capture, groundwater recharge, and stream bank stability will thus promote stream channel morphology (e.g., width/depth ratio, channel roughness, and sinuosity) appropriate to climate, landform, gradient, and erosional history.

2.2 Where grazing management practices are not likely to restore riparian and wetland sites, land management treatments should be designed and implemented where appropriate to the site.

2.3 Management practices are adequate when significant progress is being made toward this standard.

2.4 Grazing management practices will maintain, restore or enhance water quality and ensure the attainment of water quality that meets or exceeds state standards.

STANDARD 3. HABITAT:

Habitats exhibit a healthy, productive, and diverse population of native and/or desirable plant species, appropriate to the site characteristics, to provide suitable feed, water, cover and living space for animal species and maintain ecological processes. Habitat conditions meet the life cycle requirements of threatened and endangered species.

As indicated by:

> Vegetation composition (relative abundance of species);

- > Vegetation structure (life forms, cover, height, or age class);
- > Vegetation distribution (patchiness, corridors);
- > Vegetation productivity; and Vegetation nutritional value.

GUIDELINES:

3.1 Management practices will promote the conservation, restoration and maintenance of habitat for threatened and endangered species, and other special status species as may be appropriate.

3.2 Intensity, frequency, season of use and distribution of grazing should provide for growth and reproduction of those plant species needed to reach long-term land use plan objectives. Measurements of ecological condition and trend/utilization will be in accordance with techniques identified in the **Nevada Rangeland Monitoring Handbook**.

3.3 Grazing management practices should be planned and implemented to allow for integrated use by domestic livestock, wildlife, and wild horses consistent with land use plan objectives.

3.4 Where grazing practices alone are not likely to achieve habitat objectives, land treatments may be designed and implemented as appropriate.

3.5 When native plant species adapted to the site are available in sufficient quantities, and it is economically and biologically feasible to establish or increase them to meet management objectives, they will be emphasized over non-native species.

3.6 Management practices are adequate when significant progress is being made toward this standard.

STANDARD 4. CULTURAL RESOURCES:

Land use plans will recognize cultural resources within the context of multiple use.

GUIDELINES:

4.1 Rangeland management plans will consider listings of known sites that are National Historic Register eligible or considered to be of cultural significance and new eligible sites as they become known.

Appendix V

Goshute Basin Allotment -	Long Term/Short Term Objectives	-	Livestock
---------------------------	---------------------------------	---	-----------

				PRESENT SI	TUATION	LONG TERM	OBJECTIVES*	*	SHORT TER	M OBJECTIV	Е	
Study No.	Key Area Location	Ecological Site No.	Key Species	Key Spp. % Comp. By Weight	Seral Stage (% of PNC)*	Maintain or Improve	Key Spp. % Comp. By Weight	Seral Stage (% of PNC)**	Allowable Use Level***	Season of Use	Met or Not Met	Rationale
GB-01	T. 25N R. 63E Sec. 9 SE	028BY037NV	ARAR8 AGSP STIPA POA	38% 12% 11% 32%	72% LATE SERAL	Maintain	38% 12% 11% 30%	≥72% P. Grass >36% Forbs 5-15% Shrubs 25-40%	50% ARAR8 AGSP STIPA POA	Summer/ Fall	Met	Measured utilization indicates light or less use of ARAR, AGSP & POA in 1998
GB-02	T. 26N R. 63E Sec. 26 SESW	028BY037NV	ARAR8 AGSP POCA	46% 06% 17%	59% MID SERAL****	Maintain	46% 06% 17%	≥59% P. Grass >17% Forbs 5-15% Shrubs 25-35%	50% ARAR8 AGSP POCA	Summer/ Fall	Met	Measured utilization indicates moderate use of AGSP, slight use of POCA, light or less of ARAR in 1998.
GB-03	T. 25N R 63E Sec. 4 NE	028BY029NV	SYMPH POCA AGTR	04% 30% 09%	64% LATE SERAL	Maintain	05% 30% 10%	≥64% P. Grass >32% Forbs 5-15% Shrubs 20-40%	50% SYMPH POCA AGTR	Summer/ Fall	Met	Measured utilization indicates moderate use of combined perennial grasses in 1998.

Footnotes to Appendix V - Long Term/Short Term Objectives are as follows:

* Percent of PNC (Potential Natural Community) is based on 0-25 (early seral), 26-50 (mid seral), 51-75 (late seral), and 76-100 (PNC). Seral Stage is based on plant community composition, diversity, production, and other factors. Ecological sites listed above can be referred to from the U.S. Soil Conservation Service Ecological Site Descriptions.

** This is the percent composition and seral stage that would have the desired vegetative characteristics to optimize production, quantity, quality and variety to provide the greatest forage value for all users.

*** Allowable use levels for utilization are the short term objectives established to meet the long term composition objectives.

****Plant community production was recorded at 49% of normal.

48

Appendix VI Goshute Basin Allotment - Long Term/Short Term Objectives - Wildlife

			Present Situation Long Term Objective Short Term Objective				Dbjective			
Study No.	. Key Area Location	Seasonal Use Area	Key Species	Habitat Condition Rating	Maintain or Improve	Habitat Condition Rating	Allowable Use Level	Season of Use	Met or Not Met	Rationale
GB #1*	T. 25N., R.63 Sec. 08 NESW	Su\Fall	Symph AgSp	1979-Fair, 1986 Fair, 1990-Good 1994-Good	Maintain	Good to better	45%	Su\Fall	Met	Allowable use levels exceeded until 1988, then met since
GB#2*	T.25N., R63E. Sec. 04 NESW	Su\Fall	ArNo OrHy	1985-Fair, 1990- Good, 1994-Good	Maintain	Good to Better	45%	Su\Fall	Met	Allowable use levels not exceeded

* Mule deer permanent frequency study.

Appendix VII

Goshute Basin Allotment - Long Term/Short Term Objectives - Riparian

STUDY AREA DESCRIPTION		PTION	FUNCTIONING CONDITION	LONG TERM OBJECTIVES	SHORT TERM OBJECTIVES			
Туре	Location	Key Species	ASSESSMENT (PRESENT SITUATION)		Allowable Use Level	Season of Use	Met or Not Met	Rationale
Lentic No. 681R	T. 25N R. 63E Sec. 8 NENE	Riparian Grasses & Grass Like Spp.	Functional at Risk Trend Not Apparent	Achieve Proper Functioning Condition	50%	Summer/ Fall	Not Met	Riparian area will worsen with continued heavy impacts from livestock
Lentic No. 677	T. 25N R. 63E Sec. 4 SWNW	Riparian Grasses & Grass Like Spp. Riparian Shrubs & Trees	Proper Functioning Condition (PFC)	Maintain PFC	Enclosed Spring	Summer/ Fall	Met	This is an enclosed spring. Flow estimated at 1-2 gpm on 8/2/1995. Diverse vegetation inside enclosusre.
Lotic No. 675 & 676	Middle Goshute Creek T. 25N R. 63E Sec. 4 NW	Riparian Grasses & Grass Like Spp. Riparian Shrubs & Trees	FAR Trend Not Apparent	Achieve PFC	50%	Summer/ Fall	Not Met	This is the unenclosed portion of Goshute Creek. Water flow estimated at 20 gpm or greater on 8/1/1995.
Lentic No. 675	T. 25N R. 63E Sec. 4 NWNW	Riparian Grasses & Grass Like Spp. Riparian Shrubs & Trees	PFC	Maintain PFC	Enclosed Spring	Summer/ Fall	Met	This is an enclosed spring still subject to erosion during high runoff events.
Lentic No. 676	T. 25N R. 63E Sec. 4 SWNW	Riparian Grasses & Grass Like Spp. Riparian Shrubs & Trees	PFC	Maintain PFC	Enclosed Spring	Summer/ Fall	Met	This is an enclosed spring, still subject to erosion where spring riparian vegetation borders the middle Goshute fork. Water flow estimated at 15 gpm or greater on 8/2/1995.
Lentic No. 684	T. 25N R. 63E Sec. 4 NENW	Riparian Grasses & Grass Like Spp. Riparian Shrubs & Trees	PFC	Maintain PFC	Enclosed Spring	Summer/ Fall	Met	This is an enclosed spring. Past hoof action noted in the enclosure. Water flow estimated at 1-2 gpm on 8/2/1995.
Lotic No. 691 & 693	Headwaters Goshute Creek T. 26N R. 63E Sec. 34 NWSW	Riparian Grasses & Grass Like Spp. Riparian Shrubs & Trees	FAR Upward Trend	Achieve PFC	50%	Summer/ Fall	Not Met	Vegetative cover capable of protecting streambanks & dissipating energy during high flows varied along stream length. Potential for "blow out." Water flow estimated at 5 gpm or greater on 8/1/95.

STU	STUDY AREA DESCRIPTION		FUNCTIONING LONG TERM CONDITION OBJECTIVES		SHORT TERM OBJECTIVES			M OBJECTIVES
Туре	Location	Key Species	ASSESSMENT (PRESENT SITUATION)		Allowable Use Level	Season of Use	Met or Not Met	Rationale
Lentic No. 692	T. 26N R. 63E Sec. 34 NENW	Riparian Grasses & Grass Like Spp.	PFC	Maintain PFC	50%	Summer/Fall-	Met	Area in very good condition with varied riparian species present. Some hoof action and hummocking noted.
Lentic No. 694	T. 26N R. 63E Sec. 35 SWNW	Riparian Grasses & Grass Like Spp.	FAR Downward Trend	Achieve PFC	50%	Summer/Fall	Not Met	Considerable trampling present all the way down the wash to the larger channnel.
Lentic No. 695	T. 26N R. 63E Sec. 35 NWNE	Riparian Grasses & Grass Like Spp.	FAR Downward Trend	Achieve PFC	50%	Summer/Fall	Not Met	Very steep area. Severe trampling noted throughout the meadow.
Lentic No. 696	T. 26N R. 63E Sec. 35 NWNW	Riparian Grasses & Grass Like Spp.	Nonfunctional Downward Trend	None	50%	Summer/Fall	Not Met	Heavy early season grazing & trampling have contributed to sloughed banks, compacted soils, and shrinking meadows.
Lentic No. 697	T. 26N R. 63E Sec. 35 NWNW	Riparian Grasses & Grass Like Spp.	FAR Downward Trend	Achieve PFC	50%	Summer/Fall	Not Met	Moderately heavy grazing has contributed to potential washout of upper meadow & degradation of lower spring vegetation

Goshute Basin Allotment - Long Term/Short Term Objectives - Riparian

APPENDIX VIII STOCKING RATE CALCULATIONS

Utilization and Stocking Rate Calculations

Data will be analyzed and proper stocking levels calculated for the allotment. Appropriate stocking levels will be based on monitoring information, specifically key forage plant method transects. The appropriate stocking level is calculated using the following formula:

Actual use (AUMs)=Desired use (AUMs)Corrected Utilization (%)*Desired Utilization (%)**

* Value from use pattern mapping, adjusted using yield index

** Value from Nevada Rangeland Monitoring Handbook - Native perennial grasses 50%;

The Desired Utilization (proper use factor) used in the stocking rate calculations for the Goshute Basin Allotment is 50% allowable use for perennial grasses. Throughout the evaluation years, most of the key forage plant method transects have been read for perennial grasses (Bluebunch wheatgrass and needlegrass). The allowable use factor of 50% is supported by current range literature. The raw utilization used in the stocking rate calculation for each year is based on averaging those transects that found use of key perennial grasses to be in the heavy or moderate use class for 93, 95, 97, and 98. For 1996 those transects in the moderate or light use class were averaged.

Utilization/Stocking Rate Calculations

Year	Raw <u>Utiliz.</u>	Yield <u>Index</u>	Corrected Utilization	Actual <u>Use AUMs</u>	Proper Stocking <u>Level AUMs</u>
1993	59%	1.15	67.9%	336 (A)	247
1995	58%	1.60	92.8%	628 (L)	338
1996*	33%	0.58	19.1%		
1997	49%	0.89	43.6%	346 (L)	397
1998	42%	1.21	50.8%	347 (A)	342

* There was no licensed use in the Goshute Basin Allotment during the 1996 grazing year. Cattle that were licensed in the Indian Creek or Cherry Creek Allotments drifted into the Goshute Basin and made basically light grazing use of the area. Thirty five head of cattle were licensed in the Indian Creek Allotment from 7/01 to 8/31.

The average proper stocking level is 331 AUMs. This represents an approximate 48% reduction to the current authorized livestock use of 633 AUMs.

The proper stocking level of 331 AUMs will be allocated to sheep. The period of use for sheep will remain the same, from 7/16 to 10/05. The cattle grazing permit will be eliminated from the allotment. The wild horse AML will be established at 0 animals yearlong on the allotment (no AUMs allocated).

1. Allocation by user - Based upon four year actual use and proper stocking level of 331 AUMs

Sheep= 331 AUMsWild Horses= 0 AUMsTotal= 331 AUMs

2. New livestock authorized use by permittee

	Authorized	New
Permittee	Use -	Decrease = Authorized Use
		ж. Т
Bertrand Paris	534 AUMs	- 203 AUMs = 331 AUMs
Indian Creek Ranch	99 AUMs	- 99 AUMs = 0 AUMs
Totals	633 AUMs	- 302 AUMs = 331 AUMs

3. New livestock authorized use summary (AUMs of specified livestock grazing)

	Authorized	Historical	— Total — —
Permittee	Use	Suspended Use	Use
Bertrand Paris	331 AUMs	638 AUMs	969 AUMs
Indian Creek Ranch	0 AUMs	180 AUMs	180 AUMs

4. Total use authorizations (AUMs) and Wild Horse AML

Adju	sted de	ma	nd =	Nev	<u>v authorization</u>
Sheep	534	-	203	=	331 AUMs
Cattle	99	-	99	=	0 AUMs
Wild Horses				=	0 AUMs
Totals	633	-	302	=	331 AUMs

APPENDIX IX UTILIZATION INFORMATION

A complete listing of key forage plant method utilization transects conducted in the Goshute Basin Allotment for five years of grazing use is as follows:

1993	- 1995	1996	1997	1998
1. 64% Agsp/Stipa	1. 40% Agsp	1. 08% Agsp	1. 26% Agsp 38% Brome	1. 46% Agsp at GB-02
2. 52% Agsp/Stipa	2. 30% Agsp	2. 05% Agsp	2. 15% Agsp	2. 38% Agsp 49% Poa
3. 52% Agsp/Stipa	3. 35% Agsp	3. 25% Agsp	3. 10% Brome	3. 50% Combined sp.
4. 66% Agsp/Stipa	4. 47% Agsp	4. 44% Agsp	4. 07% Brome	4. 42% Combined sp. At GB-03
	5. 37% Agsp	5. 36% Agsp	5. 48% Brome	5. 54% Combined sp.
	5b. 49% CRsp.	6. 27% Agsp	6. 48% Agsp	6. 36% Combined sp.
	5c. 63% CRsp.		7. 64% Combined sp.	7. 60% Combined sp.
	6. 58% Agsp		8. 46% Brome	8. 48% Combined sp.
	-7. 70% Agsp		9. 50% Agsp	9. 25% Agsp at GB-01 54% Stipa at GB-01
	8. 79% CRsp.		10. 14% Agsp	
	9. 57% CRsp.			

Agsp = Bluebunch wheatgrass. Stipa = Needlegrass. CRsp. = Combined riparian species.

Brome = Mountain brome. Combined sp. = Combined perennial grasses (Poa, carex, rye, stipa, brome).

APPENDIX X OTHER PERTINENT INFORMATION

A. Goshute Task Force recommendations concurred by the Area Manager are as follows:

1. Set a goal of removing the 99 AUMs cattle use in the Goshute Basin Allotment. If feasible create an 850 acre seeding in the Cherry Creek Allotment for cattle use (priority 1).

2. Request that all cattle be moved into and out of the basin via Indian Creek Canyon. Prohibit the use of salt near water or riparian areas (priority 1).

3. Monitor closely to insure cattle do not drift down the canyon outside the allotment. If necessary and feasible install a drift fence at the mouth of the canyon (priority 1).

4. Work with the sheep permittee to devise a satisfactory rest/rotation grazing system in the basin (priority 3).

5. Relocate a 1/2 mile section of the Indian Creek Drift Fence north around the snow drift zone. Repair the remainder of the fence and ask the three grazing permittees to perform maintenance on the fence prior to turnout in the future according to the co-operative agreement (priority 1).

6. Study the feasibility of installing a detention structure in the "burn" meadow to raise the water table and bring back meadow vegetation. This must be compatible with W.S.A. Interim Management Guidelines (priority 5).

7. Verify the location of the 80 acre parcel at the main spring and if necessary and feasible trade for other public land (in Butte Valley) (priority 3).

B. HMP Recommendations for Livestock Management

Due to the detrimental effects of cattle on the watershed, and the conflicts with wildlife species in the basin, it is proposed that all cattle use be removed from the WHA with authorized AUMs replaced by developing a seeding on the bench above Steptoe Valley.

Sheep use will continue to be allowed in the basin, but will require more effective herding than has been evidenced in the past. In addition, a rotation type grazing plan will have to be developed for use in the basin. Until this plan can be developed and implemented, an interim grazing plan is to be used which is a two year deferment system under which sheep would graze the south portion of the basin until after seedripe, at which time they would move to the north portion of the basin. In the second year, the procedure would be reversed with the sheep going into the north portion of the basin first.

The HMP also identified mule's ear wyethia as a problem in the allotment. Page 9 of the HMP states:

Mule's ear wyethia (Wyethia amplexicaulis) has invaded several areas in the basin over the course of many years. At the present time approximately 12 acres of sagebrush/perennial grass habitat has been dominated by wyethia and additional sagebrush/perennial grass and sub-irrigated meadow sites at the south end of the basin are being invaded.

C. The following field tours and/or resource studies have been accomplished for the Goshute area.

Date: Location: Purpose: Field Party:	July 24, 1975 Goshute watershed Evaluation of the upper watershed Pat Coffin, Allan Flock, Leroy McLelland, Mike Wickersham, Leonard Hoskins (Nevada Department of Wildlife)
Date: Location: Purpose: Field Party:	July 28/29, 1975 Upper Goshute Basin Review of Goshute area requested by the BLM Area Manager Osborne Casey, Ron Clark, Wayne Logan, Joe Wagner (BLM State Office and BLM Ely District)
Date: Location: Purpose: Field Party:	September 4, 1975 Goshute Basin and Curry Canyon Geologic evaluation Fred S. Boyd, Jr.
Date: Location: Purpose: Field Party:	August 4/5, 1982 Goshute Creek Watershed Reconnaissance evaluation of the Goshute Creek Watershed John Trimmer, Osborne Casey, Dick Jewell
Date: Location: Purpose: Field Party:	October 3/4, 1983 Goshute Creek, White Pine County Evaluate fish population and fishery habitat status Gene Weller, John Hutchings, Bob Layton, Paul Dankowski, Tony Macalusco (Nevada Department of Wildlife)

D. History of Bonneville Cutthroat in Goshute Creek

July 1960 Nevada Fish and Game (NFG) transplants 54 rare Utah (Bonneville) cutthroat (<u>Salmo clarki utah</u>) into Goshute Creek from Pine-Ridge Creek. All other fish in creek were killed in 1955 flood. NFG closes the stream to all fishing.

Sept. 1969 NFG does first trout population inventory estimates 42 fish/mile

June 1973 Dr. Robert Benke, Colorado State University reports on fish status. Estimates population at Goshute Creek 1-2000 fish in 4"-12" range.

July 1974 NFG suggests Goshute Creek as source of fish to transplant fish to 21 streams in White Pine Co.

March 1975 NFG classes Bonneville cutthroat trout as endangered in Nevada. On US Fish and Wildlife status undetermined list

August 1975 First BLM Stream Habitat Survey on Goshute Creek conducted (conducted annually through 1982)

October 1976 BLM constructed two large gabions on Goshute Creek to improve habitat for trout.

1977 Cutthroat trout from Goshute Creek transplanted to two streams in White Pine Co.

January 1981 Nevada Division of Wildlife (NDOW) opens Goshute Creek to fishing

December 1981 NDOW drafts Bonneville Cutthroat Management Plan

December 1982 U.S. Fish and Wildlife Service include Bonneville cutthroat trout as a candidate (Category 2) threatened or endangered species.

June 1983 Large flood damages lower Goshute Creek

June 1984 Second large flood continues damage to Goshute Creek

September 1985 U.S. Fish and Wildlife upgrades status of Bonneville cutthroat trout from Category 2 to Category 1 (sufficient evidence to list species as threatened or endangered does exist)

October 1986 NDOW survey shows 1352 fish/mile

December 1986 NDOW releases preliminary Bonneville Cutthroat Trout Species Management Plan.

March 1988 NDOW finalized Bonneville Cutthroat Trout Species Management Plan.

January 1989 U.S. Fish and Wildlife Service downgrades Bonneville cutthroat trout back to Category 2 candidate T/E species.

May 1989 BLM contracts Low Level Color Infra-red aerial photograph series of Goshute Basin and Creek. Scale varies from 1:4900 to 1:6800.

October 1994 Most recent complete (eight station) BLM Stream Survey. Stream has shown steady improvement since last major flood. Percent of habitat optimum has increased from

53% in 1988 to 63% in 1994. Bank cover increased from 55% to 75% and bank stability from 65% to 71%. Stream rated at Functioning-At-Risk with upward trend.

February 1996 U.S. Fish and Wildlife Service drops all Category 2 T/E species from candidate list including Bonneville cutthroat trout.

March 1996 BLM Nevada adopts all species previously listed as Category 2 (in Nevada) as BLM Nevada Sensitive Species including the Bonneville cutthroat trout. This continues coverage of this species under BLM Special Status Species Management (BLM Manual 6840 dated 9/16/88).

December 1998 U.S. Fish and Wildlife Service begins 90 day review of the Bonneville cutthroat trout for possible listing as a threatened species.

APPENDIX XI DOCUMENT REFERENCE

To aid the reader in the understanding of the purpose of this allotment evaluation please refer to the following documents:

- 1. Northeastern Great Basin Area Standards and Guidelines, February, 1987.
- 2. Egan Resource Area Resource Management Plan and Final Environmental Impact Statement (RMP/EIS), September 1984.
- 3. Egan Resource Area Record of Decision (ROD), February 1987.
- 4. Egan Resource Area Rangeland Program Summary (RPS), May 1988.
- 5. Egan Resource Area Final Wilderness Environmental Impact Statement (EIS), September 1987.
- 6. Goshute Creek Habitat Management Plan (HMP), March 1980.
- 7. Nevada Rangeland Monitoring Handbook (NRMH), September 1984.

APPENDIX XII LIST OF PREPARERS

Name

<u>Title</u>

James Perkins Chris Mayer Mark Barber Mike Perkins Robert Brown Gary Medlyn John Longinetti Mark Lowrie Assistant Field Office Manager, Renewable Resources Field Office Lead Rangeland Management Specialist Wildlife Biologist, Riparian and T&E Species Wildlife Biologist Wild Horse and Burro Specialist Soil Scientist Rangeland Management Specialist Rangeland Management Specialist

APPENDIX XIII

LIVESTOCK GRAZING AGREEMENT BERTRAND PARIS AND SONS (WENDY PARIS)

The purpose of this agreement is to establish and authorize a sheep grazing strategy for the Goshute Basin Allotment. Grazing use will be in accordance with the Standards and Guidelines for grazing administration as developed by the Northeastern Great Basin Resource Advisory Council (RAC), and other multiple use resource objectives outlined in the Goshute Basin Allotment Evaluation. The agreement is based upon proposals brought forth by the Bureau of Land Management (BLM) and Wendy Paris at a meeting held at the Ely Field Office on December 12, 1999.

This agreement will be used as a basis for issuance of a new term grazing permit to Wendy Paris. Both the agreement and the term grazing permit will be for a period of four years beginning March 1, 2000 and ending February 28, 2004.

The current permitted livestock use on the Goshute Basin Allotment for Bertrand Paris and Sons (Wendy Paris) is as follows:

Permittee	Number <u>of Sheep</u>	Season of Use Pern	nitted AUMs	
Bertrand Paris and Sons	750	07/01 - 10/15	528	

According to this agreement Mrs. Paris agrees to take voluntary non use of 178 AUMs for a period of four years. Sheep grazing use will be authorized for 350 AUMs for the four year period. In accordance with 43 CFR 4130.2 and 4130.3, sheep grazing use will be authorized as follows, with the authorization to be included in the new term grazing permit for Bertrand Paris and Sons.

Permittee	Number of Sheep	Season of Use Pern	nitted AUMs
Bertrand Paris and Sons	500*	07/01- 10/15	350

* Sheep numbers will be allowed up to a maximum of 1200 head. The grazing authorization will not exceed 350 AUMs annualy.

The undersigned permittee also agrees to the following terms and conditions, which will be included in the new term grazing permit.

1. Salt and/or minerals for sheep will be placed at least 100 yards from any water source or fenced or unfenced riparian area.

2. Sheep will be herded away from fragile riparian areas.

3. The Goshute Basin/Indian Creek Allotment division fence will be maintained in part by Bertrand Paris and Sons.

4. The Goshute Basin Allotment will be grazed by sheep every other year. The allotment will be rested during the 2000 grazing year. During those years the Goshute Basin Allotment is rested, the 350 AUMs sheep grazing will be authorized in the Medicine Butte Allotment. The BLM and Wendy Paris together will determine the area of the Medicine Butte Allotment to be grazed, which must occur within the designated sheep use areas.

Any changes in grazing use during the four year period must be approved by the authorized officer. Following the four year period, the BLM and Wendy Paris will monitor the allotment to determine forage availability and range condition. The sheep grazing system will be evaluated to determine consistency with the standards for grazing administration and the allotment specific objectives. A determination will be made if additional sheep AUMs can be authorized on an annual basis.

The Goshute Basin Allotment will continue to be monitored by BLM on an annual basis as time, manpower, and priorities allow. Specific rangeland monitoring studies could include proper functioning condition riparian studies, key forage plant method utilization transects, use pattern mapping, observed apparent trend, frequency trend, cover, or ecological condition studies.

Grazing will be in accordance with the Northeastern Great Basin Area Standards and Guidelines for grazing administration as developed by the Northeastern Great Basin Resource Advisory Council and approved by the Secretary of the Interior on February 12, 1997. Grazing use will also be in accordance with 43 CFR subpart 4180 - Fundamentals of Rangeland Health and Standards and Guidelines for grazing administration.

GLOSSARY

The following definitions are taken from Title 43 of the Code of Federal Regulations (Revised as of October 1, 1996), Subchapter D - Range Management, Subpart 4100-Grazing Administration-Exclusive of Alaska; General, Sec. 4100.0-5 Definitions.

The "Act" means the Taylor Grazing Act of June 28, 1934, as amended (43 U.S.C. 315, 315a-315r).

"Active use" means the current authorized use, including livestock grazing and conservation use. Active use may constitute a portion, or all, of permitted use. Active use does not include temporary nonuse or suspended use of forage within all or a portion of an allotment.

"Activity plan" means a plan for managing a resource use or value to achieve specific objectives. For example, an allotment management plan is an activity plan for managing livestock grazing use to improve or maintain rangeland conditions.

"Actual use" means where, how many, what kind or class of livestock, and how long livestock graze on an allotment, or on a portion or pasture of an allotment.

"Actual use report" means a report of the actual livestock grazing use submitted by the permittee or lessee.

"Affiliate" means an entity or person that controls, is controlled by, or is under common control with, an applicant, permittee or lessee. The term "control" means having any relationship which gives an entity or person authority directly or indirectly to determine the manner in which an applicant, permittee or lessee conducts grazing operations.

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

"Allotment management plan (AMP)" means a documented program developed as an activity plan, consistent with the definition at 43 U.S.C. 1702(k), that focuses on, and contains the necessary instructions for, the management of livestock grazing on specified public lands to meet resource condition, sustained yield, multiple use, economic and other objectives.

"Animal unit month (AUM)" means the amount of forage necessary for the sustenance of one cow or its equivalent for a period of 1 month.

"Annual rangelands" means those designated areas in which livestock forage production is primarily attributable to annual plants and varies greatly from year to year.

"Authorized officer" means any person authorized by the Secretary to administer regulations in this part.

"Base property" means: (1) Land that has the capability to produce crops or forage that can be used to support authorized livestock for a specified period of the year, or (2) water that is suitable for consumption by livestock and is available and accessible, to the authorized livestock

63

when the public lands are used for livestock grazing.

"Cancelled or cancellation" means a permanent termination of a grazing permit or grazing lease and grazing preference, or free-use grazing permit or other grazing authorization, in whole or in part.

"Class of livestock" means ages and/or sex groups of a kind of livestock.

"Conservation use" means an activity, excluding livestock grazing, on all or a portion of an allotment for purposes of--

(1) Protecting the land and its resources from destruction or unnecessary injury;

(2) Improving rangeland conditions; or

(3) Enhancing resource values, uses, or functions.

"Consultation, cooperation, and coordination" means interaction for the purpose of obtaining advice, or exchanging opinions on issues, plans, or management actions.

"Control" means being responsible for and providing care and management of base property and/or livestock.

"District" means the specific area of public lands administered by a District Manager.

"Ephemeral rangelands" means areas of the Hot Desert Biome (Region) that do not consistently produce enough forage to sustain a livestock operation but may briefly produce unusual volumes of forage to accommodate livestock grazing.

"Grazing district" means the specific area within which the public lands are administered under section 3 of the Act. Public lands outside grazing district boundaries are administered under section 15 of the Act.

"Grazing fee year" means the year, used for billing purposes, which begins on March 1, of a given year and ends on the last day of February of the following year.

"Grazing lease" means a document authorizing use of the public lands outside an established grazing district. Grazing leases specify all authorized use including livestock grazing, suspended use, and conservation use. Leases specify the total number of AUMs apportioned, the area authorized for grazing use, or both.

"Grazing permit" means a document authorizing use of the public lands within an established grazing district. Grazing permits specify all authorized use including livestock grazing, suspended use, and conservation use. Permits specify the total number of AUMs apportioned, the area authorized for grazing use, or both.

"Grazing preference" or "preference" means a superior or priority position against others for the purpose of receiving a grazing permit or lease. This priority is attached to base property owned or controlled by a permittee or lessee.

"Interested public" means an individual, group or organization that has submitted a written request to the authorized officer to be provided an opportunity to be involved in the decisionmaking process for the management of livestock grazing on specific grazing allotments or has submitted written comments to the authorized officer regarding the management of livestock grazing on a specific allotment.

"Land use plan" means a resource management plan, developed under the provisions of 43 CFR part 1600, or management framework plan. These plans are developed through public participation in accordance with the provisions of the Federal Land Policy and Management Act of 1976 and establish management direction for resource uses of public lands.

"Livestock" or "kind of livestock" means species of domestic livestock-- cattle, sheep, horses, burros, and goats.

"Livestock Carrying Capacity" means the maximum stocking rate possible without inducing damage to vegetation or related resources. It may vary from year to year on the same area due to fluctuating forage production.

"Monitoring" means the periodic observation and orderly collection of data to evaluate:

(1) Effects of management actions; and

(2) Effectiveness of actions in meeting management objectives.

"Permitted use" means the forage allocated by, or under the guidance of, an applicable land use plan for livestock grazing in an allotment under a permit or lease and is expressed in AUMs.

"Public lands" means any land and interest in land outside of Alaska owned by the United States and administered by the Secretary of the Interior through the Bureau of Land Management, except lands held for the benefit of Indians.

"Range improvement" means an authorized physical modification or treatment which is designed to improve production of forage; change vegetation composition; control patterns of use; provide water; stabilize soil and water conditions; restore, protect and improve the condition of rangeland ecosystems to benefit livestock, wild horses and burros, and fish and wildlife. The term includes, but is not limited to, structures, treatment projects, and use of mechanical devices or modifications achieved through mechanical means.

"Rangeland studies" means any study methods accepted by the authorized officer for collecting data on actual use, utilization, climatic conditions, other special events, and trend to determine if management objectives are being met.

"Secretary" means the Secretary of the Interior or his authorized officer.

"Service area" means the area that can be properly grazed by livestock watering at a certain water.

"State Director" means the State Director, Bureau of Land Management, or his or her authorized representative.

"Supplemental feed" means a feed which supplements the forage available from the public lands and is provided to improve livestock nutrition or rangeland management.

"Suspension" means the temporary withholding from active use,

through a decision issued by the authorized officer or by agreement, of part or all of the permitted use in a grazing permit or lease.

"Temporary nonuse" means the authorized withholding, on an annual basis, of all or a portion of permitted livestock use in response to a request of the permittee or lessee.

"Trend" means the direction of change over time, either toward or away from desired management objectives.

"Unauthorized leasing" and "subleasing" means --(1) The lease or sublease of a Federal grazing permit or lease, associated with the lease or sublease of base property, to another party without a required transfer approved by the authorized officer:

(2) The lease or sublease of a Federal grazing permit or lease to another party without the assignment of the associated base property;

(3) Allowing another party, other than sons and daughters of the grazing permittee or lessee meeting the requirements of § 4130.7(f), to graze on public lands livestock that are not owned or controlled by the permittee or lessee; or

(4) Allowing another party, other than sons and daughters of the grazing permittee or lessee meeting the requirements of § 4130.7(f), to graze livestock on public lands under a pasturing agreement without the approval of the authorized officer.

"Utilization" means the percentage of forage that has been consumed by livestock, wild horses and burros, wildlife and insects during a specified period. The term is also used to refer to the pattern of such use.

MAP A ALLOTMENT LOCATION WITHIN THE ELY DISTRICT



District Boundary

Indian Reservation Ruby Lake National

Wildlifa Refuge

Resource Area Boundary

Humboldt National Forest



ELY DISTRICT BUREAU OF LAND MANAGEMENT U. S. DEPARTMENT OF THE INTERIOR








