Ely F.S. Monte Cristo 4/23/98

United States Department of Agriculture
Forest Service
Humboldt - Toiyabe National Forest
Ely Ranger District
P. O. Box 539
Ely, NV 89301
(702) 289-3031

File Code: 1900
Date: April 23, 1998

MONTE CRISTO TERRACOTE

RE: Environmental Assessment for Blackrock Grazing Allotment

Dear Interested Party:

Enclosed for your review and comment is a preliminary environmental assessment concerning the implementation of grazing strategies for the Blackrock Allotment within the White Pine Mountain Range, White Pine and Nye Counties, Nevada. At this time four alternatives have been identified for consideration.

To be most helpful comments should be received by May 29, 1998 for consideration before making a final decision. Comments should be as specific as possible and include supporting reasons, that you believe should be considered in reaching a decision, that have not already been addressed in the document.

Your comments along with any new information submitted will be considered before a final decision is made. Comments should be mailed to me at the following address:

Jerry Green
District Ranger
Ely Ranger District
P.O. Box 539
Ely, NV 89301.
Comments may also be faxed to me at (702)289-2132.

All comments received will be addressed in an appendix to the EA, and considered in the decision. Comments submitted, as well as the names and addresses of those who commented, are considered part of the public record and will be released if requested under the Freedom of Information Act.

I would like to thank you for your interest in the management of the Humboldt-Toiyabe National Forest. If you have any questions, please call Jay Pence, Project Coordinator at (702)289-3031.

Sincerely,

Jerry L. Green

JERRY L. GREEN
District Ranger

Enclosure:1

BLACKROCK ALLOTMENT

PREDECISIONAL
ENVIRONMENTAL ASSESSMENT

HUMBOLDT-TOIYABE NATIONAL FOREST
CENTRAL NEVADA ECOSYSTEM
ELY RANGER DISTRICT

APRIL 1998

INTRODUCTION

The general location of the Blackrock Allotment can be observed on maps located in Appendix A. The allotment contains approximately 68,696 acres of National Forest Land. No private land occurs within the allotment. Recent GIS calculations indicate that the range readily used by cattle is 1,673 acres see Appendix E. There are 10,132 acres of range suitable for livestock grazing using suitability criteria developed in the 1970's (map available at Ely District office). Approximately 23,446 acres of the Blackrock Allotment are a part of the Currant Mountain Wilderness. Less than 0.4% of these wilderness acres may be used by livestock. The White Pine Peak Research Natural Area (RNA) is contained in this allotment and consists of 787 acres. The RNA is not used by livestock or wild horses. The wilderness and RNA are discussed in more detail on pages 6 and 7 in the issues section of this document.

PURPOSE AND NEED

The purpose of this analysis is to design and implement a grazing strategy that is in compliance with Humboldt National Forest Land and Resource Management Plan (Forest Plan) direction, standards and guidelines on the Blackrock Allotment. Monitoring has indicated that current permitted stocking levels are resulting in forage utilization above what is necessary to move toward the Desired Future Condition (DFC) as outlined in the Forest Plan.

This document is also intended to clarify confusion and concerns about the Appropriate Management Level (AML) for wild horses in the Forest Service portion of the Monte Cristo Wild Horse Territory.

The allotment was grazed by two permittees in the past. One permit was canceled in 1995 due to violations of the Term Grazing Permit. This leaves only one permittee with a valid Term Grazing Permit.

A memorandum of understanding (MOU) was signed by both permittees and the Forest Service in May of 1991 (see document in appendix A). The MOU serves several purposes. It developed an interim agreement that the permittees would limit the stocking of the allotment to 65 head for each permittee during the 1991 and 1992 grazing seasons for range resource protection. One permittee chose to stock the allotment with the 65 head. The other permittee chose to take nonuse. The MOU documented an agreement that both permittees or their successors will stock to the levels indicated by the utilization studies. It also established that the Forest Service would conduct the analysis and complete the NEPA documents required for the management of the allotment. Extensions of the agreement were made for the 1993 and 1994 grazing seasons. The forest service was able to conduct further utilization monitoring to help verify proper stocking levels.

More specifically, the proposal has the following purposes:

1. To move towards the desired/acceptable resource conditions as described in the Forest Plan page IV-48 as amended by amendment 2.

2. Establish livestock stocking levels determined by monitoring studies. This would complete the Districts agreements established in an MOU with the permittee.

3. Clarify in writing that the AML established for the Monte Cristo Wild Horse Territory is for lands administered by both the Forest Service and the BLM.

DECISION TO BE MADE

The decision to be made by the Ely District Ranger is to select a grazing management strategy with appropriate stocking levels and mitigation for livestock that meets and implements the general direction, including standards and guidelines, from the Forest Plan. The decision will also clarify the Appropriate Management Level (AML) for Wild horse use on the Forest Service portion of the Monte Cristo Wild Horse Territory.

ISSUES

An issue is defined as a point of discussion, debate or dispute concerning environmental effects. Scoping for this analysis began in the fall of 1991. Letters were sent to interested individuals and groups. The project was scoped again in 1994. The issues were fairly consistent between scopings. The issues received from both scoping efforts will be considered in this document. From these public involvement efforts 24 letters were received. These letters can be viewed in the public files at the Forest Service Office in Ely Nevada. The interdisciplinary team's (ID Team) reviewed these letters and included their own input to develop issues relating to livestock grazing on the Blackrock Allotment. For the Purpose of this analysis these issues were divided into issues carried through the analysis and issues not carried through the detailed analysis.

Issues Carried Through the Analysis:

1. WILD HORSE TERRITORY:

Background: The Forest Service portion of the Monte Cristo Wild Horse Management Area boundary overlaps into a portion of the Blackrock Allotment and continues through the Treasure Hill Allotment to the north (see map in Appendix A). Wild horse use is generally concentrated along the unfenced western boundary of the White Pine Division. A majority of the Forest Service portion of the wild horse territory consists of steep terrain with closed stands of pinyon and juniper which is not readily used by the horses. The horses typically use BLM lands adjacent to the Forest and travel to the springs just inside the Forest Boundary on the western edge of the allotment to water. Heavy use by wild horses near some of these springs has resulted in mud holes and unsanitary conditions. Heavy use, by wild horses, is occurring on riparian areas and surrounding uplands when numbers are above the established AML. This heavy use is also causing a downward trend in vegetation and soils. Mustang Spring has received such heavy use by wild horses that all vegetation in the riparian area has been eliminated. Wild horse use of 80-90% occurs on Birch, Sawmill, Emigrant, and Blackrock Springs when horses numbers are above the established AML. Wild horse use of 70-90% occurs on Vanover, Limerock and Cherry Spring when horse numbers are above the established AML. This heavy use in not consistent with direction from the Forest Plan.

The primary grazing areas (Corduroy and Freeland units) on the Blackrock Allotment are outside the Monte Cristo wild horse herd management area and are discussed in the Horse Free Area issue. Primary grazing areas on the Blackrock Allotment are not within the wild horse territory with the exception of the lower portions of Freeland and Blackrock Canyons and the west bench. Dual use does occur in these areas when cattle are moved onto or off the National Forest. Cattle from adjacent BLM lands may occasionally graze across the unfenced western boundary. This unauthorized use is associated with a permit on the adjacent BLM lands and is managed by the BLM. Past cattle use in this area has been light 15-25%.

There were 946 horses estimated to be using the entire territory prior to the 1995 gather. Aerial and ground counts indicate that there were approximately 111 wild horses using the Forest with BLM lands prior to the 1995 roundup in the Blackrock area. These animals received a majority of their water from the Forest but obtained a majority of their forage from the BLM. During the 1995 grazing season the Monte Cristo Wild Horse Territory was gathered to reflect the appropriate management level (AML) of 229 horses set by the BLM. The minimum forage utilization standards that are identified in the Forest Plan indicate that the area should not be used in excess of 35-55% for season long use areas. Wild horse use continued to exceed this standard on the Blackrock allotment during the 1996 and 97 grazing seasons. The herd levels were in excess on the 229 AML established by th BLM in both 1996 and 1997. It was determined that some animals were missed during the '95 gather and that the AML was exceeded even after the gather. Utilization on key forage plant species was measured to be in excess of 90% in some riparian areas. The majority of suitable range in the territory was used from 60-90%. This indicates that wild horse use of the allotment is exceeding Forest Plan Standards prior to any increase in the AML by the Forest. Another gather is scheduled in fiscal year 1999 to bring the herd numbers down to the AML should help reduce this use.

Concern: The Wild Horse and Burros Protection Act of 1971 calls for managing the animals in a manner that is designed to achieve a thriving natural ecological balance on the public lands. To accomplish this the district needs to set an Appropriate Management Level (AML) for this area, taking into consideration the AML already established on the BLM.

Discussion: The Ely Ranger District cooperated with the Ely BLM when the BLM set their AML. When the BLM AML was established personnel from the Ely Ranger District felt that the AML was for the entire wild horse territory since the horses move back and forth from the BLM to the Forest. The BLM document that established the AML did not make this assumption clear. Therefore an AML for the Forest was not documented in the BLM decision which could cause confusion by some agency personnel and the public.

The Monte Cristo wild horse territory was gathered to reflect the established AML in 1995. Forage utilization standards were still exceeded in several riparian areas after the 1995 roundup and during the 1996-97 grazing seasons. It has been observed that the established AML may be allowing utilization on the forest in excess of maximum forage utilization standards established by the Forest Plan. This utilization is due to the large number of horses that travel to water on Forest Service administered land from the BLM. If the Forest Service were to establish an AML in addition to the BLMs AML this problem will only be compounded. Actual numbers of horses to be allocated on the allotment will have to be determined through continued monitoring of vegetation and soils resources within the territory. At this time it appears the AML established by the BLM (which we are interpreting to include both the BLM and Forest Service lands) may be high unless greater forage production, improved water sources, and better distribution can be achieved. The Forest Service and BLM will need to continue to combine their monitoring efforts to ensure that the livestock stocking levels and wild horse AML are appropriate for the resources and conditions in this area.

2. RESOURCE CONDITIONS:

Background: Inspection of the riparian areas and some upland areas on the Blackrock Allotment indicate that they are static or moving away from the general Desired Future Condition (DFC) outlined by the Forest Plan. Livestock distribution and utilization in the allotment were studied during the 1989-94 grazing seasons. It was found that forage utilization greatly exceeded what the forest plan and the ID team specified as being necessary to achieve the

DFC of the range especially in riparian areas. A review of the Freeland and Corduroy Basin units of the Blackrock Allotment in 1996 emphasized the delicate balance of the riparian areas on these units. The review concluded that the riparian areas are at a critical point and suggested some rest of the units plus stringent utilization rates to enhance recovery. It has been recommended that use be dropped to 35-40% if current utilization standards don't succeed in improving riparian areas. Permitted livestock are presently using Blackrock Canyon, Freeland Canyon, Corduroy Basin and areas around Freeland Spring and Willow Spring. Water sources and riparian areas are limited on this allotment. All potential water sources that could be developed have already been developed. Opportunity to pipe water to different locations would be very expensive due to the distance water needs to be transported. Pumping water away from riparian areas would be expensive (even if solar pumps were used) when compared to the amount of suitable range that would be made available by the new water source.

Concern: The forage produced in the suitable range isn't going to support the permitted numbers without allowing overgrazing and resource degradation.

Discussion: Utilization studies performed in 1988, 1989, and 1991 suggested a stocking level of 79 cow/calf pairs for a 3.4 month grazing season, for 269 head months (HM's). The enforcement of maximum utilization levels in 1993 and 1994 required the early removal of livestock shortly after utilization levels had been achieved on the riparian areas. The average of the 1993-94 stocking levels was 88 cow/calf pairs for a 46 day season, for 135 HM's. The 135 HM's represents the carrying capacity for the allotment with minimal efforts made to distribute livestock through salting and riding practices. The 1988,1989, and 1991 studies suggest that two-thirds of the carrying capacity is in the Corduroy unit and the remaining one-third carrying capacity is in the Freeland unit. The actual ability of the livestock to graze in each unit for this amount of time will depend on the ability of the operator to distribute his livestock so that utilization levels are not exceeded in any one area.

Options to improve livestock distribution or forage production in this allotment have been considered by the ID team, the ranchers, and other forest service professionals. At this time it has been determined that a large investment of money would be necessary to to improve livestock distribution or increase forage production above that currently produced on the allotment with structures or through vegetation manipulation. Opportunities for improved livestock distribution through additional water sources and/or fencing are limited throughout the allotment. Temporary electric fences may provide some help in restricting use in riparian areas but salting and herding practices offer the best opportunities for improved livestock distribution. The use of prescribed fire holds some potential to increase vegetative diversity and forage production. At this time the information and funding necessary to plan and implement vegetation manipulation projects on this allotment are not available.

3. HERITAGE RESOURCES:

Background: The White Pine Range is within the traditional territory of the Western Shoshone, and is one of the last areas of the continental United States to be settled by Euroamericans. While the entire White Pine range would have been utilized by the Native American inhabitants, their use would have been concentrated near springs and streams, along principal drainages at the edges of major valleys, and along major ridge systems and in saddles. There is also a potential for many historic properties being located in the Blackrock Allotment. These historic properties will primarily be located along the major drainages in the allotment.

Concern: Grazing activities have the potential to adversely affect Historic Properties resulting from 1) the concentration of livestock on historic properties, and/or 2) construction and maintenance of grazing facilities and operations of permittees in the immediate vicinity of historic properties.

Discussion: The Forest recognizes that grazing activities have the potential to adversely affect Historic Properties. These effects are the result of 1) the concentration of livestock on historic properties, and/or 2) construction and maintenance of grazing facilities and operations of permittees in the immediate vicinity of historic properties. Cattle concentrating on or near historic properties affect those properties in several ways. First the cattle trample artifacts on the surface altering and/or breaking them. Second, if the ground is wet in the area, trampling results in the loss of information from the churning effect of the hooves. Third, if historic structures are present, cattle rubbing against the structures result in alteration or collapse of the structures. Forth, cattle trailing across a site result in rutting which can pose an erosion threat to the site.

The construction and maintenance of grazing facilities and the operations of permittees in the immediate area of historic properties can also result in the breakage and/or alteration of artifacts and site features. These effects, however, are easier to avoid since archaeological inventories are conducted prior to the construction of new grazing facilities. When historic properties are located they can either be avoided or alterations to the undertaking can be made which would protect the historic property from further damage.

A review of Forest Service and State Historic Preservation Office records revealed 27 recorded sites in the Black Rock Allotment. The former Forest Archaeologist compared a map of the recorded sites with a map of known areas of livestock concentrations and identified one area which needed to be field checked to determine if livestock were causing damage to the heritage resources. The field review did find that some heritage resources were present and being impacted by concentrated livestock use in the area.

4. ECONOMICS

Background: The ranching business has many variable costs and markets. Public land ranchers assume maintenance of range structures on their permitted allotment. These improvements aid in livestock distribution, forage availability, livestock control and animal health. Examples of range improvements are fences, water developments, solar or electric pumps and fences. Ranchers are generally responsible for 50 percent of the cost of any new improvements and all maintenance associated with the improvements. Increased herding is also an expense to the permittee. A reduction in permitted head months (HM's) has the potential to economically impact the permittee and may affect the local economy. A head month is one month's use and occupancy of the range by one animal (with or without calf). Expenditures of federal money on range structures and permit administration for a few head of cattle could also have minimal or negative financial return to the federal treasury.

Concern: The permittee may not be able to run the operation profitably if modifications such as changing livestock numbers, adding improvements, changing grazing practices or other changes are implemented. Loss of HM's could adversely affect the local economy but expenditures of federal money on range structures and permit administration may have minimal or negative financial return to the public. A decline in resource conditions will have a negative social return to all interests.

Discussion: Weighing the merits and drawbacks of the various alternatives does not need to be displayed in a monetary cost-benefit analysis and should not be when there are important qualitative considerations (40 CFR 1502.23). Benefit Cost ratios, and Present Net Value indices, cannot be used directly to compare alternatives that confer benefits and imposes costs in different ways on different people. It makes no sense, for example, to say that a "commodity emphasis" alternative is better (or more efficient) than an "amenity emphasis" alternative if it has a higher Present Net Value. The comparison is simply meaningless.

The permittee's ultimate responsibility is toward the improvement and maintenance of the resources he/she uses to make a living. In order to succeed in that responsibility the permittee is also required to manage livestock while staying within the requirements established by the Forest Service through the permit, allotment planning process and other area or Forest Plans. These goals can be achieved in a variety of ways. The economic tradeoffs in cattle numbers, length of grazing season, additional improvements and their maintenance along with social and economic values need to be weighed by the permittee and Forest Service for the alternative selected.

Issues Consistent Through All Alternatives:

These issues were identified through the scoping process. They are not carried through a detailed analysis because the Forest Service Interdisciplinary team felt they were consistent through all alternatives.

1. Wilderness Issues.

What effect does the grazing of livestock have on the integrity of the Currant Mountain Wilderness?

The Blackrock Allotment contains a portion of the Currant Mountain Wilderness (approximately 23,446 acres). Livestock grazing is authorized by the Wilderness Act section 4(d)(4)(2) which was passed in 1964. The 1970 range resource data indicates that there are approximately 88 acres of suitable range within the Current Mountain Wilderness that may be accessible for use by the permittee. Livestock utilization in the Currant Mountain Wilderness has been observed to be less than 10-15% due to the steep terrain and distance from water. This grazing in the wilderness was observed during dry years with high stocking rates. Past heavy livestock grazing use has been observed in riparian areas next to the wilderness.

Wild horse utilization in the Currant Mountain Wilderness is closely reflecting the use observed by livestock. The only area of real concern for forage utilization is at Limerock Spring. Use at this spring has not been measured since the 1995 roundup. Due to its location it is expected to receive use close to the allowable levels by wild horses that are managed within the AML established by the BLM. The forage utilization by horses and the appropriate AML for wild horses is being carried through the analysis the wild horse territory and resource conditions/monitoring issues. Carrying this issue through the environmental consequences section of this document would duplicate that discussion.

This issue will not be carried through the analysis, since livestock grazing is an authorized use of wilderness areas, less than 0.4% of the wilderness (88 acres) have potential to be grazed and past use has not exceeded the utilization standards allowed for the wilderness. Under any of the alternatives discussed in this document the effects to wilderness are not significant.

2. Range Improvements.

We received many comments through the scoping process that indicated that we need more improvements, need less improvements, the permittees should be responsible for maintaining improvements, improvements should be cost effective etc. This general discussion should help answer some of these questions. This discussion is the same for all alternatives.

Range improvements are cost-shared between the government and the permittee. Any proposed improvements are analyzed for economic feasibility following established Forest Service procedures. Improvement maintenance is generally the responsibility of the permittee, although in cases of mutual boundary fences or other specialized projects, the responsibility may be split or assumed by another permittee or source. Maintenance responsibility is established in the Term Grazing permit or other document (for other groups such as wild horse groups) that allows the activity. All range improvements have a life expectancy and will eventually need to be replaced following applicable laws and regulations.

3. Grazing Permit Compliance.

We received many comments through the scoping process that indicated that there have been many violations of the terms and conditions of the Term Grazing Permits associated with livestock grazing on this allotment and that permit compliance should be an issue. This general discussion is intended to answer these questions and comments. This discussion is the same for all alternatives.

Violations of the terms and conditions of the Term Grazing Permits associated with livestock grazing on this allotment is an administrative topic. It is not appropriate to carry it through the analysis of this allotment since there are already established administrative procedures for this issue. The Ely Ranger District has taken action to gain compliance with the terms and conditions of Term Grazing Permits on many of its allotments. We will continue to work with the remaining permittee on this allotment to gain permit compliance.

4. Horse Free Areas:

The Corduroy and Freeland grazing units are outside the Monte Cristo wild horse herd management area, in the Blackrock Allotment. A majority of permitted livestock use is in these two units. Some wild horses have left the horse territory and entered the horse free areas in the Blackrock allotment. The animals leave the horse territory looking for forage, clean water and areas away from other wild horses. The horses have gone through open gates, unmaintained fences and around fences to get into the horse free areas. Some of these animals use the forest in the horse free areas year round in mild winters. The horses are using some of the forage before, during and after the cattle enter and leave the allotment. They are directly competing with wildlife and livestock for forage.

The Forest Service and BLM are responsible to remove wild horses from horse free areas. The Forest Service and BLM gathered horses in the horse free area in conjunction with the wild horse roundup in the horse territory in 1995. Several horses escaped capture. These animals may have been forced off the horse free area by snow during the winter. The district has observed several horses that have come back into the area as they now know where it is. These horses may also go around fences or through open gates. These animals should be gathered during the fiscal year 1999 gather. Although there are some wild horses using this area their use is currently minor when compared to past use of the area by permitted livestock. Maintenance of fences, keeping gates closed and existing fences provide a minor barrier. The permittee and the interdisciplinary team experience indicates that any additional fencing would not help prevent horses entering horse free areas. The Forest Service and

BLM will need to continue their efforts to remove horses from the horse free areas as funding allows. Removal of wild horses from horse free areas will need to be accomplished following appropriate procedures. This issue is the same for all alternatives.

Issues Not Carried Through the Analysis:

These issues were identified through the scoping process. They are not carried through a detailed analysis because the Forest Service Interdisciplinary team felt they are beyond the scope of this document, outside the decision to be made, livestock and wild horse grazing have no affect on the issue, or the issue is mandated by law/regulation.

1. Eliminate livestock and wild horse grazing, i.e. revert back to 1825.

Eliminating wild horse grazing in wild horse territories would be against the law. The no grazing alternative is carried through the detailed analysis and would eliminate livestock grazing on the Blackrock Allotment. The issue about reverting back to 1825 would be very difficult since we are dealing with a dynamic ecosystem that is always changing. We are unsure exactly what the ecosystem contained and looked like in 1825. This issue is outside the scope of the decision to be made and will not be carried though the analysis.

2. White Pine Peak Research Natural Area (RNA):

Are grazing activities affecting the RNA?

The RNA was designated on September 13, 1988 and consists of 787 acres. It is located in the boundaries of the Blackrock Allotment but is not grazed. This "rangeland" RNA was created to serve as a much needed reference area representative of similar, regularly grazed rangelands. It is not grazed by livestock or wild horses because it is located too far from water, has a pinyon pine forest barrier and is on a steep slope. This issue is dropped from detailed analysis because grazing activities do not affect it.

3. Minerals development.

Are mineral development activities going to affect livestock grazing on the allotment?

Currently there is no active or proposed mining occurring on this allotment. There is an active mine in the adjacent allotment but it is not affecting the Blackrock Allotment. Any future mining activity would need to be analyzed through the NEPA process before it can be implemented. This issue is outside the scope of this document and will not be carried through the analysis.

4. Use Alternate Methods of Wild Horse Control.

We received comments in response to our scoping process that wanted us to consider alternative methods and sources of income for control of wild horses. The comments implied that livestock interests provide economic inputs toward improving the ecosystem whereas wild horses and their associated interests do not. This issue is beyond the scope of this document and will not be carried through the analysis.

5. Livestock grazing reduces fire danger.

Livestock grazing can reduce fine and medium plant materials that are a major component in the spread of fire. Removal of these materials by livestock help control and reduce the spread of wildfire.

Removal of excessive amounts of vegetation in an attempt to control wildfire often causes more detrimental effects to the ecosystem than some kinds of wildfire. Overgrazing can encourage fire adapted annual species, like cheatgrass, that encourage frequent wildfire. There is increasing documentation that indicates that wildfire suppression activities have allowed an increase in woody species that have harmed watersheds, riparian areas, decreased forage production for wildlife and livestock. Reintroduction of fire into this area should be considered. The specific details and requirements for such an analysis is not available at this time. This issue needs to be taken into consideration and implemented if practical in future planning documents.

This issue is not carried through the analysis in this document as it is outside the scope of the decision to be made.

6. WILDLIFE:

Grazing by livestock and wild horses and range vegetation manipulation projects can affect wildlife habitat and populations. For example, excessive forage use by livestock does not leave enough food for wildlife to build fat reserves to make it through critical weather conditions. Excessive forage use can also reduce hiding cover. Vegetative manipulation projects can remove hiding and thermal cover, simplify vegetative habitat structure and plant species diversity. Finally, concentrations of livestock and wild horses around water sources may affect the ability of wildlife to get water.

It should be noted that the above examples are generalities, and while impacts may be negative for species of concern (such as the management indicator species [MIS] goshawk, mule deer, and sage grouse) and the majority of species overall, some individual species may benefit from heavier grazing levels or vegetative manipulation.

Concern has been raised about livestock impacts to the remnant bighorn sheep herd. Bighorn sheep have been impacted throughout the west by historic grazing practices in conjunction with fire suppression, which has allowed tree cover to increase. Impacts to this bighorn sheep herd from the proposed grazing practices is expected to be minimal. Cattle grazing use rapidly diminishes as slopes get steeper than 30%. Bighorn sheep preferred habitat is very steep slopes with broken terrain. Thus a map of suitable bighorn sheep habitat would be the opposite of a map of suitable cattle grazing habitat. There is some potential for conflict at water sources. Bighorn sheep may water at springs in Corduroy Basin that are used by cattle. Implementation and enforcement of standards and guidelines should help facilitate use by bighorn sheep. Springs on the western portion of the allotment are utilized by wild horses. This could impact bighorn sheep use due to resource degradation and behavioral competition.

Goals for wildlife include maintaining populations of MIS species, maintaining viability of all wildlife species, and ensuring that sensitive species do not become likely to be listed as threatened or endangered species due to Forest Service actions. In addition, ecosystem health and productivity should be maintained for sustained use by future generations. This requires maintaining all ecosystem components while ensuring that critical ecosystem processes still function.

The best tool to achieve these goals while providing for resource use is to ensure plants are grazed to within established standards and guidelines. This provides food resources for wildlife for the

remainder of the year, allows for some cover by herbaceous and browse plants, and protects overall ecosystem productivity by ensuring adequate plant reserves.

Forage utilization standards were established thru the NEPA process and were incorporated into the Forest Plan by amendment number 2. They are mandatory for all alternatives that involve livestock grazing, and grazing practices which do not include standards and guidelines are not considered. The no grazing alternative would likely have higher initial productivity of wildlife species and faster movement towards the Desired Future Conditions, but overall wildlife species composition and distribution are not expected to differ greatly from the grazing alternatives. Since overall vegetation resources are considered as issue #2, and this issue does not substantially change between the alternatives for wildlife.

7. Wildlife competing against livestock.

During the scoping process we received comments that indicated that there is a concern that wildlife populations will compete against cattle on the allotment and the livestock carrying capacity will be reduced. The wildlife species present on this allotment that can compete with livestock are deer and elk. Deer generally eat forbs and brush, while elk and cattle generally graze grass. Deer and cattle forage conflicts on properly stocked summer range are rarely a problem. Elk and cattle can directly compete for forage resources. Currently there are 50 elk estimated to be using the 344,575 acre White Pine division. Elk have been reported to have been seen on the Blackrock allotment by permittee's. Elk utilization has not been observed on the Blackrock Allotment and is not currently a problem on the allotment. Management of established wildlife populations is done by the state of Nevada, and is not under Forest Service control. Elk population distribution and management is currently being debated at several levels throughout the state. This issue is being addressed through another planning forum. This issue is outside the scope of the decision to be made.

8. THREATENED, ENDANGERED AND SENSITIVE SPECIES

A variety of U.S. Fish and Wildlife Service (FWS) species of concern and FS region 4 sensitive species occur or have potential habitat on the Blackrock Allotment. No threatened, endangered, or proposed species were identified as potentially occurring in the project area. More detailed information can be found in the Biological Evaluation for this project and is attached as Appendix B.

Incidental foraging by sensitive birds and mammals (wildlife species) may be occurring on grazed portions of the allotment. Current management practices and the alternatives considered in this proposal are not likely to adversely impact these sensitive wildlife species.

All but one of the sensitive plants on the allotment are unlikely in areas affected by livestock grazing. Current management practices and the alternatives considered in this proposal are not likely to adversely impact these sensitive plant species. The remaining sensitive plant no longer meets sensitive species criteria, but has not yet been removed from the list. It is not of concern to the Nevada Heritage Program or FWS. Further, while a population could occur in grazed areas it would not likely be adversely impacted by the current management practices and alternatives considered in this proposal.

Suitable habitat for TES fish does not exist on this allotment. The spotted frog, a FWS candidate amphibian species, was identified as potentially occurring on the White Pine division. Springs on the allotment have low flow, are highly variable and are unlikely to have suitable spotted frog habitat. It is likely that grazing levels within standards and guidelines at healthy riparian areas would meet the needs of amphibian species that historically occupied the area.

No invertebrate species of concern were identified that occur on this allotment. Very little is known about invertebrate species present on the allotment including their habitat needs and status. All action alternatives should maintain habitat conditions necessary for their continued existence. Current management practices and the alternatives considered in this proposal would not likely jeopardize any invertebrate species.

Since the alternatives considered in this document will not affect any TES species viability, the alternatives are consistent with Forest Plan direction and the Endangered Species Act.

ALTERNATIVES:

Alternative A:

NO ACTION ALTERNATIVE:

The allotment has had two permittees in the past. Each permittee held a permit for 122 cow/calf pairs from June 21 to September 30. One permit was canceled in 1995 due to violations of the Term Grazing Permit. This leaves only one permittee with a valid Term Grazing Permit. There has been considerable discussion on whether the allotment has been stocked at full numbers for the past ten years. Paper records indicate that it has while discussion with permittee's indicates that one permittee did not run full numbers. Additional discussion indicates that the other permittee may have run numbers in excess of his permit at times. Historic numbers and season of use for this allotment do not appear to represent what was actually run. For this analysis we are using the permit numbers that have been in place for several years.

Under the existing two pasture deferred grazing system, 244 cow/calf pairs, are permitted to graze the Blackrock Allotment with an authorized season from June 21 to September 30. The rotation schedule can be seen in table 1 below.

Table 1: Current Rotation:

ROTATION SCHEDULE

UNIT	NUMBER/KIND	1998	1999	2000
FREELAND SPR.	244 C/C	8/11-9/30	6/21-8/10	repeat 1998
CORDUROY BASIN	244 C/C	6/21-8/10	8/11-9/30	repeat 1998

*Dates for rotation are to be considered approximate, actual dates will be determined by utilization levels. When utilization levels are reached for a particular unit, the allotment as a whole, or if it is the end of the grazing season, the cattle will be removed.

Monitoring and past experience have shown that the permittees would not be able to graze this many livestock for this period of use without having to take the livestock home early due to exceeding forage utilization standards unless additional available range can be added to this allotment. Distributing livestock through riding and salting practices should still exceed

forage utilization levels due to the limited available range. Exceeding forage utilization standards will result in resource conditions that are unacceptable in the Forest Plan. In the past cattle used browse species after utilizing much of the accessible grass species. Removing the cattle before the end of the grazing season creates a difficult situation for the permittee in that he/she must find somewhere else to graze the animals and remove them from the allotment in conditions that are often less than desirable.

The Ely Ranger District cooperated with the Ely BLM when the BLM set their AML. When the BLM AML was established personnel from the Ely Ranger District felt that the AML was for the entire wild horse territory since the horses move back and forth from the BLM to the Forest. The BLM document that established the AML did not make this assumption clear. Therefore an AML for the Forest was not documented in the BLM decision which could cause confusion by some agency personnel and the public. Therefore, the AML would not be clarified and the potential for confusion would still remains under the No Action Alternative.

Mitigation measures:

Actual grazing use is based on forage utilization standards. Forage utilization standards for this alternative can be seen in Appendix C attached to this document. The livestock operator would still be held accountable for moving his livestock to the next unit or off the forest when utilization standards are met as required by his Term Grazing Permit.

The structural range improvements shown in table D-1, Appendix D will continue to be maintained by the designated entity.

Alternative B:

DEFERRED GRAZING/ REDUCED NUMBERS ALTERNATIVE:

This alternative is based on forage utilization monitoring observations where cattle where moved to the next unit or off the Forest when utilization levels where met or exceeded. The permitte supplied the Forest Service with the number of animals he was running. These observations indicated that an average of 135 headmonths before utilization standards were met. This alternative uses that headmonth figure and compresses the permitted time and increases the number of animals.

The livestock grazing season will be for 46 days. For two years the season of use will be 7/1 to 8/15 alternating use and deferring pastures. The following two years the season of use will be 7/16 to 8/30 (see table 2 below). A unit will only receive early spring use 1 year out of 4. The total number of permitted head months (HMs) is 135 which equals 88 cow/calf pairs for 46 days. The rotating timing of use along with deferring the pastures should improve ecological conditions of the plants because they will be grazed at the same time 1 out of every 4 years. The grazing season and stocking levels reflect monitoring results from past grazing seasons. This capacity is based on minimal management in riding, salting and structural maintenance.

Table 2:

ROTATION SCHEDULE

UNIT	NUMBER/ KIND	1998	1999	2000	2001	2002+
CORDUROY BASIN	88 C/C	7/16-8/15 31 days	7/1-7/23 31 days	8/8-8/30 31 days	7/16-8/7 31 days	repeat 1998+
FREELAND SPRING	88 C/C	7/1-7/15 15 days	7/24-8/15 15 days	7/16-8/7 15 days	8/8-8/30 15 days	repeat 1998+

Dates of use are approximate. Actual dates of leaving the early pasture and entering the late pasture will still depend upon when maximum allowable use levels of riparian and/or upland is reached. When utilization levels are reached for a particular unit, or the allotment as a whole, the cattle will be removed.

This alternative will continue wild horse use on the Forest Service Portion of the Monte Cristo Wild Horse Territory. The AML established by the BLM is considered an appropriate management level for the Territory, including the Forest Service portion. See the discussion in Issue 1 page 2-3 and in Alternative A for more information on why this decision may be appropriate.

Implementation of this grazing system and AML will also include the following mitigation measures.

Mitigation measures:

In this alternative, recommended livestock grazing levels have been reduced from the levels previously permitted to coincide with the numbers indicated by forage utilization monitoring. A reduction was expected and agreed to by the permittee in an MOU. Studies indicate that permitted numbers needed to be reduced to this level in order to bring grazing levels in compliance with the utilization levels in the Term Grazing Permit in order to improve resource conditions.

Actual grazing use will be based on the same utilization standards as shown in appendix C, with the changes that were established by the ID team as shown by the # sign in the table located in Appendix C. Livestock will be moved to the next unit or removed when utilization levels are achieved. The Term Grazing Permit, Annual Operating Plan, and other planning documents will be adjusted to reflect the average of the earlier or later removal dates for the allotment as a whole or between units. Exceeding the maximum allowable use levels prescribed for an area is a violation of the Terms and Conditions of the Term Grazing Permit.

This alternative recommends improving or extending the structures in Table D-2, Appendix D to facilitate livestock management. The Forest Service will provide the materials and the permittee will provide the labor and installation. This alternative also recommends removing the structures in table D-3 Appendix D as they are no longer used and cause unnecessary maintenance cost to the permittee and the Forest Service.

Alternative C:

NO LIVESTOCK GRAZING ALTERNATIVE:

This alternative is not to be confused with the no action alternative. Under this alternative livestock grazing would not be allowed. The existing grazing permit would not be renewed and the allotment would be closed to livestock grazing. The resources would be allocated to wildlife use. The wild horse AML will be clarified as discussed in Alternative B.

Mitigation measures:

Maintenance of the structures listed in Appendix D, table D-4 will need to be completed by the entities shown in the table.

The structures listed in Appendix D, table D-5 will need to be removed by the Forest Service.

Alternative D:

ALTERNATE YEAR GRAZING / REST ROTATION

The Rangeland Management Specialists on the ID team discussed the above alternatives with the permittee on May 12, 1997. The intent of the meeting was to discuss the alternatives with the remaining permittee on the allotment to determine if he could complete the proposed actions and to see if he could help improve the alternatives. The permittee suggested an additional alternative and the ID team feels it has merit. The permittee is concerned that the proposed action of alternative B limits his grazing season and number of animals too much. The deferred system also places to much stress on his animals when they are put on the allotment late or taken off the allotment early due to the heat typically present at that time of year. The Corduroy Basin unit does not lend itself well to being the first unit due to elevation and location. Therefore, this alternative tries to accommodate those concerns.

The season of use for this alternative will be From June 24 through August 22. The permitted number will be 100 cow/calf pairs which is 200 HMs during the years the allotment is grazed. The rotation will be to use the Freeland unit first and the Corduroy Basin unit second. The allotment will be rested from livestock use every odd year. Table 3 gives a graphic representation of this alternative.

Table 3:

ROTATION SCHEDULE

UNIT	NUMBER/KIND	EVEN YEARS	ODD YEARS
FREELAND SPRING	100 C/C	6/24-7/13 20 days	REST
CORDUROY BASIN	100 C/C	7/14-8/22 40 days	REST

Dates of use are approximate. Actual dates of leaving the early pasture and entering the late pasture will still depend upon when maximum allowable use levels of riparian and/or upland is reached. When utilization levels are reached for a particular unit, or the allotment as a whole, the cattle will be removed.

This alternative will continue wild horse use on the portion of the Blackrock Allotment as discussed in Alternative B.

Implementation of this grazing system and AML will also include the following mitigation measures.

Mitigation measures:

In this alternative, recommended livestock grazing levels have been reduced from the levels previously permitted. Years that the allotment is grazed there will be more HM's permitted that the numbers indicated by forage utilization monitoring. But the forage will be allowed a growing season of rest before being grazed again. The permittee should have some of the previous years growth to assist in keeping the cattle out of the riparian areas, and increasing the forage base. A reduction was expected and agreed to by the permittee in an MOU. Studies indicate that permitted numbers needed to be reduced over past levels in order to bring grazing use in compliance with the utilization levels in the Term Grazing Permit that will improve resource conditions.

Actual grazing use will be based on the utilization standards the ID team established in Appendix C. Since this is a rest rotation grazing system, the amount of utilization by livestock will increase, but the rest year should provide better overall management and resource condition. Livestock will be moved to the next unit or removed when utilization levels are achieved. The Term Grazing Permit, Annual Operating Plan, and other planning documents will be adjusted to reflect the average of the earlier or later removal dates for the allotment as a whole or between units. Exceeding the maximum allowable use levels prescribed for an area is a violation of the Terms and Conditions of the Term Grazing Permit.

This alternative recommends maintaining the improvements in Table D-1 and improving or extending the structures in Table D-2, Appendix D to facilitate livestock management. The Forest Service will provide the materials and the permittee will provide the labor and installation. This alternative also recommends removing the structures in table D-3 Appendix D as they are no longer used and cause unnecessary maintenance cost to the permittee and the Forest Service.

ALTERNATIVES CONSIDERED BUT ELIMINATED FROM DETAILED STUDY

REST ROTATION ALTERNATIVE:

This alternative could have similar seasons of use and stocking levels as presented in the 2 pasture deferred rotation system discussed above. Standards and guidelines would remain approximately the same. This Alternative could rest one of the two existing units every year. Due to the unequal size and capacity of the units this option would cause large yearly fluctuations of livestock that would be economically unfeasible for the livestock permittee.

This Alternative could require additional fencing through the Corduroy basin unit. This additional fencing would not be considered very cost effective and the permittee agrees that it would create a livestock management problem.

COMBINE WITH TREASURE HILL ALLOTMENT:

The permittee grazes cattle on the adjacent Treasure Hill Allotment. The two allotments could be combined. The two Blackrock units would then work into the rotation from Treasure Hill. The permittee would not be allowed to increase his total permitted number but would use the Blackrock Allotment in addition to the Treasure Hill Allotment. Combining the two allotments may be desirable to help offset possible future reductions on the Treasure Hill Allotment. This alternative would have the same season of use and livestock numbers as the 2 pasture deferred rotation alternative discussed earlier. This alternative may be revisited when a future analysis is done for the Treasure Hill Allotment. This alternative was dropped from detailed analysis because it is very similar to the 2 pasture deferred rotation alternative.

COMBINE WITH ELLISON BASIN ALLOTMENT

If the Blackrock Allotment becomes vacant then it could be combined with the Ellison Basin Allotment. The permittee would not be allowed to increase his total permitted number but would use the Blackrock Allotment in addition to the Ellison Basin Allotment. The Ellison Basin Allotment Boundary will be expanded to incorporate the Blackrock Allotment. A new allotment will then exist. The permitted numbers (HMs) and grazing scheme would be the same as in Alternative B. It was noted that the environmental consequences would be the same as alternative B. Combining the two allotments may be desireable to help offset possible future reductions on the Ellison Basin Allotment.

This alternative was dropped from detailed analysis because the Blackrock allotment is not vacant.

COMBINE WITH CURRANT CREEK ALLOTMENT

This Alternative would be the same as alternative D except the Currant Creek Allotment would be combined with the Blackrock Allotment rather than having the Ellison Basin Allotment combine with the Blackrock Allotment. It should be noted that the Ellison Basin Allotment logically combines with the Blackrock Allotment better due to physical location of the suitable ranges. Combining the Blackrock and Currant Creek Allotments would result in a linear allotment that would be difficult to manage.

This alternative was dropped from detailed analysis because the Blackrock allotment is not vacant.

ENVIRONMENTAL CONSEQUENCES

This section discloses the environmental consequences of implementing the alternatives. Professional expertise and experience with similar projects in similar settings was used by the interdisciplinary team members to evaluate the effects of the alternatives to the issues carried through the analysis.

1. WILD HORSE TERRITORY:

Alternative A: No Action.

As discussed in the issue 1 page 3, Since there would be no "official" documentation of the AML for the area, the confusion and uncertainty associated with the appropriate management level (AML) would remain.

Environmental Effects for Alternatives B-D.

The confusion and uncertainty associated with the wild horse AML would no longer exist. The BLM AML would drive the management of this portion of the Monte Crito Wild Horse Territory. The AML will more closely reflect the level of use and numbers necessary to manage the animals in a manner that achieves a thriving natural ecological balance on the public lands as directed in the Wild Horse and Burros Protection Act of 1971.

2. RESOURCE CONDITIONS/MONITORING:

Alternative A: No Action.

This stocking level has resulted in forage utilization levels being consistently exceeded on the riparian areas, in the past. Which corresponds to degradation of the riparian areas. Livestock have been requested to leave the allotment early into the permitted grazing season. Removal of livestock early during the heat of the summer has proven to be difficult and has resulted in some missed cattle exceeding the forage utilization standards even farther. This is a violation of the Terms and Conditions of the Term Grazing permit and could result in some severe action being taken against the permit.

Alternative B: Two Pasture Deferred Rotation.

The stocking rate would be established at a level that is expected to meet the forage utilization levels based on past monitoring and observations. Achieving the forage utilization standards contained in the Term Grazing Permit and EA is expected to improve riparian and upland resource conditions. The stocking levels have been adjusted to closely reflect existing monitoring data and research. These lower stocking levels will reduce the intensity of the monitoring requirements by both the permittee and the Forest Service to ensure that these levels are not exceeded.

Alternative C: No Grazing.

Resource conditions would be expected to improve faster than the no action alternative and move toward a more natural ecosystem due to the absence of livestock grazing. The confusion and uncertainty associated with the wild horse AML and any potential for allowed overstocking would be reduced. Wildhorse use would continue to require monitoring.

Alternative D: Alternate Year Grazing.

The stocking rate would be established at a level that is higher than the level expected to meet the forage utilization levels based on past monitoring and observations, but the entire Allotment would be rested from grazing every other year. The utilization levels would be less stringent due to the rest rotation grazing system. Therefore the HM's of available forage would

also change a little as a result. The higher number of livestock grazing in the unit would help the permittee justify spending more time moving the livestock away from riparian areas to increase utilization on the uplands through use of a rider if necessary. One seasons rest would allow the plants an additional period of rest to recover from the previous seasons grazing use. Achieving the forage utilization standards contained in the Term Grazing Permit and EA is expected to improve riparian and upland resource conditions. The stocking levels have been adjusted to closely reflect existing monitoring data and research. These lower stocking levels will reduce the intensity of the monitoring requirements by both the permittee and the Forest Service to ensure that these levels are not exceeded.

3. HERITAGE RESOURCES:

Effects of all grazing Alternatives:

With one exception the availability of information regarding the location of historic properties and the effects of grazing on historic properties located in the allotment is currently inadequate to assess the effects of grazing. In order to assess the effects of grazing in the allotment and in order to comply with the stipulations in the Rangeland Management MOU between the Forest and the State Historic Preservation Office an inventory program designed to locate, identify, and evaluate the historic properties in this allotment needs to be implemented. With that background inventory information steps could then be taken to protect the significant historic properties within the allotment. This could be accomplished by moving structures which currently result in the concentration of livestock on heritage resource properties. Prior to the relocation of range structures or facilities the areas to receive the improvements would need to be inventoried for heritage resources and the improvements would need to be designed to avoid any potential impacts to heritage resources.

Alternative A: No Action.

Under the No Action Alternative the allotment would continue to be grazed by up to 244 cow calf pairs from June 21 to September 30. Under this alternative there would be no measures taken to improve the range or protect heritage properties. Cattle would continue following the same movement patterns and concentrating in the same areas as the past. There would be no change in distribution of animals in the allotment and impacts are expected to be consistent with recent historic use in the area.

Alternative B: Two Pasture Deferred Rotation.

Under this alternative the allotment stocking levels would be reduced down to 88 cow calf pairs the period of time between July 1 to August 15. The reduced numbers and the reduced duration may reduce the amount of damage caused to heritage resources within the allotment. Also as part of this alternative some herding should occur which is designed to disperse distribution of livestock and utilization of forage. The potential effects of this on heritage resources is unknown. It may relieve some of the pressure on sites where animals have historically concentrated. It may also move stock on to sites which have not been impacted in the past.

Proposed improvements identified in this alternative would be implemented only after a section 106 review. During that review opportunities for site protection would be determined and worked into the undertaking. It is further recommended that during the section 106 review

process for the identified improvements additional acreage, around the improvement, be inventoried to identify sites which may be adversely impacted by the movement and/or concentration of cattle.

Alternative C: No Grazing.

Under this alternative damage to Historic Properties resulting from 1) the concentration of livestock on historic properties, and/or 2) construction and maintenance of grazing facilities and operations of permittees in the immediate vicinity of historic properties would be reduced since there would be no cattle grazing in the allotment and no construction or maintenance of grazing facilities. The potential for damage to historic properties would continue however from wild horse use in the allotment.

Alternative D: Alternate Year Grazing.

Under this alternative the number of stock using the allotment would be reduced to 100 cow/calf pairs from June 24 to August 22 on even years and rested on odd years. The effects of this would be similar as to the Alternative B with the potential added benefit that with the years rest between each cycle of use may provided additional protection to the sites in the allotment. As with Alternative B any proposed improvements would be implemented only after a section 106 review. During that review opportunities for site protection would be determined and worked into the undertaking. It is further recommended that during the section 106 review process for the identified improvements additional acreage, around the improvement, be inventoried to identify sites which may be adversely impacted by the movement and/or concentration of cattle.

4. ECONOMICS:

Alternative A: No Action.

Economic effects to the livestock permittee would remain uncertain. The permittee would need to continue maintenance of 18 water developments and 18.6 miles of fence. The permittee would continue to be responsible to ensure that he does not exceed the forage utilization standards as established in his Term Grazing Permit. This would require several trips to the Allotment a week in order to properly monitor forage utilization levels. The trips to the allotment would increase when forage utilization standards are close to being met. The permittee would want to have a rider or someone constantly moving cattle out of the riparian areas to prevent exceeding utilization standards. Even though the permittee is able to comply with the above needs he would be unable to count on being able to use the allotment for the entire season of use. Past studies have shown that he would be required to remove the livestock early and at various times depending on the year. The permittee would need to find an alternate source of forage for 122 cow/calf pairs in a short period of time if he were about to exceed forage utilization standards. The actual economic effects for the rancher are unknown.

The economic effects to the local, state and federal economy would remain as in the recent past as long as the rancher were able to continue to use the allotment for the entire season. If the permittee were able to run on the allotment for the entire permitted season then this alternative would produce 830 HMs of forage every two years. It is expected that the rancher would have to seek alternate sources of forage for part of the time which would result in unknown effects to the local, state and federal economy.

Alternative B: Two Pasture Deferred Rotation.

Immediate economic effects to the livestock permittee would be negative because he would be allowed to graze 560 less head months in a two year grazing cycle. Overall economic effects to the permittee are difficult to determine. Some stability would result since permittee should be able to count on a more consistent grazing season because forage utilization levels are not expected to be exceeded in as short a time frame as in Alternative A. The permittee would continue to be responsible for 18 water developments and 18.6 miles of fence. The actual economic effects for the ranch would remain unknown.

The local economy would lose the revenue associated with 560 head months of livestock grazing on the National Forest for every two year cycle; but may increase some types of revenue due to increased production on private land or additional leases that could result on other lands. If the permittee were able to run on the allotment for the entire permitted season then this alternative would produce 270 HMs of forage every two years.

The overall economy should eventually see an improvement over alternative A due to the improvement of the natural resources of the Blackrock Allotment and the associated improvement of the Allotments condition. The economic effects on the federal economy would be negligible from the existing condition.

Alternative C: No Grazing.

Economic impacts to the existing permittee is expected to decrease his overall income through the loss of his head months for the Blackrock Allotment. The permittee would gain time and operating costs because he would no longer have the expense of maintaining 18 water developments and 18.6 miles of fence. The permittee would not have to commit his time and put miles on his vehicles to ensure that forage utilization standards and guidelines are not exceeded along with the extra work (riding, trailing, etc.) associated with livestock grazing on the Blackrock Allotment. The permittee may be able to gain some head months on his other holdings since he should have more time and resources available to improve his private land and other allotments.

Economic impacts to the local economy through decreases in tax money associated with livestock numbers is very difficult to determine since the county does not keep accurate records of this information. In addition it is difficult to determine the impacts to the local economy through fencing supplies, fuel etc. that are associated with grazing the Blackrock Allotment. Any numbers used for an analysis in this document would not be accurate. If wildlife populations and associated recreation increase due to less livestock grazing it may increase contributions of that source to the local economy associated with this alternative. The overall economy should eventually see an improvement over alternative A due to the improvement of the natural resources of the Blackrock Allotment and the associated improvement of the Allotments condition. Economic return at the federal level would decrease a little because the Forest Service would need to maintain fence formerly maintained by the permittee but monitoring and personnel time requirements associated with livestock grazing would be reduced. Economics of this alternative remain unknown.

Alternative D: Alternate Year Grazing.

Immediate economic effects to the livestock permittee would be negative because he would be allowed to graze 630 less head months in a two year grazing cycle. Overall economic effects

to the permittee are difficult to determine. Some stability would result since permittee should be able to count on a more consistent grazing season because forage utilization levels are not expected to be exceeded in as short a time frame as in Alternative A. The permittee would continue to be responsible for 18 water developments and 18.6 miles of fence. The actual economic effects for the ranch would remain unknown.

The local economy would lose the revenue associated with 630 head months of livestock grazing on the National Forest for every two year cycle; but may increase some types of revenue due to increased production on private land or additional leases that could result on other lands. If the permittee were able to run on the allotment for the entire permitted season then this alternative would produce 200 HMs of forage every two years.

The overall econonomy should eventually see an improvement over alternative A due to the improvement of the natural resources of the Blackrock Allotment and the associated improvement of the Allotments condition. The economic effects on the federal economy would be negligible from the existing condition.

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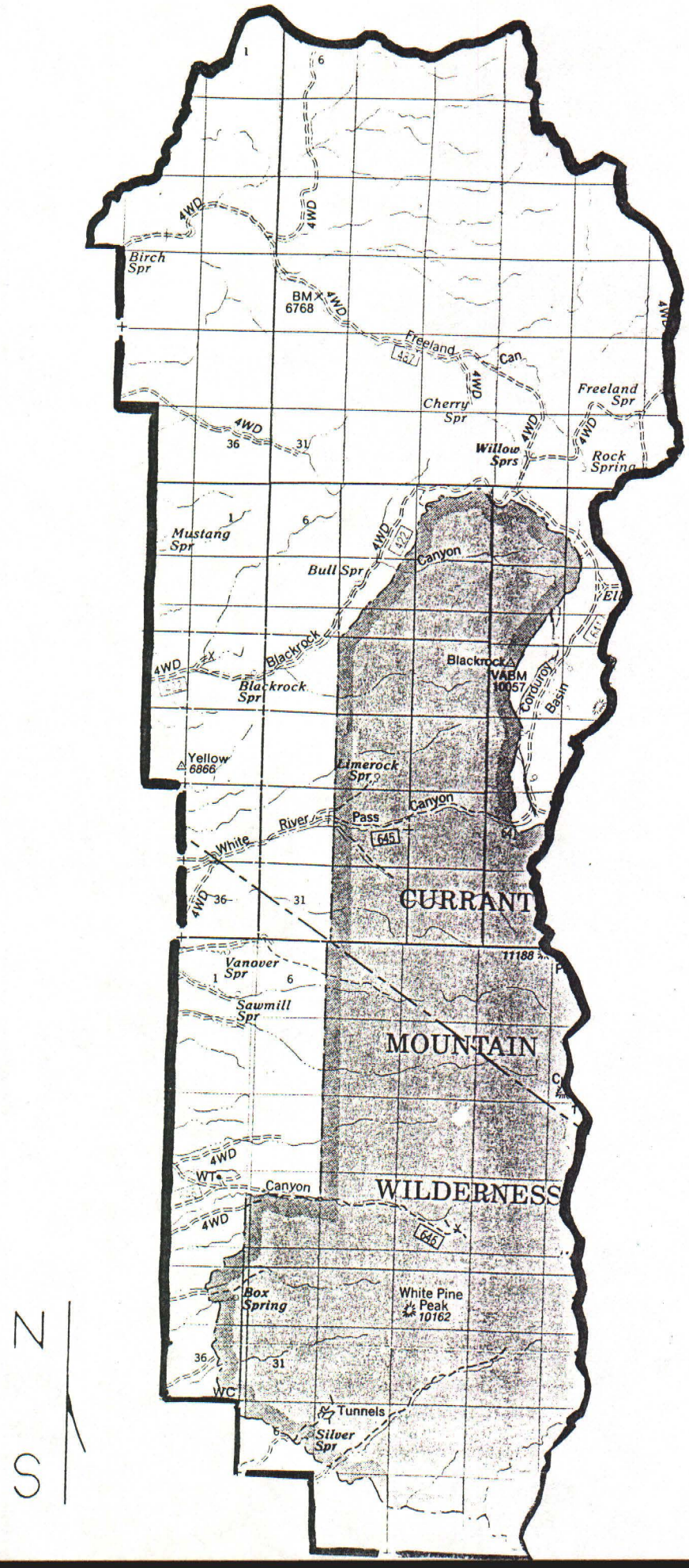
APPENDIX A

MAPS

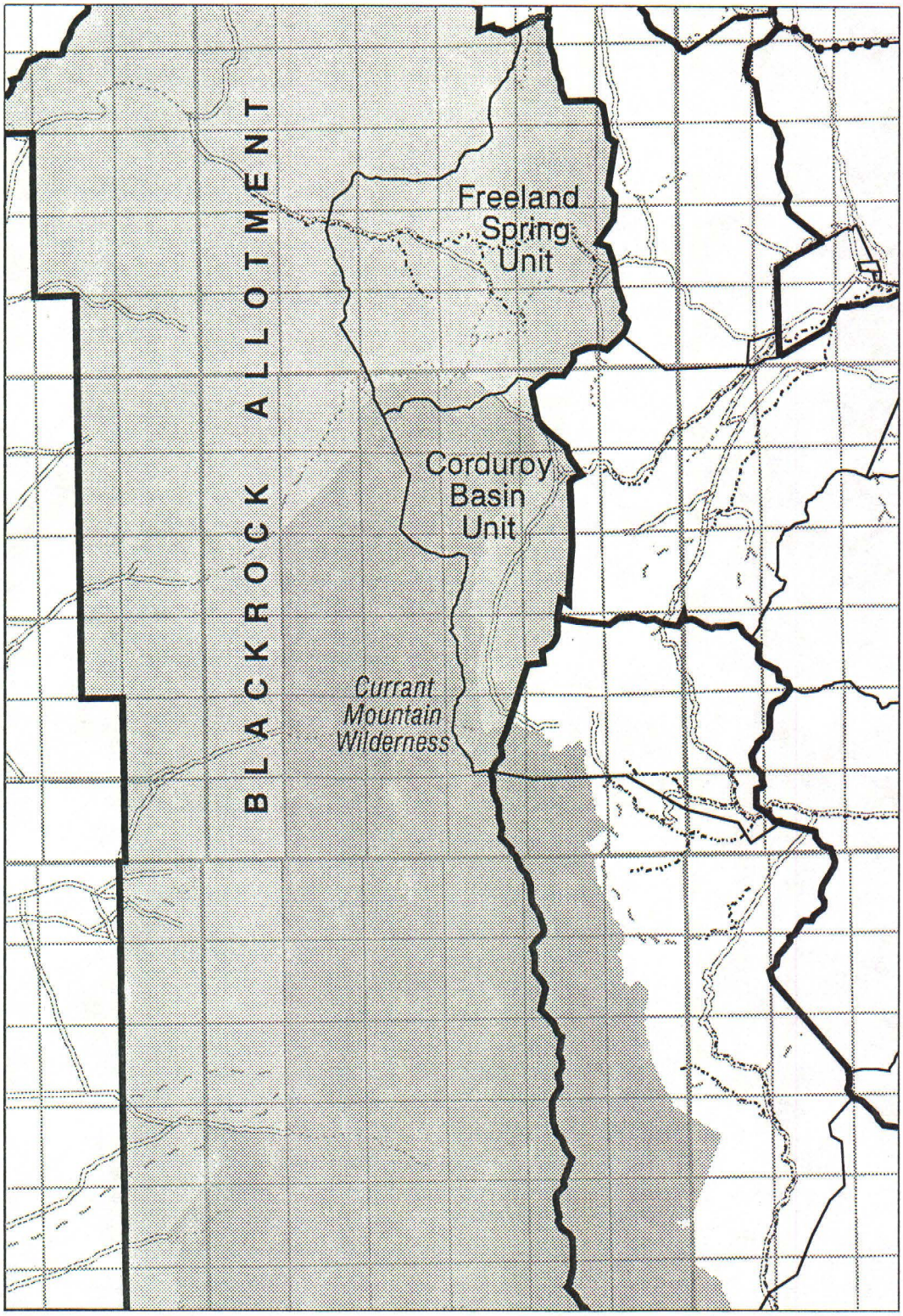
BLACKROCK ALLOTMENT



White Pine Division, Ely Ranger District

Humboldt-Toiyabe National Forest

Blackrock Allotment



Allotments
- Allotment Bdy
- Allotment Bdy/fn
- Unit Bdy
- drift fence
- fence

Roads
- 1-Primary Hwy
- 2-Secondary Hwy
- 3-Improved,Paved
- 4-Improved,Grav
- 5-Improved,Dirt
- 6-Unimproved
- 7-Unimproved,4WD

Trails
- trail

Streams
- Stream-perrenial

Boundary
- National Forest

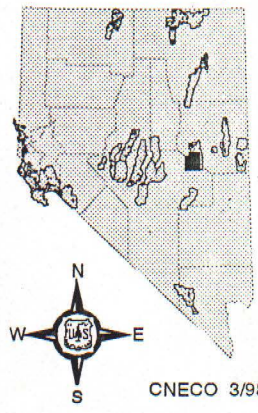
Pls
- Section Line
- Township Line

Wilderness
- FPA
- WSA
- Wilderness
- Allotments

Nfs
- National Forest

1 0 1 2 3 4 5 Miles

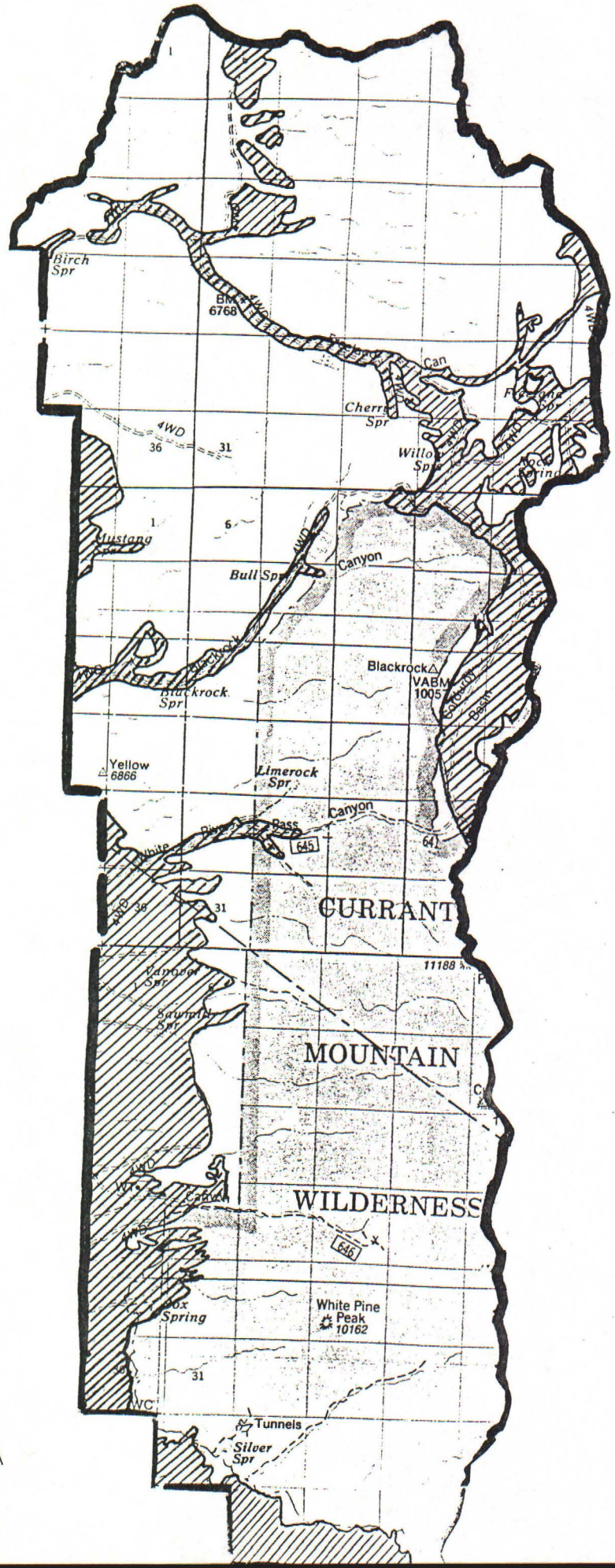
SCALE 1:126720



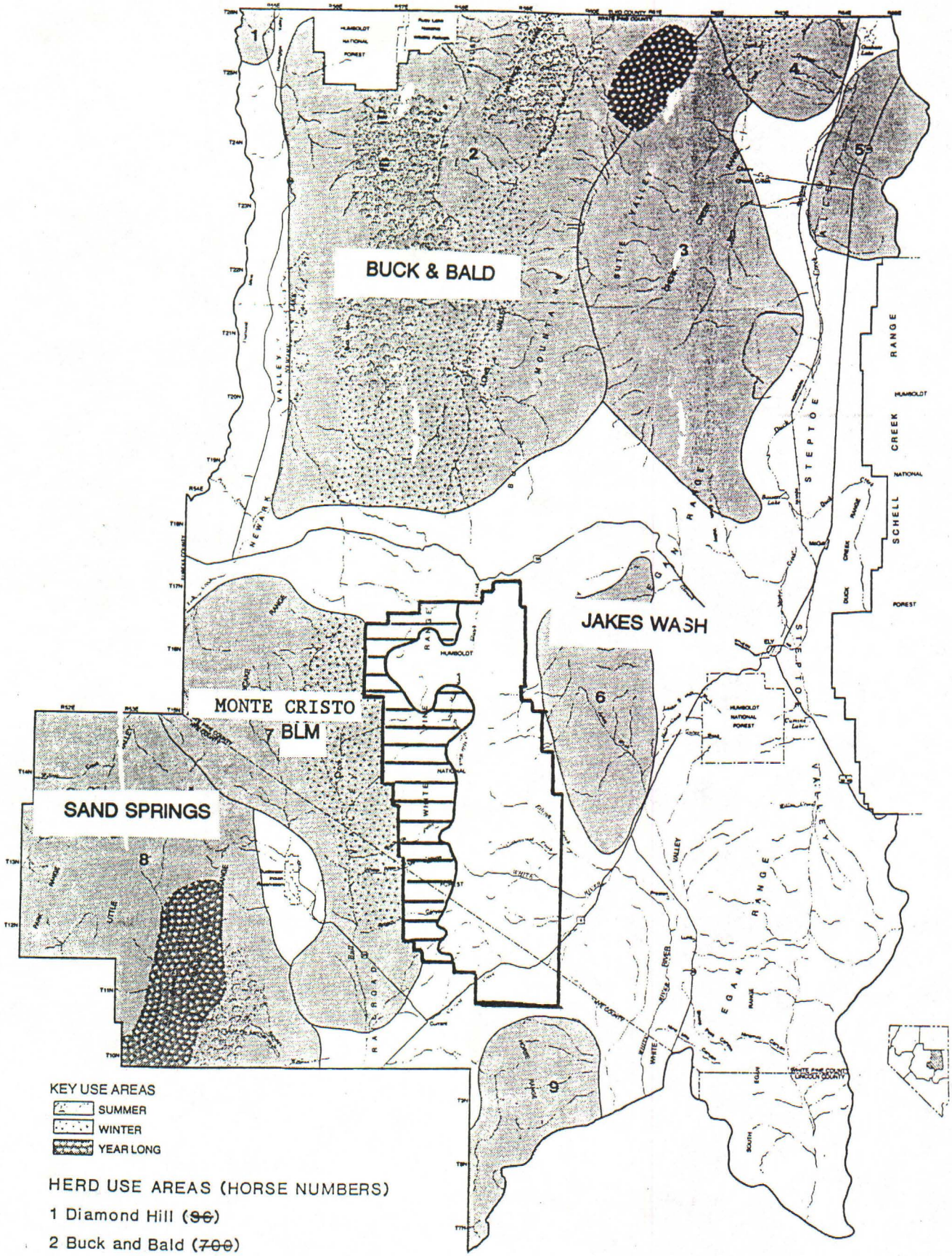
This GIS product was compiled from various sources and may be corrected, updated, modified, or replaced at any time. For more information contact: Central Nevada Ecosystem, Ely, Nevada (702) 289-3031

CNECO 3/98

BLACKROCK ALLOTMENT



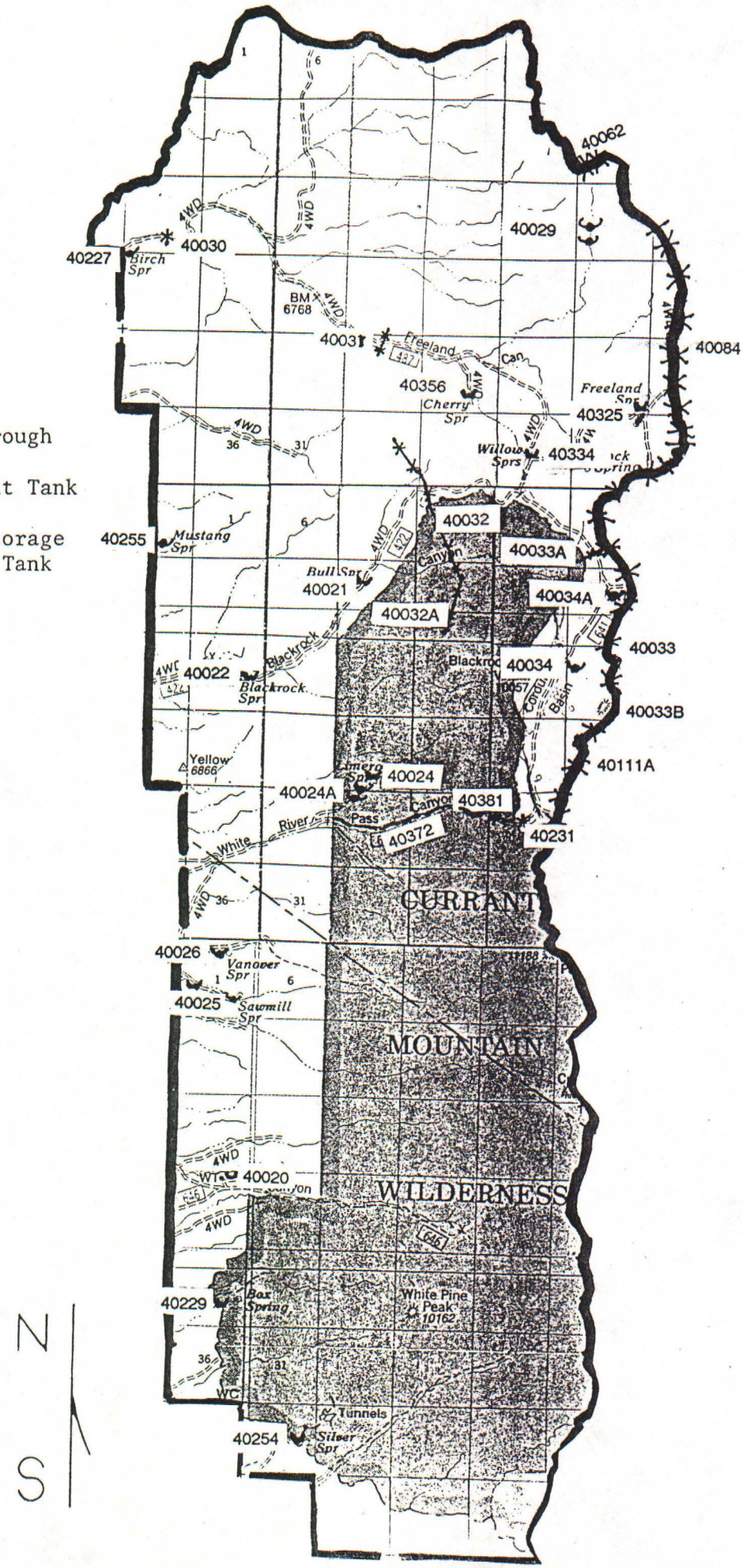
Suitable Range


BUCK & BALD
JAKES WASH
MONTE CRISTO
BLM
SAND SPRINGS
1
2
3
4
5
6
7
8
9
KEY USE AREAS
SUMMER
WINTER
YEAR LONG
HERD USE AREAS (HORSE NUMBERS)
1 Diamond Hill (~~96~~)
2 Buck and Bald (~~700~~)
3 Butte (60)
4 Cherry Creek (11)
5 Antelope (14)
6 Jakes Wash (20)
7 Monte Cristo (96)
8 Sand Springs (494)
9 White River (20)
MONTE CRISTO
USFS
UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
EGAN RECORD OF DECISION
WILD HORSE HERD USE AREAS
1
1986

BLACKROCK ALLOTMENT

RANGE IMPROVEMENTS

- Water Development - trough
- Water Development - Pit Tank
- Water Development - Storage Tank
- Fence
- Stock Trail



APPENDIX B

BIOLOGICAL EVALUATION

(Specific locations of known or suspected sensitive species occurrances have been deleted)

APPENDIX C

TABLE CONTAINING

ALLOWABLE USE LEVELS

UTILIZATION STANDARDS AND GUIDELINES FOR THE BLACKROCK ALLOTMENT
Deferred Rotation Grazing
Alternatives A & B

ALLOTMENT	UNIT	CATEGORY	RIPARIAN	UP-LANDS
BLACKROCK	ENTIRE ALLOTMENT		BROWSE 35%	GRASS/ SHRUB 60% 50%
	CORDUROY CLUSTER	I	GRASS/ SEDGE 45%	
	FREELAND SPRING#	II	45%	
	BOX SPRING		45%	
	SILVER SPRING		45%	
	VANOVER SPRING		45%	
	WHITE RIVER*		45%	
	SAWMILL SPRING*		45%	
	BROOM CREEK*		45%	
	FREELAND CREEK# T14N R58E S26, 27	III	55% 55%	
	ROCK SPRING		55%	
	WILLOW SPRING		55%	
	CHERRY SPRING		55%	
	BIRCH SPRING	IV	55%	
	WHITE RIVER		55%	
	SAWMILL SPRING		55%	
	BROOM CREEK	V	60%	
	BULL SPRING		60%	

ALLOTMENT	UNIT	CATEGORY	RIPARIAN	UP-LANDS
	BLACKROCK SPRING		60%	
	BLACKROCK CREEK		60%	
	MUSTANG SPRING		60%	
	FREELAND CREEK# T14N R57E S13, 14, 24 T 14N R58E S19, 20, 28, 29		60%	

* These riparian areas are within the Currant Wilderness Area.

These riparian categorizations were changed by the I.D. Team on 11/21/91. They are now a part of the current Term Grazing permit and Annual Operating Plans.

UTILIZATION STANDARDS AND GUIDELINES FOR THE BLACKROCK ALLOTMENT
Rest Rotation Grazing
Alternative D

ALLOTMENT	UNIT	CATEGORY	RIPARIAN	UP-LANDS
BLACKROCK	ENTIRE ALLOTMENT		BROWSE 35%	GRASS/ SHRUB 65% 50%
	CORDUROY CLUSTER	I	GRASS/ SEDGE 45%	
	FREELAND SPRING	II	45%	
	BOX SPRING		45%	
	SILVER SPRING		45%	
	VANOVER SPRING		45%	
	WHITE RIVER*		45%	
	SAWMILL SPRING*		45%	

ALLOTMENT	UNIT	CATEGORY	RIPARIAN	UP-LANDS
	BROOM CREEK*		45%	
	FREELAND CREEK T14N R58E S26, 27	III	60% 60%	
	ROCK SPRING		60%	
	WILLOW SPRING		60%	
	CHERRY SPRING		60%	
	BIRCH SPRING	IV	60%	
	WHITE RIVER		60%	
	SAWMILL SPRING		60%	
	BROOM CREEK	V	65%	
	BULL SPRING		65%	
	BLACKROCK SPRING		65%	
	BLACKROCK CREEK		65%	
	MUSTANG SPRING		65%	
	FREELAND CREEK T14N R57E S13, 14, 24 T 14N R58E S19, 20, 28, 29		65%	

* These riparian areas are within the Currant Wilderness Area.

APPENDIX D

TABLE CONTAINING

RANGE STRUCTURE INFORMATION

The following structures (Table D-1) are needed to run livestock on the Blackrock allotment **In all grazing alternatives**. They currently need regular maintenance and are not scheduled to be replaced. The permittee is required to maintain these improvements prior to livestock turnout.

Table D-1

TYPE	MAP #	LOCATION	UNITS	NAME	MAINTENANCE RESP.
Pipelines & Troughs	40022	Sec.13,T13N,R57E	.25 Mi /2 Troughs	Blackrock Pipeline & Troughs	Nat'l Mustang Assoc.
Pit Tanks	40026	Sec.1,T12N,R57E	2	Vanover Pit Tanks	Permittee
Pipeline & Troughs	40229	Sec.25,T12N,R57E	.25 Mi /1 Trough	Box Spring Pipeline & Trough	Nat'l Mustang Assoc.
Pit Tanks	40029	Sec.14,T14N,R58E	2	Upper Freeland Pit Tanks	Permittee
Fence	40030	Sec.14,T14N,R57E	.1 Mi	Lower Freeland Fence	Permittee
Fence	40031	Sec.29,T14N,R58E	5 Mi	Freeland Fence	Permittee
Fence	40032	Sec.33,T14N,R58E Sec.4,T13N,R58E	.75 Mi	Blackrock Cyn. Drift Fence	Permittee
Fence	40033	Sec.2,11/14,T13N,R58E	1.5 Mi & 2 Mi	Corduroy Mountain Fence	Permittee
Fence	40033A	Sec.2.T13N,R58E	.2 Mi	Corduroy Mountain Fence Ext.	Permittee
Fence	40033B	Sec.14,T13N,R58E	2.3 Mi	Corduroy Mountain Fence	Permittee
Pit Tank	40034A	Sec.11,T13N,R58E	1	Corduroy Water Deve.	Permittee
Fence	40062	Sec.11,T14N,R58E	.5 Mi	Indian Garden Drift Fence	Permittee Tom Plain Allotment
Fence	40084	Sec.11/14/24 /25/35/36,T14N,R58E	5.0 Mi	Ellison Black Bdry Fence	Permittee for Ellison Basin Allotment
Fence	40111	Sec.22/27,T14N,R58E	.2 Mi	White River Pass Drift Fence	Permittee for Currant Creek Allotment
Fence	40111A	Sec.23,T13N,R58E	1.0 MI	White River Pass Drift Fence	Permittee for Currant Creek Allotment
Trough	40254	Sec.6,T11N,R58E	1	Silver Spring	Permittee
Trough	40334	Sec,34,T14N,R58E	1	Willow Spring	Permittee
Trough	40356	Sec.28,T14N,R58E	1	Cherry Spring	Permittee
Trough	40021	Sec.7,T13N,R58E	1	Bull Spring	Permittee
Pipeline/Troughs	40025	Sec.1,T12N,R57E	.3 mi/2 troughs	Sawmill Pipeline & Troughs	Permittee
Pit Tank	40034	Sec.14,T13N,R58E	1	Corduroy Water Dev.	Permittee

TYPE	MAP #	LOCATION	UNITS	NAME	MAINTENANCE RESP.
Pit Tank	40225	Sec.2,T13N,R57E	1	Mustang Spr. Water Dev.	Permittee
Pit Tank	40227	Sec.23,T14N,R57E	1	Birch Spr. Water Dev.	Permittee
Trough	40235	Sec.26,T14N,R58E	1	Freeland Spr. Water Dev.	Permittee

The following structures (Table D-2) need to be replaced or relocated and are necessary to run livestock on the Blackrock allotment in **Alternatives B and D**. The permittee and Forest Service will cost share the improvement costs. The permittee will be responsible to maintain the improvements prior to livestock turnout.

Table D-2

TYPE	MAP #	LOCATION	UNITS	NAME	DISCUSSION
Trough	40021	Sec.7,T13N,R58E	1	Bull Spring W.D.	Replace trough, preferably with rubber tire trough.
Pipelines & Troughs	40025	Sec.1T12N,R57E	.3 Mi /2 Troughs	Sawmill Pipeline & Troughs	Re-level trough
Pit Tank	40034	Sec.14,T13N,R58E	1	Corduroy Water Dev.	Pit tank needs to be cleaned out.
Pit Tank	40225	Sec.2,T13N,R57E	1 Mustang Spring Water Dev.		Water source needs protection (fencing) Pit tank needs to be cleaned out and protected or reinforced. Water should be piped onto the BLM. Wild Horse interests should have maint. resp.
Pit Tank	40227	Sec.23,T14N,R57E	1	Birch Spring Water Dev.	Fence around water source needs to be replaced.
Trough	40235	Sec.26,T14N,R58E	1	Freeland Spring Water Dev.	Relocate water trough away from sensitive area

The following structures (Table D-3) are recommended for removal in **all alternatives** since they are no longer needed. They are nonfunctional and are located in unsuitable range.

Table D-3

TYPE	MAP #	LOCATION	UNITS	NAME	REMOVAL RESP.
Fence	40381	Sec.27,T13N,R58E	.2 Mi	Lower White River Fence	USFS
Fence	40231	Sec.27,T13N,R58E	300 Feet	Upper White River Fence	USFS

Limerock Spring and the Broom Canyon water development were previously eliminated during permit issuance since they are nonfunctional and are located in unsuitable range.

The following structures (Table D-4) will need to be maintained by the designated entity if the allotment is closed to livestock grazing as proposed in **Alternative C.**

Table D-4

TYPE	MAP #	LOCATION	UNITS	NAME	MAINTENENCE RESP.
Pipelines & Troughs	40022	Sec.13,T13N,R57E	.8 Mi /2 Troughs	Blackrock Pipeline & Troughs	Nat'l Mustang Assoc.
Pipeline & Troughs		Sec.25,T12N,R57E	.2 Mi /1 Trough	Box Spring Pipeline & Trough	Nat'l Mustang Assoc.
Pit Tanks	40026	Sec.1,T12N,R57E	2	Vanover Pit Tanks	Wild Horse user groups.
Fence	40032	Sec.33,T14N,R58E Sec.4,T13N,R58E	.75 Mi	Blackrock Cyn. Drift Fence	USFS
Fence	40033	Sec.2,11/14,T13N,R58E	1.5 Mi & 2 Mi	Corduroy Mountain Fence	Ellison Basin Permittee
Fence	40033A	Sec.2.T13N,R58E	.2 Mi	Corduroy Mountain Fence Ext.	USFS
Fence	40033B	Sec.14,T13N,R58E	2.3 Mi	Corduroy Mountain Fence	.6 Mi. Current Creek Permittee, 1.7 Mi. Ellison Basin Permittee
Fence	40062	Sec.11,T14N,R58E	.5 Mi	Indian Garden Drift Fence	Permittee Tom Plain Allotment
Fence	40084	Sec.11/14/24 /25/35/36,T14N,R58E	5.0 Mi	Ellison Black Bdry Fence	Permittee for Ellison Basin Allotment
Fence	40111	Sec.22/27,T14N,R58E	.2 Mi	White River Pass Drift Fence	Permittee for Currant Creek Allotment
Fence	40111A	Sec.23,T13N,R58E	1.0 MI	White River Pass Drift Fence	Permittee for Currant Creek Allotment
Trough	40254	Sec.6,T11N,R58E	1	Silver Spring	USFS
Trough	40356	Sec.28,T14N,R58E	1	Cherry Spring	Switch to wild horse group

The following structures (Table D-5) are recommended for removal if the Allotment is closed to livestock Grazing **(Alternative C).**

Table D-5

TYPE	MAP #	LOCATION	UNITS	NAME	REMOVAL RESP.
Pit Tanks	40029	Sec.14,T14N,R58E	2	Upper Freeland Pit Tanks	Don't remove but don't maintain. Leave for wlf.
Fence	40030	Sec.14,T14N,R57E	.1 Mi	Lower Freeland Fence	USFS
Fence	40031	Sec.29,T14N,R58E	.5 Mi	Freeland Fence	USFS
Trough	40334	Sec,34,T14N,R58E	1	Willow Spring	USFS
Pit Tank	40034A	Sec.11,T13N,R58E	1	Corduroy Water Deve.	USFS

BOB MILLER
Governor

STATE OF NEVADA

CATHERINE BARCOMB
Administrator

DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES
COMMISSION FOR THE
PRESERVATION OF WILD HORSES
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May 11, 1998

Ms. Maud Naroll
State Clearinghouse
209 East Musser Street, Room 200
Carson City, Nevada 89701-4298

Subject: Blackrock Allotment EA - SAI# E1995-125

Dear Ms. Naroll:

The Commission for the Preservation of Wild Horses has reviewed the Blackrock Environmental Assessment. This is a unique situation with joint Bureau of Land Management and Forest Service management of a common herd.

It is our understanding that the appropriate management level was established by a multiple use decision by the Bureau of Land Management. We would suggest that the Decision Record include any new or necessary objectives for future monitoring and evaluation.

Thank you for considering our input.

Sincerely,

Cathy Barcomb

CATHERINE BARCOMB
Administrator