

## United States Department of the Interior

BUREAU OF LAND MANAGEMENT SURPRISE RESOURCE AREA P.O. BOX 460 CEDARVILLE, CALIFORNIA 96104-0460



4100 (CA-370) P

April 6, 1999

CERTIFIED MAIL # P 971 468 256 RETURN RECEIPT REQUESTED

Cathy Barcomb Commission for the Preservation of Wild Horses 123 West Nye Lane, Suite 248 Carson City, NV 89706-0818

Dear Cathy:

Enclosed is the Proposed Multiple Use Decision, Decision Record and FONSI, and Environmental Assessment No. CA-370-99-08 for the Bare Allotment and Fox-Hog HMA.

Based on all information available to me, it is my decision to implement the Proposed Action as disclosed in EA No. CA-370-99-08, by: (1) establishing the Carrying Capacity of the Bare Allotment, (2) establishing the Appropriate Management Levels for the Fox-Hog Wild Horse Herd Management Area; (3) amending the Bare Allotment Management Plan; and (4) re-issuing North Fork Ranch's permit to graze livestock in the Bare Allotment.

If, after review of the enclosed information, you should wish to protest or appeal this proposed decision, you may do so under 43 CFR 4160.1. Please refer to Protest and Appeal Procedures on Page 8 of the Proposed Decision.

If you have any questions or concerns about the enclosed information, please call me or Tara deValois of this office.

Sincerely,

Susan T. Stokke

Surprise Field Office Manager

Maran C. AM - acting

Enclosures (2)

1-Proposed Decision (Bare Allotment)

2-EA & Decision Record/FONSI (Bare Allotment)



## United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Surprise Field Office
P.O. Box 460
602 Cressler Street
Cedarville, CA 96104
(530)279-6101 - (530)279-2171 FAX

In Reply Refer To: 4100(CA-370)P

April 2, 1999

## **DECISION RECORD/FONSI**

**Environmental Assessment #CA-370-99-08** 

# BARE ALLOTMENT AND FOX-HOG WILD HORSE HERD MANAGEMENT AREA

Livestock Carrying Capacity and Grazing Strategy Wild Horse Appropriate Management Level

#### **Decision**

Based on all the information available to me, it is my decision to implement the Proposed Action of the attached Environmental Assessment #CA-370-99-08. No additional mitigation measures were identified as a result of the environmental analysis.

#### **Rationale**

The Proposed Action and two alternatives to the Proposed Action were analyzed in Environmental Assessment #CA-370-99-08.

The alternatives include a "No Action" alternative that would continue the livestock grazing system designated in the Bare Allotment Management Plan, and a "Riparian" alternative that would establish stocking rates based solely on riparian vegetation carrying capacity. The No Action alternative was not chosen because of the large amount of fencing that would be required to meet the objectives. The Riparian alternative was not chosen because of the large amount of fencing that would be required to meet the objectives, and because of the economic impacts to the livestock operator as a result of reductions in the amount of authorized grazing use.

I have chosen to implement the Proposed Action because the proposed changes in the livestock grazing system, coupled with the accomplishment of appropriate management levels for wild horses, are compatible with meeting soil, vegetation, and landscape objectives for the Bare Allotment and the Fox-Hog Herd Management Area. When compared to both the No Action and the Riparian alternatives, much less fencing of riparian and other special habitats would be necessary under the Proposed Action to meet the objectives. Fences are expensive to build and maintain, they complicate wildlife and wild horse movements, and they detract from the aesthetics of native rangelands. The expenses to the livestock operator of the increased herding which would be required to meet the objectives under the Proposed Action are much less than the expenses of maintaining the miles of additional fence which would be necessary under the No Action and Riparian alternatives.

## Finding of No Significant Impact

Based upon the Environmental Assessment #CA-370-99-08, I have determined that implementation of the Proposed Action of the Bare Allotment and Fox-Hog HMA Livestock Carrying Capacity and Grazing Strategy, and Wild Horse Appropriate Mangement Level would not result in any significant impacts on the quality of the human environment. Therefore, an Environmental Impact Statement is not required according to section 102 (2) (c) of NEPA.

The proposed action is in conformance with the Tuledad/Home Camp Management Framework Plan. The proposed activity would not cause any undue or unnecessary environmental degradation.

Susan T. Stokke, Field Office Manager

Date



## United States Department of the Interior

#### BUREAU OF LAND MANAGEMENT

Surprise Field Office
P.O. Box 460
602 Cressler Street
Cedarville, CA 96104
(530)279-6101 - (530)279-2171 FAX

In Reply Refer To: 4130 (CA-370) P

# BARE ALLOTMENT AND FOX-HOG HMA Livestock Carrying Capacity and Grazing Strategy Wild Horse Appropriate Management Level Environmental Assessment CA-370-99-08

## BACKGROUND

The Bare Allotment is located in Washoe County, Nevada. It is approximately 20 miles southeast of Eagleville, California and 22 miles northwest of Gerlach, Nevada.

In 1936, with the advent of the Taylor Grazing Act, priority for the allotment was established at 25,336 AUMs. In 1963, a suspended non-use agreement was signed with 14,737 AUMs active use and 10,566 AUMs suspended non-use.

In 1975, five pastures were created by interior fencing, and an Allotment Management Plan (AMP) was written and implemented. The grazing system in the AMP designated a 3 year cycle of rest, early use, and late use for each pasture. The system was difficult to implement due to the lengthy moves from one pasture to the next, and due to the requirement to move cattle from higher pastures to lower pastures during the hottest and driest part of the year. The AMP was then modified on an annual basis for several years.

In 1979, a decision, based on the 1976 inventory and subsequent field examinations, was made to reduce the active use by 40% (14,737 AUMs to 8,797 AUMs). In 1980, the Interior Appropriations Act revised the 1979 decision to reduce permitted use by 10% in 1980 (from 14,737 AUMs to 13,260 AUMs). Fox Mountain was fenced into a sixth pasture.

In 1982, a revised Allotment Management Plan (AMP) was signed. The class of livestock was changed from cow/calf pairs to yearlings and the grazing system in the revised AMP became rest every other year for all pastures, except the Hog Mountain Pasture which received late use each year. Utilization limits were moderate (60%) for all pastures, except the Fox Mountain Pasture which was limited to light (40%) utilization due to concerns for mule deer habitat. The permit remained at 13,260 active AUMs and 12,043 suspended AUMs, on several conditions:

- 1. Permit would be for yearlings. Yearlings tend to use uplands more than cow/calf pairs, and they concentrate less in riparian areas.
- 2. Additional water would be developed.
- 3. Intensive studies would be conducted and further reductions would be implemented if needed.

In 1986, an AMP Evaluation was completed. Uplands appeared to be improving, except for the browse communities in Fox Mountain. Insufficient data was available to change the authorized use, but carrying capacity estimates indicated that 13,260 AUMs was too high. Several recommendations were made, including:

- 1. Existing objectives were changed and new objectives were developed.
- 2. Carrying capacity through the term of the AMP was 10,329 AUMs.
- 3. Work with permittees to keep actual use on the allotment similar to actual use during the term of the original AMP (7,000 to 8,000 AUMs), until a more accurate forage survey and carrying capacity calculation could be performed.
- 4. Season of use change in Fox Pasture to May 15 to July 15.

In 1988, the permittees agreed with the AMP evaluation recommendations during the preseason allotment meeting. Since the 1986 AMP evaluation, actual use has fluctuated from 3,428 AUMs to 9,886 AUMs. The Fox Pasture is used from mid May to mid July. In 1996, the Bare Ranch switched to a fall cow/calf operation, due to changes in the cattle market.

In 1998, livestock and wild horse management was evaluated and a Rangeland Health Assessment was conducted. The primary concern for the Bare Allotment and the Fox-Hog Wild Horse Herd Management Area (HMA) is the less than satisfactory condition of riparian habitats.

## **PURPOSE AND NEED**

Development of a livestock grazing strategy and carrying capacity for the Bare Allotment, and establishing an Appropriate Management Level for the Fox-Hog HMA is needed to resolve the conflicts between livestock and wild horse use, and riparian habitats.

- \* These conflicts are the greatest where riparian areas are used for longer periods of time (more than 30-45 days), and in areas receiving concentrated wild horse and livestock use during the hot season (July 1 to October 31).
- \* Some riparian areas lack the species and structural diversity necessary for diverse wildlife habitat.
- \* Many of the riparian areas support early seral herbaceous communities, which provide less wildlife habitat and less protection for soils during high flows.
- \* A few riparian areas are rated as functional-at-risk, hydrologically.
- \* Conflict areas are further complicated by the presence of roads along many of the perennial and ephemeral drainages, and by a few stock watering facilities in riparian areas.

## **SCOPING**

The livestock operators in the Bare Allotment, the Nevada Department of Wildlife (NDOW), and the Commission for the Preservation of Wild Horses (the Commission) were provided the opportunity to comment on, and contribute information to, the 1998 evaluation. The livestock operators met with the BLM several times during and after the 1998 field season to discuss annual monitoring results, the 1998 evaluation, and future management options. NDOW and the Commission did not attend the meeting which was scheduled to discuss the final evaluation, and to develop the management alternatives. Both NDOW and the Commission provided written comments regarding the evaluation.

An interdisciplinary team from the Surprise Field Office, BLM, developed several management alternatives which would meet the objectives recommended in the 1998 evaluation. All input and comments received to date have been incorporated into these alternatives.

## **Issues Selected for Analysis**

The following issues were identified during the scoping process:

## Impacts on Upland Vegetation Communities

Upland communities comprise the vast majority of the lands and habitat in the Bare Allotment and the Fox-Hog HMA. The current wild horse and livestock management systems are maintaining and enhancing the vigor and diversity of most upland vegetation communities. Future management must be designed to continue to support healthy upland communities.

## Impacts on Riparian Vegetation Communities

Riparian habitats are important to all users, including livestock, wild horses, wildlife, and the public. Riparian communities are associated with water and are subject to the highest impacts from users. They are also the most productive sites, with the greatest opportunity for improvement in the short term. The condition of riparian communities affects the quality of wildlife habitat, and the amount of soil which is removed from watersheds. Timing, intensity, and duration of livestock and wild horse use will have the greatest impact on these communities over the short and long term. Future management must be designed to improve and maintain the health of riparian communities.

## Impacts on Wildlife Indicator Species

The Bare Allotment and Fox-Hog HMA provide year-round habitat for a wide range of wildlife species, including mule deer, pronghorn antelope, sage grouse, and a variety of non-game species. Changes in livestock and wild horse management have the potential to affect wildlife habitat conditions, including the quality and quantity of wildlife forage and cover. Mule deer, pronghorn antelope, and sage grouse were selected as wildlife indicator species for this analysis. Management actions must take into account the impacts of wild horse and livestock grazing on wildlife habitats.

## Impacts on Wild Horses

The Fox Hog Herd Management Area provides year-round habitat for wild horses. The HMA encompasses approximately the eastern one half of the Bare Allotment and is currently home to some 400 wild horses. It is known that there is ingress and egress between this herd and HMAs to the east in the Winnemucca District. Management actions must take into account habitat needs and migration patterns of wild horses.

## Impacts on Livestock Management

The Bare Allotment supports approximately three quarters of North Fork Ranch's seasonal (spring, summer, fall) needs for livestock forage. Reductions in stocking rates, addition of fences and projects, herding and pasture move requirements, and seasonal use restrictions all increase the costs, to the livestock operation, of running cattle on public lands. When these costs exceed the amount of return made from selling calves or yearlings, the livestock operation can no longer stay in business. Management actions must take into account the costs of intensive livestock management to the livestock operation.

## Issues Considered, but Dropped from Further Analysis

A determination was made that the following resources/programs are either, 1) not present, 2) would not be measurably affected by any of the alternatives, or 3) would be better addressed in site specific environmental assessments. Air Quality, Hazardous/Solid Wastes, ACECs, Water Quality, Cultural Resources, Prime/Unique Farmlands, Floodplains, Wild & Scenic Rivers, Native American Concerns, Wilderness, and T&E Species.

## **Consistency with Land Use Plan Objectives**

The Tuledad/Home Camp Management Framework Plan (MFP), contains land use objectives and decisions for the entire planning area. Applicable land use plan goals, objectives, and decisions are summarized in Appendix A. The MFP was reviewed and compared with the three alternatives evaluated in this assessment. Based on this review, the alternatives are in compliance with the Tuledad/Home Camp Management Framework Plan.

## **Consistency with Fallback Rangeland Health Standards**

Soils Health Standard:

Upland soils exhibit infiltration and permeability rates

Fallback (43 CFR 4180.2(f)(1)(i)): that are appropriate to soil type, climate, and landform

Stream Health Standard:

Fallback (43 CFR 4180.2(f)(1)(iii)): Stream channel morphology (including but not limited to gradient, width/depth ratio, channel roughness and sinuosity) and functions are appropriate for the climate and landform.

Riparian/Wetland Sites Standard:

Fallback (43 CFR 4180.2(f)(1)(ii)): Riparian and wetland areas are in proper functioning condition.

**Biodiversity Standards:** 

Fallback (43 CFR 4180.2(f)(1)(v)): Healthy, productive, and diverse populations of native species exist and are maintained.

Based on a review of the available information, the Soils Health Fallback Standard is being met and the Biodiversity Fallback Standard is being met for upland communities on the Bare Allotment. The Stream Health Fallback Standard, the Riparian/Wetland Fallback Standard, and the Biodiversity Fallback Standard for riparian communities are not fully met, but significant progress is being made towards meeting these standards. See Appendix B for Rangeland Health Assessment.

## **ALTERNATIVES**

Through the scoping process, three alternatives were selected for detailed analysis, including:

- \* Proposed Action Set stocking rate to upland carrying capacity between November 1 and June 30, and to riparian carrying capacity between July 1 and October 31. Use herding and pasture rotation to meet riparian objectives.
- \* No Action Continue grazing management as in the Bare AMP. Use exclosure fencing to meet remaining riparian objectives.
- \* Riparian Alternative Set stocking rate to riparian carrying capacity. Use livestock distribution and exclosure fencing to meet riparian objectives.

## **Features Common to All Alternatives**

The alternatives considered in this environmental assessment are designed to meet the following landscape goals and resource management objectives:

## Landscape Management Goals

- \* Manage for Healthy Rangelands Maintain or improve the vigor and diversity of vegetation types that occur across the landscape.
- \* Manage for Healthy Riparian Areas At a minimum, manage for Proper Functioning Condition (PFC) on all riparian areas. Develop Desired Plant Community (DPC) descriptions for all key riparian areas; these DPC's should range from mid seral to Potential Natural Community (PNC).

## Resource Management Objectives

- \* Maintain current amounts of litter to protect soils from accelerated wind and water erosion and to maintain soil health.
- \* Ensure uplands are moving towards, or are being maintained at, mid seral to Potential Natural Community (PNC) for the appropriate Range Site Potentials (as described by NRCS).
- \* Increase the diversity of seral stages in some of the big sagebrush and mountain brush communities on the higher elevations to improve wildlife habitat and to maintain progress towards Range Site Potential.
- \* Increase the age class diversity of existing aspen stands, and increase the size and occurrence of aspen stands where the potential exists.

- \* Maintain bitterbrush in Form Class 1.25-2.5 to benefit both game and non-game species in all pastures.
- \* Reduce accelerated erosion and compaction of soils in riparian areas.
- \* Little High Rock Canyon (in the High Rock ACEC):
  - a. Maintain the primitive characteristics of the High Rock Canvon complex.
  - b. Preserve archaeological and historical sites.
  - c. Provide habitat for bighorn sheep, other game and non-game wildlife, and wild horses.
  - d. Maintain Little High Rock Creek in Proper Functioning Condition and moving towards PNC.
- \* Manage livestock numbers to be within the carrying capacity of the allotment on a year with median to low precipitation and plant growth. Maintain a livestock grazing system that, 1) will allow the upland and riparian vegetation, and the High Rock Canyon objectives to be met, and 2) is economically feasible for the livestock operator to achieve.
- \* Maintain the Fox-Hog Wild Horse herd within the Appropriate Management Level (AML), to allow soil and vegetation management objectives, including riparian area objectives, to be met, and to maintain a viable herd.
- \* Implement the Surprise Integrated Noxious Weed Management Area Memorandum of Understanding.

## **Description of Alternatives Considered**

For a comparison of the three alternatives, please refer to Table 1, page 11.

## **Proposed Action**

The proposed action would:

- 1) Establish an Appropriate Management Level of 226 horses for the Fox-Hog Wild Horse Herd Management Area.
- 2) Set cattle stocking rates to the calculated carrying capacity for the Bare Allotment between November 1 and June 30, and to the estimated riparian carrying capacity (public and NFR private lands) between July 1 and October 31. The season of use

flexibility would be extended to February 15 to November 30, as annual weather and forage conditions allow. The North and South Hoover Pastures, and the lower elevation portions of the Lost Creek, Old Camp, West Summit, and Hog Mtn Pastures would receive the majority of the winter and early spring use. Up to 13,517 AUMs would be available for use. Of the 13,517 AUMs, up to 5,254 AUMs could be used by cattle between July 1 and October 31. The remaining AUMs could be used between November 1 and June 30.

Pasture rotation and in-pasture herding would be required to limit the duration of livestock use in riparian areas to less than 45 days between November 1 and June 30, and to less than 30 days between July 1 and October 31. The sequence of use, and season of use for each pasture would vary annually; emphasis would be placed on varying the season of use for each area, while still following natural move patterns (uphill through summer, downhill into winter). Cattle would be distributed to stay within the carrying capacity of each pasture.

Additional carrying capacity calculations would be necessary to determine proper stocking rates for the Hoover, Lost Creek, West Summit, and Old Camp Pastures. Success would depend on tight control, by the operators, of pasture moves and herding. The BLM would conduct compliance monitoring and would enforce utilization and season of use requirements as necessary to meet resource objectives. The BLM would gather wild horses as needed to keep wild horse numbers within the AML. Wild horse gathers would be conducted in a manner that would maintain herd viability and reproduction. Key riparian utilization would be a maximum of 60% by July 1, and a maximum of 40% by October 31. Upland utilization would be a maximum of 60% on key grasses and shrubs.

#### No Action

The No Action alternative would:

- 1) Establish an Appropriate Management Level of 226 horses for the Fox-Hog Wild Horse Herd Management Area.
- 2) Continue the cattle grazing system specified in the 1982 AMP, as modified by the 1986 evaluation recommendations (see table below). Cattle carrying capacity would remain at 13,260 AUMs, distributed evenly over the entire season of use (April 1 to October 31). No in-pasture herding would be required to limit the duration of livestock use in riparian, aspen, or bitterbrush communities. In the Hog Mountain Pasture, some exclosure fencing would be necessary on the riparian areas which receive the most concentrated use during the hot season each year. In addition, alternative water sources would be needed in the uplands to draw cattle out of the remaining riparian areas.

Up to 50 miles of riparian fencing, several aspen exclosures, and 6 water developments would be required to meet riparian, bitterbrush, and aspen objectives. Success would depend on 1) tight control, by the operators, of pasture moves, and 2) maintenance of water developments and exclosure fences in the Hog Mountain Pasture. The BLM would conduct compliance monitoring and would enforce utilization and season of use requirements as necessary to meet riparian and upland objectives. The BLM would gather wild horses as needed to keep wild horse numbers within the AML. Wild horse gathers would be conducted in a manner that would maintain herd viability and reproduction. Key riparian utilization would be a maximum of 60% by July 1, and a maximum of 40% by October 31. Upland utilization would be a maximum of 60% on key grasses and shrubs.

## No Action Grazing System:

Year 1	Year 2	Season of Use
North Hoover	South Hoover	April 1 to May 15
Lost Creek	Old Camp/West Summit	May 1 to June 15
Clover Creek	East Summit/Fox Mountain	June 1 to July 15
Hog Mountain	Hog Mountain	July 15 to October 31

## Riparian Alternative

The riparian alternative would:

- 1) Establish an Appropriate Management Level of 226 horses for the Fox-Hog Wild Horse Herd Management Area.
- 2) Set cattle stocking rates to the estimated carrying capacity of the riparian areas on the Bare Allotment. Cattle would be spread out over the entire allotment, for the entire season, each year. The season of use flexibility would be extended to February 15 to November 30, as annual weather conditions allow. Stocking rates would be set to prevent cattle use from exceeding light use overall on riparian areas. Some exclosure fencing would be necessary on the riparian areas in each pasture which receive the most concentrated use during the hot season each year. Alternative water sources would be needed in the uplands to draw cattle out of the remaining riparian areas, and to make the lower elevation areas in the allotment available for late season use.

Up to 50 miles of riparian fencing, several aspen exclosures, and 15 water developments would be required to meet riparian, bitterbrush, and aspen objectives. Success would depend on 1) maintaining good livestock distribution throughout the

allotment, season-long, and 2) maintenance of exclosure fences and water developments throughout the allotment. The BLM would conduct compliance monitoring and would enforce utilization and season of use requirements as necessary to meet riparian and upland objectives. The BLM would gather wild horses as needed to keep wild horse numbers within the AML. Wild horse gathers would be conducted in a manner that would maintain herd viability and reproduction. Key riparian utilization would be a maximum of 60% by July 1, and a maximum of 40% by October 31. Upland utilization would be a maximum of 60% on key grasses and shrubs.

## Alternatives Considered, but Dropped from Detailed Study

## \* No Livestock Grazing

The option to remove livestock grazing was covered under the "No Livestock Grazing Management Proposal" in the 1978 Tuledad/Home Camp Final Grazing EIS. This alternative was dropped because it is not considered a viable alternative.

#### \* No Wild Horses

The BLM is mandated to manage for healthy populations of wild horses where they existed prior to 1977, and where the presence of wild horses is not in conflict with maintaining a thriving, natural ecological balance. Wild and domestic horses have been present in this Fox-Hog HMA since the early 1900's. The Fox-Hog HMA is well suited to wild horse grazing. There is adequate water, forage, and seasonal habitat to support healthy herds. There are few fences and relatively little private land. As long as wild horse numbers are kept within AML's, there are few conflicts between horses and most species of wildlife. Removing all wild horses from the Bare Allotment is not necessary in order to meet most of the resource objectives, or to maintain a thriving, natural ecological balance.

## \* No Hot Season (July 1 to October 31) Livestock Grazing.

The financial impacts to the livestock operator of removing hot season livestock use outweigh the benefits of reduced hot season grazing on riparian and special habitats. The allotment is large enough, has sufficient infrastructure, and provides enough seasonal diversity that all areas of the allotment can be adequately protected from livestock grazing impacts through periodic rest and deferment.

## \* Set Wild Horse Appropriate Management Level to the carrying capacity of the uplands.

Up to 125 miles of riparian fencing, especially stream corridor fencing and 20 water developments would be needed to meet riparian objectives. The economic impact

of building and maintaining that much fence would be more than either the livestock operators or the BLM could afford. The fences would interfere with wild horse and wildlife movements between watering sources and between seasonal ranges, to the point of causing deaths, especially during dry summers or heavy snow winters.

**TABLE 1: ALTERNATIVE COMPARISON** 

	Livestock AUMs			Management	Monitoring and Compliance	
	Total	Hot Season		Requirements		
1	13,517 AUMs	5,254 AUMs	2,708 AUMs (226 head)	*Pasture rotation *In-pasture herding *Up to 10 miles of fence.	Key riparian utilization: Max of 60% by July 1 Max of 40% by October 31 Upland utilization: Max of 60% Key grasses and shrubs. Duration of use.	
2	13,260 AUMs	7,577 AUMs	2,708 AUMs (226 head)	*Pasture rotation *Up to 50 miles of fence.	Key riparian utilization: Max of 60% by July 1 Max of 40% by October 31 Upland utilization: Max of 60% Key grasses and shrubs. Pasture rotation Fence maintenance	
3	10,507 AUMS	5,254 AUMs	2,708 AUMs (226 head)	*Spread stock out *Up to 50 miles of fence	Key riparian utilization:  Max of 60% by July 1  Max of 40% by October 31  Upland utilization:  Max of 60%  Key grasses and shrubs.  Fence maintenance	

## AFFECTED ENVIRONMENT

## **Upland Vegetation**

The allotment consists of three primary belts of vegetation, including:

- a. 4,800 to 5,500 feet Salt desert shrub and Wyoming big sagebrush communities with pockets of basin wildrye and winterfat.
- b. 5,500 to 6,400 feet Big sagebrush, low sagebrush, and bitterbrush communities.
- c. 6,400 to 8,200 feet Mountain big sagebrush, low sagebrush, and mountain mahogany communities with pockets of aspen and mountain brush.

Based on livestock actual use, wild horse census data, precipitation, and utilization monitoring from 1987 to 1997, the estimated carrying capacity for livestock and wild horse use in the Bare Allotment is 16,225 AUMs. See Appendix 2f.

Astragalus tiehmii and Cryptantha schoolcraftii, and Eriogonum crosbyae U.S. Fish and Wildlife Service and Nevada BLM "watch" plant species occur on upland areas on Badland soils in the northeastern portions of the allotment in the Hog Pasture and in the extreme southwestern portions of the South Hoover Pasture. Off-road vehicle use and road building associated with mining activity has had some impact on known populations. Current levels of livestock and wild horse use are not having a measurable impact on the populations.

The floodplains on the lower reaches of Grassy and Cottonwood Creeks have lost much of the herbaceous understory vegetation. Big sagebrush, greasewood, and desert shrubs now dominate these sites. The herbaceous production on these floodplains could be increased with brush disturbance and proper post treatment rest from grazing pressure.

Due to a lack of natural fire, some of the big sagebrush and mountain brush communities on the higher elevation loamy soils are becoming dominated by big sagebrush and mountain brush species. As the shrub species become more dominant, these types of sites are moving away from the Natural Resource Conservation Service (NRCS) Range Site Potentials, and the vigor and diversity of perennial understory species is being reduced.

#### Watershed

The allotment falls within portions of two major watersheds, Duck Flat/Long Valley #16040204 and High Rock/Hog Mountain #16040203 which drains into Duck Lake and High Rock Lake closed basins. No Savvy/Old Camp Creek (ephemeral) and Lost Creek (perennial) are the primary tributaries to the Duck Lake basin. Cottonwood Creek (including Grassy, Cottonwood, Clover, and Jim's Creeks) and Hog Ranch Creek are the primary tributaries to the High Rock Lake basin.

Much of the watershed areas consist of mid elevation Great Basin mountain terrains with abundant canyons, buttes and rims as well as upland benches consisting of moderate to steep terrain. The watershed area contains several ephemeral and a few perennial springs scattered throughout the area. Water flow during the spring runoff period is high causing stream channel erosion in all major drainages. After spring runoff, most drainages dry up or drop to very low levels of flow.

The watershed areas are characterized by low to moderate watershed cover along with soils of moderate to slow infiltration capacities. The greatest amount of runoff occurs during late winter and spring as a result of rapid snow melt and spring storms. Sheet and rill erosion occur over most of the area with soil deposition being scattered and small. Gullies and washes are scattered throughout the area. These drainages contain vertical cuts averaging from two to five feet in depth with some as deep as ten feet. The actively eroding channels along with the overland flow contribute a moderate to high sediment yield during the spring runoff period. This active erosion contributes to riparian degradation, loss of vegetation production and the lowering of the water table in the gully and channel areas. These areas have potential for a reduced rate of erosion, sediment yield and improved water quality by reducing and slowing peak flows. Reduced peak flows will slow the erosion process which will reduce sediments yield and improve water quality for the watersheds.

There are a variety of soils in the allotment, from sandy and gravelly Pleistocene lake terraces around Duck Lake, to shallow clay and loam soils on the central terraces, to deep loamy soils on the higher elevation slopes. Due to soil, weather, and topographic conditions, much of the allotment is subject to moderate levels of natural erosion.

Many of the springs and creeks have experienced accelerated erosion in the past due to historic livestock and wild horse use. Heavy grazing in the creeks is preventing the establishment of sod-forming grass and Carex species, as well as woody species, along significant portions of Clover, Cottonwood, Cherry, Lost, Leadville, Grass Valley, and Little Hog Ranch Creeks which have the potential to support these species. Based on monitoring in these riparian areas on the allotment in 1997, trampling and bank shearing, by livestock and wild horses, and soil compaction due to roads along the drainages continue to accelerate erosion on most of the perennial creeks.

In addition to the main drainages, there are a number of small, scattered springs in the allotment. The water sources on the Bare Allotment currently support mostly herbaceous riparian vegetation, with some stretches of aspen, willow, and rose. Some of the drainages have the potential to support additional woody riparian vegetation.

Based on the Surprise Valley/Home Camp Soil Survey, when the riparian areas in the Bare Allotment are at PNC, they are capable of producing approximately 6,598,631 pounds a year. With a proper use factor of 50%, this is equivalent to 4,124 AUMs.

#### Wildlife

The Bare Allotment supports a wide variety of wildlife habitat. An equally wide variety of mammals, birds, and reptiles spend all or part of their time on the allotment. The low elevation salt desert shrub zones are particularly important for pronghorn antelope winter habitat, during mild winters. The low sagebrush areas supply important sage grouse and pronghom spring, summer, and fall habitat. The big sagebrush, mountain brush, and aspen communities on Fox, Hog, and Cherry Peaks provide spring, summer, and fall habitat for mule deer and for neotropical bird species. The canyons support several species of raptors, as well as chukar and quail. The riparian systems are important for all species of wildlife; the perennial, low elevation systems are particularly important due to their scarcity. The allotment does not provide significant waterfowl or any cold water fish habitat.

Mule deer habitat on the allotment is in satisfactory condition. The brush and browse communities on Fox, Hog, and Cherry Peaks provide good cover and forage for mule deer. Mule deer habitat would be improved by additional residual herbaceous vegetation in riparian areas in the fall and by expanding woody communities around riparian areas.

Spring/summer pronghom habitat on the allotment is in satisfactory condition. The low sagebrush communities throughout the allotment provide excellent pronghorn habitat. Winter/early spring pronghorn habitat would be improved by additional herbaceous vegetation in the salt desert shrub communities.

Sage grouse habitat is currently in a variety of conditions depending upon the season of the year. Winter, spring and nesting habitat is in generally satisfactory condition with abundant sagebrush cover, stable low sagebrush sites with a variety of herbaceous and shrub cover, and upland vegetation generally providing good amounts of herbaceous cover. Summer habitat for brood raising, particularly small meadows are providing less cover and insect production than optimal for chick survival. Additionally upland herbaceous cover adjacent to wetland sites is less than optimal for sage grouse production.

#### Watershed

The allotment falls within portions of two major watersheds, Duck Flat/Long Valley #16040204 and High Rock/Hog Mountain #16040203 which drains into Duck Lake and High Rock Lake closed basins. No Savvy/Old Camp Creek (ephemeral) and Lost Creek (perennial) are the primary tributaries to the Duck Lake basin. Cottonwood Creek (including Grassy, Cottonwood, Clover, and Jim's Creeks) and Hog Ranch Creek are the primary tributaries to the High Rock Lake basin.

Much of the watershed areas consist of mid elevation Great Basin mountain terrains with abundant canyons, buttes and rims as well as upland benches consisting of moderate to steep terrain. The watershed area contains several ephemeral and a few perennial springs scattered throughout the area. Water flow during the spring runoff period is high causing stream channel erosion in all major drainages. After spring runoff, most drainages dry up or drop to very low levels of flow.

The watershed areas are characterized by low to moderate watershed cover along with soils of moderate to slow infiltration capacities. The greatest amount of runoff occurs during late winter and spring as a result of rapid snow melt and spring storms. Sheet and rill erosion occur over most of the area with soil deposition being scattered and small. Gullies and washes are scattered throughout the area. These drainages contain vertical cuts averaging from two to five feet in depth with some as deep as ten feet. The actively eroding channels along with the overland flow contribute a moderate to high sediment yield during the spring runoff period. This active erosion contributes to riparian degradation, loss of vegetation production and the lowering of the water table in the gully and channel areas. These areas have potential for a reduced rate of erosion, sediment yield and improved water quality by reducing and slowing peak flows. Reduced peak flows will slow the erosion process which will reduce sediments yield and improve water quality for the watersheds.

There are a variety of soils in the allotment, from sandy and gravelly Pleistocene lake terraces around Duck Lake, to shallow clay and loam soils on the central terraces, to deep loamy soils on the higher elevation slopes. Due to soil, weather, and topographic conditions, much of the allotment is subject to moderate levels of natural erosion.

Many of the springs and creeks have experienced accelerated erosion in the past due to historic livestock and wild horse use. Heavy grazing in the creeks is preventing the establishment of sod-forming grass and Carex species, as well as woody species, along significant portions of Clover, Cottonwood, Cherry, Lost, Leadville, Grass Valley, and Little Hog Ranch Creeks which have the potential to support these species. Based on monitoring in these riparian areas on the allotment in 1997, trampling and bank shearing, by livestock and wild horses, and soil compaction due to roads along the drainages continue to accelerate erosion on most of the perennial creeks.

In addition to the main drainages, there are a number of small, scattered springs in the allotment. The water sources on the Bare Allotment currently support mostly herbaceous riparian vegetation, with some stretches of aspen, willow, and rose. Some of the drainages have the potential to support additional woody riparian vegetation.

Based on the Surprise Valley/Home Camp Soil Survey, when the riparian areas in the Bare Allotment are at PNC, they are capable of producing approximately 6,598,631 pounds a year. With a proper use factor of 50%, this is equivalent to 4,124 AUMs.

#### Wildlife

The Bare Allotment supports a wide variety of wildlife habitat. An equally wide variety of mammals, birds, and reptiles spend all or part of their time on the allotment. The low elevation salt desert shrub zones are particularly important for pronghorn antelope winter habitat, during mild winters. The low sagebrush areas supply important sage grouse and pronghorn spring, summer, and fall habitat. The big sagebrush, mountain brush, and aspen communities on Fox, Hog, and Cherry Peaks provide spring, summer, and fall habitat for mule deer and for neotropical bird species. The canyons support several species of raptors, as well as chukar and quail. The riparian systems are important for all species of wildlife; the perennial, low elevation systems are particularly important due to their scarcity. The allotment does not provide significant waterfowl or any cold water fish habitat.

Mule deer habitat on the allotment is in satisfactory condition. The brush and browse communities on Fox, Hog, and Cherry Peaks provide good cover and forage for mule deer. Mule deer habitat would be improved by additional residual herbaceous vegetation in riparian areas in the fall and by expanding woody communities around riparian areas.

Spring/summer pronghorn habitat on the allotment is in satisfactory condition. The low sagebrush communities throughout the allotment provide excellent pronghorn habitat. Winter/early spring pronghorn habitat would be improved by additional herbaceous vegetation in the salt desert shrub communities.

Sage grouse habitat is currently in a variety of conditions depending upon the season of the year. Winter, spring and nesting habitat is in generally satisfactory condition with abundant sagebrush cover, stable low sagebrush sites with a variety of herbaceous and shrub cover, and upland vegetation generally providing good amounts of herbaceous cover. Summer habitat for brood raising, particularly small meadows are providing less cover and insect production than optimal for chick survival. Additionally upland herbaceous cover adjacent to wetland sites is less than optimal for sage grouse production.

Habitat for riparian-dependent species, including some small mammals, ground-nesting birds, and willow/aspen nesting birds, would be improved by additional residual herbaceous vegetation in riparian areas and by expanding the number and extent of woody riparian communities.

#### Wild Horses

The Fox-Hog Wild Horse Herd Management Area is located within the Bare Allotment. It covers 94,080 acres and includes all of the Hog, Fox, and East Summit Pastures, as well as portions of the Clover, West Summit, and Old Camp Pastures. There are two main use areas within the Fox-Hog herd area:

- 1. Cottonwood and Clover Creeks to the west in the Clover, Summit, and southern portions of the Hog Pastures.
- 2. Little High Rock Canyon and Hog Mountain to the east on the north end of the Hog Pasture. Horses from this use area routinely mix with wild horses from herds to the north and east of the Fox-Hog HMA (High Rock and Calico Mountain HMAs).

The horses in the Fox-Hog wild horse herd appear to be healthy and reproductive. During census flights, foal crop ranged from 14% to 27%. There is sufficient mixing of animals with the Calico Mountain and High Rock Canyon wild horse herds to maintain the genetic viability of the Fox-Hog herd. The livestock operator on the allotment opens all of the pasture gates at the end of the grazing season, and the wild horses on the allotment have no problems moving between seasonal ranges. There appears to be sufficient low elevation forage to support the current numbers of wild horses through the winter; however, the last several winters have not been severe and wild horse numbers have significantly increased since the last severe winter (1992/93).

Wild horse numbers have ranged from a low of 42 adult animals after the 1986 gather to 283 adult animals in 1997. The numbers have been steadily increasing since the last Fox-Hog gather in 1989. As the size of the herd has increased, more bands of wild horses are using portions of the Bare Allotment which are outside the HMA boundaries (Clover, Old Camp, West Summit, Hoover, and Lost Creek Pastures of the Bare Allotment and parts of the Duck Lake, Wall Canyon West, and Home Camp Allotments). Wild horses from the Fox-Hog herd have always used some of these lower elevation areas during the winter (especially hard winters); however, an increasing number of horses are remaining outside of the HMA boundaries through the summer. As wild horse numbers continue to increase, wild horses may begin to compete with pronghorn antelope for winter habitat in the salt desert shrub communities.

## High Rock Canyon Area of Critical Environmental Concern (ACEC)

Approximately 2,000 acres on the north end of the Hog Pasture is in the ACEC. The ACEC encompasses all of Little High Rock Canyon.

The Bare Allotment livestock operators have not placed cattle in Little High Rock Canyon and they do not plan to use the canyon for grazing. A few stray cows from the allotments which border Little High Rock Canyon use the canyon each year; however, this use has been minimal. Several bands of wild horses use Little High Rock Canyon year-round.

## **Livestock Operation**

North Fork Ranch (NFR)

Owner:

J.R. Simplot

Manager:

Dick Mecham

## **Grazing Permit:**

Active AUMs	Suspended AUMs	Total AUMs	Exchange of Use
13,260	12,043	25,303	231

Season of Use:

April 1 to October 31

Yearling cattle were grazed from 1987 to 1995. The current class of livestock is fall-calving cow/calf pairs. The cows calve in late fall, the cow/calf pairs enter the allotment in April, and the calves are weaned and removed from the allotment in mid-July.

The current grazing system consists of a nine pasture combination of rest and deferred use. This system reflects early use on the lower elevations of the allotment, and gradually moving uphill to the highest elevations. All pastures, except Hog Mountain, are used every other year to allow vegetation to recover. The Hog Mountain Pasture is used after grasses have set seed each year, and the livestock operator adjusts the portions of the pasture used each year to allow rest every other year for the majority of the area.

The grazing system has been followed each year as prescribed. However, on each of the years during which the allotment has been closely supervised during the grazing season, significant numbers of livestock have used portions of the rest pastures or have re-entered/remained in the use pastures for longer than the prescribed use period. The livestock responsible for the unauthorized use have been primarily North Fork Ranch animals, although livestock from the surrounding

allotments (Home Camp, Duck Lake, Wall Canyon West, and Winnemucca Allotments) have also had an impact.

This use has generally not been discovered until the end of the grazing season, or until significant use has been made along riparian corridors. Cherry Creek, Lost Creek, Clover Creek, No Savvy Creek, Look Creek, Jim's Creek, Leadville Creek, and Cottonwood Creek, have received the most impact from the unauthorized use. The use has occurred despite the presence of a full-time rider in the Bare Allotment. Wild horse destruction of fences (especially along the Winnemucca District boundary), gates left open by recreational users (especially during the mule deer and pronghorn antelope hunting seasons), and the extended periods of time required to clean the larger pastures of livestock appear to be the primary causes of the use. The operator on the allotment is currently responsible for approximately 40 miles of external fence and 60 miles of internal fence.

#### Other

#### a. Cultural/Historical

Livestock and wild horses continue to impact archaeological resources, especially around natural water sources in the allotment. Hoof action breaks up lithic remains and churns up soils. This churning mixes up the strata of archaeological sites, making it more difficult to assess the site. When livestock and wild horses concentrate around a water source, erosion can accelerate and archaeological remains can be disturbed or moved away from the site.

## b. Little High Rock Wilderness Study Area (WSA)

Approximately 18,000 acres on the north end of the Hog Pasture is in the WSA.

Livestock grazing has decreased in the past decade within the WSA due to nonuse in Little High Rock Canyon and late use in the Hog Mountain Pasture.

The primary impact of the presence of wild horses in the WSA involves short periods of helicopter and small plane overflights during aerial census and gathering activities.

## c. Mining

The Hog Ranch Gold Mine stopped excavation operations in 1995. Most of the disturbed areas associated with the mining activities have been rehabilitated.

Large portions of the allotment have mining claims. A few of these claims on the west side, and more recently the east side, of the allotment are active. This

activity has resulted in some difficulty in keeping gates closed in the Hoover Pastures. However, there is little conflict between the current level of mining activity and livestock grazing on the allotment.

## **ENVIRONMENTAL CONSEQUENCES**

## **Impacts on Upland Vegetation Communities**

## **Proposed Action**

Under the proposed action alternative, the current vigor and diversity of upland vegetation communities would be maintained. The existing infrastructure and the proposed frequency of pasture rotation and herding would allow vegetation enhancement activities, such as prescribed fire and aspen stand improvement, to occur. The annual changes in livestock season of use in the higher elevation pastures would enhance the species diversity within upland communities. This would be especially true for bitterbrush and aspen communities in the Hog Mountain Pasture.

## No Action

Under the no action alternative, the current vigor and diversity of upland vegetation communities would be maintained. The existing infrastructure and pasture rotation system would allow vegetation enhancement activities, such as prescribed fire and aspen stand improvement, to occur in all but the Hog Mountain Pasture.

## Riparian Alternative

Under the riparian alternative, the current overall vigor and diversity of upland vegetation communities would be maintained. Upland communities which are very close to water sources would receive heavy, season-long livestock and wild horse use. Most upland communities would receive light or less livestock use. Vegetation enhancement activities, such as prescribed fire, would not occur because no areas of the allotment would be available for multiple years of season-long rest from livestock use.

## Impacts on Riparian Vegetation Communities

## **Proposed Action**

Riparian areas under the proposed action would be maintained in proper functioning condition with an upward trend for the majority of the allotment. Impacts to riparian values would be less as hot season use (07/01 to 10/31) would be restricted to 30 days or less of livestock use, along with required in-pasture herding. Of the 13,517 Active AUMs, 5,254 AUMs or 39% could be used during the hot season. Some

riparian areas would still receive moderate to heavy use depending on the number of wild horses using the area, especially in concentration areas. Woody riparian vegetation would also be expected to improve without the greater than 30 days of late season livestock use, allowing for improvement in structural and species diversity in the riparian communities. Due to the limited time of hot season use by livestock and the amount of time available for regrowth, it is expected the riparian areas will have plenty of residual forage left at the end of the growing season. The action includes up to 10 miles riparian protection fences.

#### No Action

Under this alternative, the majority of the riparian areas would be expected to be maintained in proper functioning condition with a slight upward trend in the short term, except for the Hog Mountain Pasture. The Hog Mountain Pasture would continue to receive moderate to severe utilization levels as the season-of-use is from 07/15 to 10/31 every year. Wild horses are also impacting the riparian areas especially in the Hog Mountain Pasture as horse numbers increase due to ingress of horses from Winnemucca District. Of the 13,260 Active AUMs, 7,577 AUMs or 57% could be used during the hot season, 18% more than under the proposed action. Woody riparian vegetation would be expected to increase in all pastures except Hog Mountain Pasture because of the season-of-use and the amount of wild hoses using the area. In the long term, after the proposed fences are constructed, the riparian areas are expected to be in PFC with an upward trend for the majority of the allotment. Project development includes up to 50 miles of fence.

## Riparian Alternative

The riparian alternative would benefit riparian values by setting the stocking rate to the estimated carrying capacity of the riparian areas along with light utilization levels overall for the allotment. Riparian areas would be expected to be maintained in proper functioning condition with a slight upward trend in the short term. Of the 10,507 active AUMs, 5,254 AUMs or 50% could be used during the hot season, 11% more than under the proposed action. Wild horses would still have an impact on riparian areas if numbers are not maintained at 226 head as horses are not restricted by timing and duration. In the long term, after the proposed fences are constructed, the riparian areas are expected to be in PFC with an upward trend for the majority of the allotment. Woody riparian vegetation is also expected to improve under this strategy. Project development includes up to 50 miles of fence.

## Impacts on Wildlife Indicator Species

## Impacts Common to All Alternatives

Upland sagebrush dominated sites are expected to change little from their present satisfactory conditions. The implementation of a grazing system, with seasonal movement of livestock, adjustments in stocking rates and timing of use, and development of projects starting about 25 years ago has led to some dramatic improvements in upland ecological conditions. Implementation of any of the alternatives would continue the past practices on uplands and hence there would be little change in habitats for the three wildlife indicator species.

## **Proposed Action**

Mule deer habitat associated with riparian areas and small meadows would benefit primarily from decreased livestock and wild horse use in several key, but small systems, capable of producing woody vegetation (e.g., Cottonwood Creek, Upper Clover Creek), and aspen stands. Decreasing the amount of summer use by livestock by 2,323 AUMs (31 percent over existing use) and decreasing the present hot season horse use by 40 or more percent, would provide increased opportunities for riparian community improvement and increased frequency, cover and reproduction of woody species. However, these communities are a very small portion of the total habitat used by mule deer within the allotment.

Pronghorn antelope and antelope habitat would benefit slightly from implementation of the proposed action. Decreasing livestock and wild horse hot season use by at least 30 percent will increase the availability of succulent forbs on meadows in the portions of the allotment used by antelope.

Implementation of the proposed action would affect sage grouse primarily in and near meadow systems during the hot season months. Other important aspects of sage grouse habitat, including water, upland herbaceous vegetation, predation, and sagebrush would not appreciably change from the current satisfactory conditions. Meadows would retain more forage than under previous management providing conditions for increased amounts of residual vegetation and insect production. Continued livestock and horse grazing on meadows would result in a high proportion of the meadow communities in forb production, which is beneficial to sage grouse. Decreased hot season use would also result in more herbaceous vegetation remaining on upland sites adjacent to meadows. However, the utilization ceilings for meadows by season, and the reduction in the amount of time that livestock remain in any one part of a pasture will result in increased meadow vegetation, improved insect production and less disturbance to sage grouse broods from past practices.

#### No Action

Mule deer habitat associated with aspen stands and woody riparian corridors that would be fenced because they receive heavy livestock/horse use would improve in condition because the grazing/browsing pressure could be better controlled. As key areas are fenced, the remaining areas would receive increased livestock/horse grazing due to the concentration of animals on a smaller area of preferred hot season habitat. Because there are also utilization ceilings specific to key riparian areas by season, the overall utilization by livestock and wild horses outside the exclosures would be similar to those observed in the recent past

Pronghorn antelope habitat and populations would be mostly unchanged from existing conditions. Meadows fenced would initially provide increased summer antelope forage on a very small area. Depending upon how the fenced meadows were grazed in the future the quality and quantity of antelope forage could vary widely, with meadows grazed conservatively for forb production having the most antelope values. Unfenced meadows would receive about the same level of livestock and horse use that occurs presently and would be expected to contain high forb component in the plant community structure, but forage production less than the fenced meadows.

Summer impacts to sage grouse associated with meadow habitats would depend on whether the meadow was fenced or not, and how grazing was managed within fenced meadows. Unfenced meadows would receive grazing levels similar to those presently occurring in the allotment. Most meadows are stable, with good ground cover, but end of season utilization levels are greater than optimal for sage grouse. This limits cover, insect production and forage production. It does provide for a high percentage of desirable forbs in early stages of growth that sage grouse prefer, but at low production levels. Fenced meadows grazed conservatively would provide insects, desirable forbs, and cover. Fenced, ungrazed meadows would provide cover and insects but few forbs.

### Riparian Alternative

Impacts to mule deer habitats would be similar to the No Action alternative. The amount of fencing would be the same in both alternatives with similar results. Elimination of the grazing rotation in favor of spreading the livestock less densely over the entire allotment would still result in livestock and wild horses preferring riparian areas and meadows during the hot season. The lower livestock hot season stocking rate, 30 percent reduction from present level) would be offset by a lack of seasonal deferment and the shortened grazing period of the proposed action. On unfenced meadows, the utilization ceilings would be the limiting factor for riparian use.

Pronghorn antelope habitat effects would be similar to the No Action alternative for the reasons stated above.

Sage grouse habitat effects would be similar to the No Action alternative for the reasons stated above.

## **Impacts on Wild Horses**

## **Proposed Action**

The proposed action would have overall positive impacts to wild horses. The reduced numbers of wild horses in the HMA would result in less competition for forage and water between livestock and the wild horses themselves. The minimal fencing proposed in this alternative would not impair existing migration routes or access to water sources. Livestock use during the winter and early spring period could result in increased competition for forage during the winter/spring period.

#### No Action

The no action alternative would have an overall negative impact on wild horses in the area. The construction of 50+ miles of fencing around riparian areas has the potential to restrict natural migration routes and limit access to open water.

## Riparian Alternative

The riparian alternative would have an overall negative impact on wild horses in the area. The construction of 50+ miles of fencing around riparian areas has the potential to restrict natural migration routes and limit access to open water. Livestock use during the winter and early spring period could result in increased competition for forage during the winter/spring period.

## **Impacts on Livestock Management**

## **Proposed Action**

Herding would be required to limit the duration and intensity of livestock use on riparian and special habitats, especially after July 1. Intensive efforts would be required to remove livestock from, and to prevent livestock from returning to, pastures following periods of use.

#### No Action

Intensive efforts would be required to remove livestock from, and to prevent livestock from returning to, pastures following periods of use. Up to an additional 50 miles of protective fencing and 6 water developments, mostly in the Hog Mountain Pasture, would need to be constructed and maintained. If use levels are exceeded, cattle would need to come off the allotment early, or stocking rates would need to be reduced until necessary fencing is completed.

## Riparian Alternative

Up to an additional 50 miles of protective fencing and 15 water developments would need to be constructed and maintained throughout the allotment. Intensive herding efforts would be required to keep cattle distributed throughout the allotment, seasonlong. If use levels are exceeded, cattle would need to come off the allotment early, or stocking rates would need to be reduced until necessary fencing is completed.

## Mitigation

- \* Provide year-round water, at ground level for wildlife on all livestock water developments.
- \* No suspended livestock AUM's will be restored until Rangeland Health Standards and Guidelines are met.

## **Unavoidable Adverse Impacts**

Under the proposed action and riparian alternative, there would be a significant increase in the amount of labor needed to keep cattle herded and/or distributed properly.

Under the no action and the riparian alternative, there would be a significant increase in the amount of labor needed to maintain fences. Some of the fences would complicate wild horse and wildlife movement between water and forage, and between seasonal ranges. Some of the fences would have a significant adverse impact on the scenic, "untrammelled" nature of the allotment. A relatively small amount of vegetation would be disturbed during fence construction.

Under the riparian alternative, there would be a reduction in the number of AUMs the livestock operator would be allowed to harvest from the allotment.

## Irreversible and Irretrievable Commitment of Resources

There are no irreversible or irretrievable commitments of resources identified under any of the three alternatives considered. The livestock grazing systems can be changed, fences can be removed, and the wild horse herd can be allowed to increase in number if future evaluations indicate a different course of action is needed to meet resource objectives.

## **Cumulative Impacts**

The alternatives are designed to maintain or improve the current good conditions in upland communities and to improve the conditions in riparian communities and special habitats. In the long term, the alternatives will benefit: 1) Wildlife, by providing habitat which is more diverse and plentiful, 2) Wild horses, by maintaining an adequate amount of forage for the appropriate number of animals, and 3) The livestock operation, by providing adequate forage for seasonal livestock needs without increasing operating costs beyond the value of the operation.

## CONSULTATION

The alternatives were developed in consultation, cooperation, and coordination with the livestock operator and the Commission for the Preservation of Wild Horses. The Nevada Department of Wildlife was invited to participate in the process, but they have declined to do so.

## **PREPARERS**

Alan Uchida, Watershed Specialist
Roger Farschon, Ecologist/Wilderness Specialist
Tara de Valois, Rangeland Management Specialist
Rob Jeffers, Supervisory Resource Management Specialist/Wild Horse Specialist
Hugh Bunten, Cultural Resources/Recreation Specialist

APPENDIX A - Tuledad/Home Camp Management Framework Plan (1977)

Summary of Applicable Land Use Plan Objectives and Decisions			
Resource Issue	Objectives and the second of t	Decisions	
Range Management	Manage land which is suitable for livestock grazing in such a manner that within 20 years all plant communities are on an upward trend toward site potential. Site potential by soil associations are described in the soil survey for the Surprise Valley-Home Camp area by Summerfield and Bagley (USDA, SCS, 1965)	Initiate systematic livestock management plan on the Bare Allotment.  The initial stocking rate will not exceed the present active preference. (14,737 AUMs).	
	Increase livestock production from the present 44,334 AUMs to 79,325 AUMs as forage becomes available.  Stabilize the local economy which is dependent upon livestock production on public lands.	Consider large-scale cultural treatments after an environmental assessment has been prepared for sites identified as having potential for successful treatment.  Forage increases should be first allocated to meet wildlife habitat objectives or other multiple use objectives.  Subsequent forage increases should be allocated	
Watershed	Reduce soil erosion class to slight (SSF 30 or less) throughout each planning unit within 30 years for the entire 666,000 acres.	to meet Class I demands of the permittee.  Implement livestock management plans that restore vegetation to site potential.  Implement water monitoring stations to allow analysis of water quality for adherence to Federal, State, and local regulations.	

Summary of Applicable Land Use Plan Objectives and Decisions			
Resource	Objectives	Decisions	
Wildlife	Provide high quality deer habitat.	Provide deer habitat capable of supporting deer populations of 270 on Cherry Mountain, 150 on Fox Mountain, and 40 on Hog Ranch Mountain.	
		Strive to change monotypic stands of mountain mahogany on deer summer/yearlong ranges to an interspersion of about 50% brush fields and 50% mixed brush/grass types, as consistent with site potential.	
		Develop a grazing management plan that will provide for leader growth and reproduction of bitterbrush.	
	Double existing antelope populations to reach levels of 2,500 antelope on summer ranges, and 2,000 antelope on winter ranges by 1990	Manipulate areas of tall sagebrush where site analysis shows succeeding forage will be superior to the brush removed. Monitor results.	
	Maximize nesting opportunities and improve waterfowl habitat for spring-fall use by improving existing water bodies and creating seasonal marshlands on all potential habitat by 1983.	Artificial nesting areas and improved shoreline vegetation should be provided to improve waterfowl production at Woodruff Reservoir.	
	Improve 75% of sage grouse habitat during the next 15 years.	Provide year-round water, at ground level for wildlife on all livestock water developments.	
		Prohibit all vegetation manipulation within two miles of sage grouse strutting areas and within 100 yards of any meadow or stream.	

Summary of Applicable Land Use Plan Objectives and Decisions				
Resource Issue	Objectives	Decisions		
Wildlife	Maintain and improve existing raptor nesting habitat and expand nesting range by 25% by 1985.	Exclude vegetative manipulations within a 3 mile radius of any eagle, peregrine falcon, or prairie falcon eyrie.  Identify sites and develop a (raptor) HMP to be coordinated with other resource activity plans to		
	Achieve maximum reproduction, survival, and	avoid conflicts.  Management systems should be designed to		
growth of riparian vegetation on 75% of this vegetation type within 10 years.		improve riparian vegetation on streams throughout the unit. Fence streams where management is unable to improve riparian habitat.		
	Maintain at least 25% of each native vegetation type in a natural or near natural condition and improve non-game bird habitat on all range	Maximize vegetative cover according to site potential.		
	improvement projects.	All reservoirs should be designed to provide cover, food and water for non-game birds by retaining or developing varying heights and densities of vegetation, shading portions of sterile soil-water interfaces.		
Wild Horses	Protect and manage wild free-roaming horses and burros as components of the public land in a manner to achieve ecological balance with other uses.	Manage and protect a viable, self-sustaining horse population. Protect and maintain no less than 50 horses for the Fox-Hog Herd Management Area. Develop herd management activity plans for each herd management area.		
	-	Consider horse use areas when fencing.		
		Conduct routine inventories of wild horses.		



## United States Department of the Interior

#### **BUREAU OF LAND MANAGEMENT**

Surprise Field Office
P.O. Box 460
602 Cressler Street
Cedarville, CA 96104
(530)279-6101 - (530)279-2171 FAX

In Reply Refer To: 4100(CA-370)P

April 2, 1999

## PROPOSED MULTIPLE USE DECISION

## BARE ALLOTMENT AND FOX-HOG WILD HORSE HERD MANAGEMENT AREA

Livestock Carrying Capacity and Grazing Strategy Wild Horse Appropriate Management Level

## **BACKGROUND**

The Tuledad/Home Camp Final Environmental Impact Statement was issued in 1978. This document established multiple use goals and objectives which provide management guidance for the public lands in the Bare Allotment. This document designated the Bare Allotment as available for grazing.

43 CFR 4130.2 requires the authorized officer to issue grazing permits or leases to qualified applicants to authorize use on the public lands that are designated as available for livestock grazing through land use plans.

The proposed grazing use on the allotment was analyzed in Plan Conformance/NEPA Compliance Record No. CA-370-99-08. It was found to be in conformance with the applicable land use plan.

This Proposed Decision is needed because the current livestock grazing system and the current number of wild horses on the Bare Allotment are in conflict with some of the resource objectives for the allotment.

## **PROPOSED DECISION**

Based on all information available to me, it is my decision to implement the Proposed Action of Environmental Assessment #CA-370-99-08, by: 1) establishing the Carrying Capacity for the Bare Allotment, 2) establishing Appropriate Management Levels for the Fox-Hog Wild Horse Herd Management Area, 3) amending the Bare Allotment Management Plan, and 4) re-issuing North Fork Ranch's permit to graze livestock in the Bare Allotment.

1. The Total Carrying Capacity (livestock and wild horses) for the Bare Allotment is:

16,225 AUMs.

II. The Appropriate Management Level for the Fox-Hog Herd Management Area is:

226 wild horses.

## III. The Bare Allotment Management Plan (AMP) is amended as follows:

- A. Replace the objectives of the AMP with the following objectives:
  - 1. Maintain current amounts of litter cover on all upland trend transects to protect soils from accelerated wind and water erosion and to maintain soil health.
  - 2. Ensure all upland trend sites are moving towards, or are being maintained at, mid seral to Potential Natural Community (PNC) for the appropriate Range Site Potentials (as described by NRCS).
  - 3. Increase the diversity of seral stages in some of the big sagebrush and mountain brush communities on the higher elevations to improve wildlife habitat and to maintain progress towards Range Site Potential.
  - 4. Increase the age class diversity of existing aspen stands, and increase the size and occurrence of aspen stands where the potential exists.
  - 5. Maintain bitterbrush Form Class in the range of 1.25-2.5 to benefit both game and non-game species in all pastures.
  - 6. At a minimum, manage for Properly Functioning Condition (PFC) on all riparian areas. Develop Desired Plant Community (DPC) descriptions for all key riparian areas; these DPC's should range from mid seral to Potential Natural Community (PNC).
  - 7. Reduce accelerated erosion and compaction of soils in key riparian areas.

- 8. Little High Rock Canyon:
  - a. Maintain the primitive characteristics of the Little High Rock Canyon complex.
  - b. Preserve archaeological and historical sites.
  - c. Provide habitat for bighorn sheep, other game and non-game wildlife, and wild horses.
  - d. Maintain Little High Rock Creek in Properly Functioning Condition and moving towards PNC.
- 9. Manage livestock numbers to be within the carrying capacity of the allotment on a year with median to low precipitation and plant growth. Maintain a livestock grazing system that, 1) will allow both the upland and riparian objectives, and the Little High Rock Canyon objectives to be met, and 2) is economically feasible for the livestock operator to achieve.
- 10 Maintain the Fox-Hog Wild Horse herd within the Appropriate Management Level (AML) of 226 horses, to allow soil and vegetation management objectives, including riparian area objectives, to be met, and to maintain a viable herd.
- 11 Implement the Surprise Integrated Noxious Weed Management Area Memorandum of Understanding.
- B. Replace the Grazing System/Management Practices in the Bare AMP with:

## Initial Stocking Rate

Active Use	Suspended Non-use	Total Permitted Use	<u>Private Use</u>
13,260 AUMs	12,043 AUMs	25,303 AUMs	231 AUMs

When the BLM determines that the Rangeland Health Standards are fully met, an additional 257 AUMs of Suspended Non-use may be activated.

## **Livestock Grazing System**

The existing eight fenced pastures will be maintained. An annual pasture rotation schedule will be developed by the BLM and the livestock operator prior to grazing use each year to meet the objectives for the allotment. This schedule will include, 1) turnout and gather dates for each pasture, and 2) herding strategies for all pastures which are scheduled for more than 45 days of use in the cool season (November 1 to June 30) or 30 days of use in the hot season (July 1 to October 31).

The pasture rotation and herding schedule will emphasize periodic season-long rest and annual changes in season of use for each pasture/use area, while following natural livestock movement patterns (uphill in spring/summer, downhill in fall).

## Conditions and Flexibility

- 1. Of the total 13,260 AUMs of Active Use, a maximum of 5,254 AUMs may be used between July 1 and October 31.
- 2. Duration of use on each key public riparian area will be limited to a maximum of 45 days during the cool season (November 1 to June 30), or 30 days during the hot season (July 1 to October 31). Pasture rotation and herding will be the primary tools to ensure duration of use does not exceed these amounts. Riparian area specific fencing of key riparian areas will be considered if pasture rotation and herding are insufficient in meeting resource objectives.
- 3. Maximum use on key riparian areas will be: (1) 60% of the current year's growth by July 1 (herbaceous vegetation), and/or (2) 40% of the current year's growth by October 31 (herbaceous and woody vegetation).
- 4. Maximum use of upland vegetation will be 60% of the current year's growth of key grasses and shrubs.
- 5. Following consultation with the BLM, the livestock operator may change the pasture rotation system during the grazing year to adapt to weather, water, and forage conditions. However, duration of use in riparian areas may not exceed 30 days during the hot season, and utilization criteria may not be exceeded.
- 6. The BLM may authorize livestock use that exceeds utilization criteria, <u>only</u> when it is determined that such use is necessary to meet vegetation or wildlife habitat objectives.
- 7. All salt placed on the Bare Allotment must be at least ¼ mile from all water sources and natural riparian areas on public land.
- 8. The Bare Allotment livestock operator will be given first preference for use in Little High Rock Canyon if the BLM determines that prescriptive livestock grazing would benefit the vegetation or wildlife in the canyon.
- 9. The Fox Mountain Pasture may be used after July 15 no more than one year in three.

- C. Incorporate the following Monitoring Requirements into the Bare AMP:
  - 1. Within 5 years, conduct a Riparian Functional Assessment (RFA) and Ecological Site Index (ESI) to obtain baseline data on the hydrologic conditions and potentials of the riparian systems in the allotment.
  - 2. Conduct baseline rangeland condition assessments on all upland trend sites using methods comparable to NRCS (vegetation composition by weight at this time). Verify and/or update range site descriptions for each permanent trend transect. Identify areas that do not meet NRCS potentials due to decadent shrub components.
  - 3. Within 5 years, conduct a baseline aspen inventory.
  - 4. Monitor upland trend, using established cover methods once every 10 years, and using NRCS weight methods once every 20 years.
  - 5. Conduct riparian vegetation community analysis and soil alteration assessments on all key riparian systems once every 6 years.
  - 6. Utilization transects and mapping on all key riparian and upland (including aspen and bitterbrush) communities once every 3 years.
  - 7. Cole Browse on bitterbrush once every 3 years
  - 8. Aerial census wild horse numbers and distribution once every 3 years, and before any gather.
  - 9. Annual wild horse and livestock use supervision.
  - 10 Actual use collected annually at the end of each grazing season.
  - 11 Baseline and annual noxious weed inventory and assessment.
  - 12 Production and cover assessments before any prescribed fire and annually after both wild and prescribed fire until rehabilitation plan objectives are met.
  - 13 Little High Rock Canyon Riparian utilization and key area photographs once every 6 years.

D. Add the following to the Proposed Projects section of the Bare AMP:

## **Project Development Needs**

Site specific environmental assessments will be conducted before any projects are implemented in the Bare Allotment.

- 1. Prescribed fire may be used as a tool in 1) higher elevation, decadent big sagebrush and mountain brush communities, 2) Lower Cottonwood Creek and/or Lost Creek, and 3) non-regenerating aspen stands.
- 2. Small erosion control structures to halt headcutting in the drainages (as necessary, based on the findings of the RFA).
- 3. Short pipelines and limited water developments to remove troughs from the drainages/springs and onto the uplands.
- 4. Road closures in drainages (as necessary, based on the findings of the RFA).

## IV. The North Fork Ranch livestock grazing permit will be renewed as follows:

Bare Allotment #00900

Term: 10 years, beginning March 1, 2000 and ending February 28, 2010.

```
1870 cattle 03/01 - 06/30 98% pl 7,349
1340 cattle 07/01 - 10/31 98% pl 5,254
670 cattle 11/01 - 11/30 98% pl <u>657</u>
13,260 AUMs
```

The following terms and conditions shall be incorporated in the permit:

- 1. "The terms and condition of your permit or lease may be modified if additional information indicates that revision is necessary to conform with 43 CFR 4180 (Rangeland Health Standards and Guidelines)".
- 2. "All grazing use will be in accordance with the Bare Allotment Management Plan and all other applicable decisions."
- 3. "Billing will be based on actual use reports submitted 15 days following the last authorized take off date for your permit."
- 4. "Any increases or extensions in grazing use must receive prior approval from the authorized officer."

## **AUTHORITY**

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

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

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

4130.2(a): "Grazing permits or leases shall be issued to qualified applicants to authorize use on the public lands and other lands under the administration of the Bureau of Land Management that are designated as available for livestock grazing through land use plans..."

4130.3: "Livestock grazing permits and leases shall contain terms and conditions determined by the authorized officer to be appropriate to achieve the management and resource condition objectives for the public lands and other lands administered by the Bureau of Land Management, and to ensure conformance with the provisions of subpart 4180 of this part."

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

4130.3-2: "The authorized officer may specify in grazing permits or leases other terms and conditions which will assist in achieving management objectives, provide for proper range management or assist in the orderly administration of the public rangelands..."

## **PROTEST AND APPEAL PROCEDURES**

In accordance with 43 CFR 4160.2, any applicant, permittee, lessee or other affected interest may protest this proposed decision under 43 CFR Sec. 4150., in person or in writing to the Authorized Officer at the following address: Susan T. Stokke, Field Manager, Surprise Field Office, P.O. Box 460, Cedarville, CA 96104. Any protest must be filed within 15 days after receipt of the decision. The protest, if filed, should clearly and concisely state the reason(s) as to why the proposed decision is in error.

In accordance with 43 CFR 4160.3(a), "In the absence of a protest, the proposed decision will become the final decision of the authorized officer without further notice unless otherwise provided in the proposed decision".

Any person whose interest is adversely affected by the final decision may file an appeal and petition for stay of the decision pending final determination of the appeal. The appeal and petition for stay must be filed in the office of the Authorized Officer at the address stated above within 30 days following receipt of the final decision, or 30 days after the date the proposed decision becomes final.

The appeal shall state the reasons, clearly and concisely, why the appellant thinks the final decision is in error.

Should you wish to file a motion for a stay, the appellant shall show sufficient justification based on the following standards, as required by 43 CFR 4.21(b)(1):

- 1. The relative harm to the parties if the stay is granted or denied,
- 2. The likelihood of the appellant's success on the merits,
- 3. The likelihood of immediate and irreparable harm if the stay is not granted, and
- 4. Whether the public interest favors granting the stay.

As noted above, the petition for stay must be filed in the office of the authorized officer.

Susan T. Stokke, Field Office Manager

Date



## DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES

# COMMISSION FOR THE PRESERVATION OF WILD HORSES

123 W. Nye Lane, Room 230
Carson City, Nevada 89706-0818
Phone (775) 687-1400 • Fax (775) 687-6122

Susan T. Stokke, Field Office Manager BLM-Surprise Field Office PO Box 460 602 Cressler Street Cedarville, CA 96104

RE: Bare Allotment and Fox Hog
Wild Horse Herd Management Area

Dear Susan,

We appreciate the opportunity to review and comment on the Bare Allotment and Fox-Hog Wild Horse Herd Management Area Decision Record/FONSI.

We feel the appropriate management level (AML) issues were not fully addressed and that the carrying capacity is flawed. We find it extremely difficult to understand and disagree (as was stated in our previous letter), how the carrying capacity was determined and calculated. Setting a carrying capacity on a one time percentage of forage production is incorrect. Depending upon precipitation and runoff the forage production will greatly vary from year to year. Adjusting wild horses annually is not an option as it is with livestock.

We agree that utilization on riparian areas should be limited to 40% to protect the area. We encourage the District to properly monitor wild horse use prior or post livestock turnout to more accurately determine an AML for Fox-Hog HMA.

Sincerely,

CATHERINE BARCOMB

Administrator