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NEVADA WILD HORSE RANGE AND USAF TACTICAL
FIGHTERS WEAPONS CENTER RANGE COMPLEX

WILD HORSE HERD MANAGEMENT AREA PLAN

Nevada Wild Horse Range and USAF Tactical Fighter
Weapons Center Range Complex
Wild Horse Herd Management Area Plan

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I. Introduction

The Nevada Wild Horse Range (NWHR) was established in 1962 by a cooperative agreement with the Department of Defense and the Department of Interior. Wild horse population estimates at that time were placed at 200-400 head. These horses were mainly in the area designated as the NWHR. Since 1962 the wild horses have expanded their range and roam over a much larger area. The present population estimates are 4000-5000 wild horses on the NWHR and surrounding area. The NWHR is 394,000 acres of unfenced range lying within the northeast corner of the USAF Tactical Fighters Weapons Center Range Complex in Nye County. The total area of the present home range is estimated at 1,165,000 acres. (See map), which is presently covered by a five party agreement for management with the U.S. Air Force (USAF), U.S. Fish and Wildlife Service (USFWS), Department of Energy (DOE), Bureau of Land Management (BLM), and the Nevada Department of Wildlife (NDOW).

Historically this area was grazed by livestock, horses and wildlife. Even though the area was withdrawn for military purposes in 1940, livestock grazing continued until 1979. Attempts were made during the fifties and sixties to discontinue livestock grazing to no avail. In 1979 a fence along the northern boundary was completed thus eliminating livestock grazing from the area. Nationally the NWHR is not well known and does not generate much public interest, because of its remoteness and the inaccessibility of the area. The National Wild Horse Association, a Las Vegas based organization, has shown considerable active interest and has been involved in helping develop and maintain water improvements. The members are also very much interested in the welfare of the wild horses. The USAF and the DOE has an on-going program of weapons development and military aircraft training which is presently increasing. These activities lessen and/or prevent even agency access to the area, especially the area designated as the Tonopah Test Range.

II. Plans Purpose

The major purpose of this plan is to manage the wild horses according to the Wild Horse and Burro Act of December 15, 1971, (Public Law 92-195) as amended by Public Law 94-579 and Public Law 95-514.

III. Background Information

A. Location

The NWHR is located in the northeast corner of the USAF Tactical Fighters Weapons Center Range Complex (Range Complex) approximately 40 miles southeast of Tonopah, Nevada. (See area map) The general topography is of broad flat valleys and steep rocky mountains.

The area the wild horses are presently using is shown on overlay No. 1. The acreage is as follows:

NWHR	394,000 acres
Remaining Use Area	<u>771,000 acres</u>
	1,165,000 total acres

B. Resource Data

1. Vegetative Resource

No vegetative inventory has been conducted nor is one planned. To determine the grazing capacity monitoring studies will be conducted. Because of the security restriction placed on the area outside the NWHR, monitoring will be conducted on NWHR only.

Utilization studies initiated in 1980 show that heavy to severe use is being made within 1/2 mile of all water facilities. Outward from waters to about 4 1/2 miles the use is moderate to heavy and even past this point, the vegetation appears to have been mown.

Cactus Flat and Kawich Valley should have similar vegetative communities. However this is not the case. The intense grazing made on Cactus Flat has altered the vegetative community and rabbitbrush is increasing to a high percentage in the plant community.

Generally the communities in the valleys are composed of galleta grass, Indian ricegrass, numerous forbs, big sage, low sage, rabbitbrush, buckwheat, desert globemallow, pinyon pine, and juniper.

2. Range Condition and Trend

Condition and trend studies were initiated in the spring of 1981. Vegetative trends can only be determined after many years of data collection. Based on the physical damage to the forage plants from trampling, and grazing and the abundance of undesirable plants, the apparent trend is down.

The apparent condition varies from good to poor depending on the distance from water. These areas within 1/2 mile of water are in very poor condition whereas those farther removed are in fair to good condition, depending on distance from water sources. The visual appearance and field observation of comparison areas were used to derive the apparent condition.

No such thing as apparent cond.

3. Soils

Soils in the NWHR area are primarily aridisols and entisols. A few mollisols occur on the upper elevations of the mountains and high plateaus. No soil survey has been conducted nor is one planned.

4. Water (see overlay #2)

Water sources for the wild horses and wildlife in the home range consist mainly of undeveloped springs and natural catchment basins. Past livestock operations had developed some of the spring and pipelines, but since these operations have been restricted from the Range Complex, these developments have deteriorated to the point that they provide water only at the source.

The BLM with assistance from the National Wild Horse Association has developed five springs. Two of these spring developments are the water source for two pipelines for better water distribution.

Waters in the Cedar Peak area are maintained by the Nevada Wild Horse Association. Summer and Cedar Springs, along with George's Water, are maintained by Mr. Joseph Fallini. The Air Force maintains the water well at the Operations and Maintenance Compound on the Tonopah Test Range.

Wild horse use areas are restricted to the above mentioned water sources especially during the summer months.

5. Animals

a. Wildlife

An estimated 200-300 mule deer, 120 antelope, 35-50 desert bighorn sheep, and four (4) mountain lions make year long use of the area. The mule deer are found on all mountain ranges within the area. The antelope use the foothills and the valleys. Main concentrations are in the northern portion of Cactus Flat and all of Kawich Valley with occasional sightings around Stonewall Mountains. The desert bighorn sheep and the mountain lions are on and around Stonewall Mountain.

Other wildlife species found in the area include a variety of raptors, such as Golden eagles and hawks, numerous small birds and small mammals and many reptiles. Jackrabbits and cottontails are common, but population levels fluctuate periodically in high/low cycles.

No endangered species are known to exist in the area.

b. Livestock

Livestock are no longer licensed to graze this area and only an occasional livestock trespass occurs.

c. Wild Horses

Origin of the wild horse in this area is not known, but it was probably from domestic stock of ranches and mining operations. Estimated wild horse population in the late 1950's was a 200-400 herd according to USAF personnel. Little emphasis has been placed on data collection, particularly due to the restricted entry and remoteness of the NWHR. In 1960 a Wild Horse Management Plan was developed for the NWHR. Even though both parties agreed to the plan it was never implemented. The BLM and USAF have been conducting aerial horse inventories since 1977. The present population is 3122 (actual count), with an estimated population of 3500-4000 horses present.

Horse colors vary from white to black and all shades in between. However, the predominant colors are bay and sorrel with a few pintos in the Stonewall Mountain area. The wild horses are found mainly within the NWHR. There are two other herds as shown on the base map. No efforts have been made to control the wild horse population at least for the past twenty years. Prior to that period data is sketchy.

Most animals appear to be in good condition. Some poor condition animals have been seen intermixed with animals of good condition. These poor condition animals could be the result of old age, sickness, parasites and nursing (mares).

There is no data for sex ratio, age structure, or mortality. Productivity based on limited data from one year's observation is approximately 8 or 9 percent.

d. Burros

There are no burros on the NWHR at this time. Burros do exist around Stonewall Mountain and the Goldfield range. Present population estimates are:

Stonewall Mountain - 110 burros
Goldfield Range - 50 burros

Most of the burros are off the Range Complex but they do occasionally migrate onto the range.

The animals appear to be in good condition.

6. Seasonal Use Areas (See Overlay # 1)

The horses tend to concentrate in the areas close to the water source during the summer months. Most of these areas are along the upper portions of the piedmont slope. During the cooler months the horses use a much larger area extending 10-15 miles from known water sources.

7. Home Range (See Overlay # 1)

Three home ranges have been identified in the area, Kawich, Stonewall, and Goldfield hills.

Horses in the Stonewall home range do not mix with the other two herds. The Kawich and Goldfield herds do intermix during the winter months near the Mud Lake area.

C. Existing Projects (See Overlay # 2)

1. Water

Water projects consist of three spring developments with troughs at the source and two spring developments with a pipeline distribution system. These projects are maintained by the National Wild Horse Association.

Water projects left over from past livestock operations have deteriorated and are in need of repair. The pipeline projects are no longer functional and provide water only at the spring source. There are also numerous nonfunctional wells and silted in reservoirs.

2. Fence

The northern boundary of the Range Complex has been fenced to restrict cattle movement into the range. There are no interior fences.

D. Coordination

1. Relationship to Other Resource Use and Resource Conflicts

a. Wild Horse - Wildlife (See Overlay # 3)

Present estimate of big game are 35 to 50 Desert Bighorn Sheep, 120 antelope, and, 200-300 mule deer.

In the Stonewall herd area the wild horses (500 +) are making heavy demands on the water and forage resources. The highest mountain peaks show sign of horse use. This herd is in direct conflict with the mule deer and desert bighorn sheep.

The Kawich herd area has approximately 120 head of antelope and 1500 to 2000 herd of horses. During the winter months the antelope frequent the areas between the Silver Bow and Rosebud springs. However, as the wild horses move back into the area in early spring the antelope leave this area. It is not known if the

*Not supported
by other research
on deer & horses*

horses are responsible for their departure or just a seasonal movement of antelope. The horses are making heavy demands on the vegetative resources and are utilizing the same forage species as the antelope.

Based on what? 100% overlap? I doubt it.

The resident herd of mule deer is very small in numbers at the present. The NDOW feels that this is the result of too many horses in and around the deer habitat. Two to three hundred deer are estimated in the area on a seasonal basis mainly from a migratory herd.

conflict has never been a factor who said they were increasing. The data doesn't show this.

Continued heavy use of forage and uncontrolled horse population increase and expansion of horse use will likely result in reduced productivity of bighorn sheep and mule deer in the area. Should the heavy forage utilization by horses continue, a demise of native big game species could occur in the area.

b. Wild Horse - U.S. Air Force and Department of Energy Uses

The U.S. Air Force has used the NWHR and surrounding area as a military training area for the past forty years. Initially there was little conflict between wild horses and the Air Force use because of the low wild horse population. In the last 10-15 years the horse numbers have increased and have interfered with the military's training to the point of in direct conflict between the two.

DOE, through a contract with Sandia National Laboratories, has used the northern portion of the Range Complex for military weapons test and development for more than ten years. The weapons development systems requires the use of many optical devices in which good visibility is necessary in order to be effective. The suspended particulates have increased to the point that, at times, the optical equipment is rendered useless. The increased particulates are the result of reduced ground cover from overgrazing.

*Wild Horse
? this*

Another problem is that of wild horses on or near the test site air field. This presents a potential safety hazard to aircraft that use the airfield.

The increased vehicular use and the large wild horse population have resulted in vehicle/horse collisions. To date there have been no human injuries, but the potential for serious accidents exists.

IV. Objectives

A. Habitat

1. Forage

Maximum allowable use on the key forage species should be 55% for perennial grasses and forbs, and 45% for shrubs.

2. Cover

The main source of cover is provided by the pinyon-juniper on the mountain slopes. Some cover is provided by the canyons and rocky outcrops along the foothills.

3. Water

Present waters will be maintained. No new developments are planned.

B. Wild and Free Roaming Horses

1. Primary Objectives

The primary objectives are to manage, protect and control wild free roaming horses where they existed in 1971. The wild horses will be managed in accordance with Wild, Free-Roaming Horse and Burro Act, and the Range Land Improvement Act for protection against capture, branding, harassment, or death. 11/2/80

2. Animal Numbers

Representatives of the five agencies responsible for management of the NWHR, Tonopah Test Range, Desert Game Range and USAF Tactical Fighter Weapons Training Center Range Complex (formerly Nellis Air Force Range) made the following recommendations on February 12, 1982:

- a. Reduce the numbers of horses from the present numbers to an average of 1000 animals.¹
- b. Confine and manage these animals to the Kawich Home Range.
- c. Remove the horses/burros from the Stonewall and Goldfield Ranges.

¹ These interim numbers were derived by estimating the available suitable forage within a four mile radius of water. Numbers to be managed on NWHR will be derived from monitoring studies over a period of years. The selected number will be allowed to fluctuate an average of 20 percent between periodic removal operations.

3. Specific Objectives for the Three Home Ranges are:

*But you don't know
have an inventory
Horses go further
from H2O*

- a. Kawich (See Overlay #1)
Aerial counts in May 1981 showed 1700 horses using this home range. The horses have expanded this range in the recent past which is evident by the difference in vegetal cover in the Cactus Flat area to that in Kawich Valley. Livestock operators using the Kawich Valley possibly kept the wild horse level at a minimum in area.

*Ad. difference
in veg cover does
not indicate
expansion. A change
in May or may not*

If this herd is not reduced to a level that is in line with the vegetative carrying capacity serious resource damage can be expected. *but you said you don't know this*

An average herd size of 1000 horses will be maintained.

- b. Goldfield Range (See Overlay #1)

The area is within the Tonopah Test Site and ground entry is severely restricted. Only aerial horse count and general vegetative data have been collected.

No monitoring studies can be conducted in this area because of the inherent danger and security restriction.

All horses will be removed from this area.

- c. Stonewall Range (See Overlay #1)

There are approximately 570 head of horses currently using this area. The Nevada Department of Wildlife recommends total removal from this area because of the conflict between wildlife and wild horses. Only a small portion of the "home range" can be monitored, and the recommendation is to remove all horses from Stonewall Mountain.

4. Wildlife Objective

Increase Desert Bighorn Sheep herd population on Stonewall Range to 150 head.

Increase resident mule deer herd on Stonewall range to 300, Kawich range to 80.

Increase Antelope population on Kawich range to 300.

V. Management Methods

A. Minimal Management

In order to keep management at a minimal level, there will be no pasture fencing even though a higher population level might be maintained if fencing were used. The objective can be attained by reducing the wild horse population to the current grazing capacity of the suitable range. Wildlife demands shall be considered when determining the grazing capacity.

B. Methods to be Used

Methods to be used to reduce the wild horse population will be water trapping and/or helicopter gathering.

C. Timing

The initial reduction should take place in FY82 in accordance with the U.S. Air Force and Tonopah Test Range scheduling. Close coordination is required in order to effectively accomplish any removal of wild horses. A longer period (three years) of reduction may be required due to limited funding.

This is capture plan

VI. Cooperative Arrangements (See Five-Party Cooperative Agreement)

The Bureau has entered into a Cooperative Agreement with the U.S. Air Force, Department of Energy, U.S. Fish and Wildlife, and the Nevada Department of Wildlife. This agreement details the different roles and responsibilities of each cooperator.

VII. Management Facilities and Equipment

Existing management facilities on the Kawitch consist of two pipelines and two corrals plus five spring developments. (See Overlay #3 for location). The pipelines and spring developments have increased the area of use made by the wild horses. The corrals are in disrepair and serve no purpose at this time, but could be repaired easily and used in a capture operation.

VIII. Studies and Assessment

A. Habitat Studies

Monitoring studies have been started on the Kawich area (NWHR) to evaluate range condition and trend, utilization, climate and grazing patterns.

B. Animal Studies

The Fish and Wildlife Service is interested in assisting in conducting a population dynamic study to determine age structure, mortality, natality, sex ratio, and a life table. The service will submit a proposal to the BLM to see if there is a possibility for funding the study. This information is greatly needed in order to manage the wild horses.

we will get it from capture data we trained Las Vegas personnel in July in procedure for analyzing the data

C. Animal Census

1. The NDOW will continue annual wildlife census.
2. BLM will continue annual wild horse census.

IX. Modification

This plan may be modified as new data and evaluation deem necessary.

X. Persons, Groups and Government Agencies Consulted

U.S. Air Force Nellis Air Force Base,
U.S. Department of Energy,
Nevada Department of Wildlife
U.S. Fish and Wildlife Service
National Wild Horse Association
Wild Horse Organized Assistance
Animal Protection Institute
Humane Society of Southern Nevada

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