

**United States Department of the Interior
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**Environmental Assessment
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**Rafiki Mountains Wild Horse Range
2009 Gather Plan
and Environmental Assessment (EA)**

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1.0 BACKGROUND INFORMATION

1.1 Introduction

After analysis of comments, the Bureau of Land Management (BLM) Hawk Lake Field Office (HLFO) proposes to gather all wild horses from the Rafiki Mountains Wild Horse Range (RMWHR) and adjacent lands; conduct appropriate testing on each removed horse to determine its genetic profile; return 90 horses with an optimal range of genetic profiles; permanently remove up to 100 adults, including foals with mares identified for removal; and manage the wild horse population at 90 wild horses. These actions are necessary because the BLM has determined that excess wild horses are present on the range. Excess wild horses removed would be prepared for adoption or sale at the Richfield Corrals Facility. The methods of capture would include the use of the Active Denial System (ADS), Long Range Acoustic Devices (LRADs), rubber bullets, and helicopter drive-trapping, each of which would be used to herd horses into temporary traps of portable panels. After capture in the traps, horses would be sorted on site.

The gather would begin on or around September 10, 2009 and continue until management objectives are met. Public lands will be closed for as long as the gather operation takes. After review of wild horse census, distribution, and condition data, forage utilization, ecological conditions, trend data, and precipitation data, it has been determined that an excess population of wild horses exists within the RMWHR and that there are additional wild horses residing outside the Herd Management Area because of the growing overpopulation. It has also been determined that a post-gather population of 90 wild horses within the RMWHR will promote a thriving natural ecological balance (TNEB) and preserve multiple use relationships for several years.

This environmental assessment (EA) has been prepared to analyze the impacts associated with the BLM's proposal to remove excess wild horses.

An appropriate management level (AML) is the number of wild horses, determined through BLM's planning process, to be consistent with the objective of achieving and maintaining a TNEB and ensuring multiple-use relationships. The Rafiki Mountains Herd Management Plan and the Hawk Lake Resource Area Management Plan (HMAP), initially drafted in 1984, established the initial stocking rate for the range at 125-137 wild horses. The AML was revised in July 1992 and set at 85-105 wild horses. BLM's mandate is to manage for healthy, self-sustaining herds on healthy rangelands. The habitat objectives in the HMAP are to manage for a slight upward trend in range health. Cumulative impacts, including weather, drought, and grazing, have resulted in the current conditions. Excess wild horses were last gathered from the RMWHR in 2006 utilizing a bait trapping method. Prior to that, helicopter drive trapping was used in 1997, 2001, and 2003. Before helicopter drive trapping, gathers were conducted almost exclusively on horseback.

1.2 Location

The project area is located in northeastern Tatu County, California, and northwestern Bwana County, Nevada, in the RMWHR and adjacent Rubin National Forest lands. Elevations range from 3,050 feet to 7,350 feet above sea level. Annual precipitation varies with elevation with six inches at the lower elevations to upward of 20 inches at the higher elevations. Plant communities also vary with elevation and due to precipitation from cold desert shrub to sub-alpine forests and meadows. Soils vary in depth from shallow (less than ten inches) to 20 to 40

inches deep depending on location. Water is limited to five perennial water sources within the RMWHR.

In 1969, the Secretary of the Interior created the RMWHR after plans to remove wild horses from the Rafiki Mountains and sell them for slaughter led to objections from the public. The Secretary reserved 36,000 acres to “protect the unique population of wild horses of Spanish ancestry and protect native wildlife, watershed, recreation, archaeological, and scenic values.”

1.3 Purpose and Need

The purpose and need of the proposed action is to immediately manage for a TNEB over the next several years and limit wild horses to within the RMWHR. Data from the Natural Resource Conservation Service’s *Rafiki Mountains Wild Horse Range Survey and Assessment* (2004) and the *Interagency Rafiki Mountains Wild Horse Range Evaluation* (February 2006) shows that the RMWHR does not have the capacity to sustain the current wild horse population over the long term in a manner that is conducive to healthy rangelands or ecological conditions. The Proposed Action is needed to restore wild horse herd numbers to levels more consistent with a TNEB and to remove or relocate wild horses from areas outside the RMWHR.

Since 1996, the Rafiki Mountains wild horse herd has averaged 160 horses. Aerial census data collected in February and March of 2009 showed the Rafiki herd consisted of 190 wild horses, excluding the current foal crop. Twenty-nine (29) of those wild horses are perpetually residing outside the RMWHR. Resource damage in the low elevation desert areas and sub-alpine meadows of the RMWHR has been reported. Such resource damage is likely to continue unless immediate action is taken. In 2007, a shift toward a downward trend in ecological condition was documented for the low elevation areas of BLM and NPS lands. Heavy forage utilization continues to be documented in the same areas.

The area has experienced years of drought; between 1993 and 2005, only four years had above average precipitation levels (RMWHR Evaluation 2008, Western Regional Climate Center 1993-2005). The precipitation levels in 2008 were far above the 30-year average and current year precipitation data indicates 200% of average for 2009. Excess wild horses were allowed to remain on the RMWHR during drought years, thereby magnifying the deterioration of the range that otherwise would have occurred at a slower rate. Removing both the excess wild horses from the RMWHR and horses from areas outside the RMWHR is necessary to restore and maintain a TNEB, prevent deterioration of the range, and maintain the multiple use relationships.

1.4 Relationship to Planning

The proposed population management is in conformance with the Hawk Lake Resource Management Plan Final EIS (1984) objectives to manage for a balance between a healthy population of wild horses and improvements in range condition, wildlife habitat, and watershed condition.

The proposed action is in conformance with the Wild Free-Roaming Horses and Burros Act of 1971 (PL 92-195 as amended) (WFHBA) and with all applicable regulations at 43 CFR (Code of Federal Regulations) Section 4700, and policies outlined by BLM and the United States Forest Service. The BLM is the lead agency for coordinating and implementing wild horse management in the Rafiki Mountains.

The WFHBA states that the Secretaries of the Interior and Agriculture shall “determine appropriate management levels of wild free-roaming horses and burros on areas of public lands; and determine whether appropriate management levels should be achieved by the removal or destruction of excess animals, or other options (such as sterilization or natural controls on population levels).” According to 43 CFR Section 4700.0-6, “Wild horses shall be managed as self-sustaining populations of healthy animals in balance with other uses and the productive capacity of their habitat.”

Wild horse management is limited to areas inhabited by wild horses at the time of passage of the Act (December 1971). Wild horses that have drifted outside the boundaries of the RMWHR would be removed in accordance with public land laws, rules, regulations, and policy. Management of wild horses “shall be undertaken with the objective of limiting the animals’ distribution to herd areas,” which is the “geographic area identified as having been used by a herd as its habitat in 1971” (43 CFR-4710.4 and 43 CFR 4700.0-5).

2.0 DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

2.1 Proposed Action

After analysis of comments, the Bureau of Land Management (BLM) Hawk Lake Field Office proposes to gather all wild horses from the Rafiki Mountain Wild Horse Range and adjacent lands; conduct genetic testing on each removed horse to determine its genetic profile; return 90 horses with an optimal range of genetic profiles; permanently remove up to 100 adults including foals with mares identified for removal; and manage the wild horse population at 90 wild horses. These actions are necessary because the BLM has determined that excess wild horses are present on the range. Excess wild horses removed would be prepared for adoption or sale at the Richfield Corrals Facility. The method of capture would include the use of the Active Denial System (ADS), Long Range Acoustic Devices (LRADs), rubber bullets, and helicopter drive-trapping, each of which is described below. These methods would be used to herd horses into temporary traps of portable panels. After capture in the trap, horses would be sorted on site.

The Active Denial System is a “non-lethal, directed-energy” device that “projects a focused beam of millimeter waves to induce an intolerable heating sensation on an adversary’s skin.”¹ The ADS, although typically mounted on a truck, would be mounted on a helicopter during the round-up. The beam would be used to force horses to run in the desired direction, away from the discomfort of the ADS and into traps, from which they will be transported to the holding location.

Long Range Acoustic Devices “transmit [noise] in a highly directional beam, even with significant ambient noise” thus “reduc[ing] the risk of exposing nearby personnel or peripheral bystanders to harmful audio levels.”² Although LRADs are often used to communicate spoken words or instructions, the proposed action would use the devices solely to emit a loud noise,

¹ Joint Non-Lethal Weapons Program, Active Denial System, <https://www.jnlwp.com/ads.asp> (last visited July 13, 2009); *see also* SUSAN LEVINE, CTR. FOR TECH. AND NAT’L SEC. POLICY, NAT’L DEF. UNIV., *THE ACTIVE DENIAL SYSTEM: A REVOLUTIONARY, NON-LETHAL WEAPON FOR TODAY’S BATTLEFIELD* (2009), *available at* https://www.jnlwp.com/public_affairs/adspaper.pdf.

² American Technology Corporation, Long Range Acoustic Device: Product Overview, <http://www.atcsd.com/site/content/view/15/110/> (last visited July 13, 2009); *see also* Roman Vinokur, *Acoustic Noise as a Non-Lethal Weapon, SOUND AND VIBRATION*, Oct. 2004, at 19, *available at* <http://www.sandv.com/downloads/0410vino.pdf>.

similar in tone to a smoke detector (but much louder). LRADs would, like the ADS, be mounted on a helicopter during the round-up. The high decibel level would induce the horses to flee the piercing noise and run into traps, at which time they will be transported to the holding location.

Rubber bullets are non-lethal rubber projectiles. The proposed action would employ trained sharpshooters to fire rubber bullets from helicopters at the horses. The sharpshooters would aim at the horses' hides, away from sensitive areas such as the face. The rubber bullets would startle the horses into running in the desired direction and into traps, from which they will be transported to the holding location.

Helicopter drive-trapping involves chasing horses with a helicopter, facilitated by on-the-ground wranglers, to scare the horses into running into traps, from which they will be transported to the holding location.

Multiple trap sites may be used to capture the wild horses. The traps would consist of portable panel pens with jute wings. The aforementioned methods would be used to herd horses to the trap and into the wings where a "prada" horse would be released in front of the wild horses to guide them to the trap. When a band of horses or individuals enters the trap, the gate would be closed by the BLM contractor or BLM personnel. The horses would have their blood drawn by qualified personnel at the trap site, then be transported to Richfield Corrals, where they would be housed pending the results of the genetic testing. BLM scientists and veterinarians would review the data and use their expertise to determine which 90 horses are best suited for return to the RMWHR.

The decision to permanently remove specific individual wild horses would be based upon recommendations received from the Rafiki Mountains Wild Mustang Center, BLM veterinarians, comments from the public and analysis of the population.

2.2 No Action Alternative

Under this alternative, excess wild horses from the RMWHR and adjacent lands would not be gathered and removed at this time. Direct management of the wild horse population in the RMWHR and adjacent lands would be postponed. A TNEB would not be met and no progress toward meeting rangeland health standards would be made. Wild horse populations would continue to increase. A management plan to reduce herd numbers would be evaluated and implemented at a later time. The BLM would continue vegetation and population monitoring. More wild horses would reside outside the wild horse range. The size of the areas with excessive forage utilization would continue to increase. Forage would be consumed earlier in the year as more horses have to be supported by a finite piece of land.

2.3 Alternatives Considered but Eliminated from Further Analysis

2.3.1 Use of Fertility Control Alone on Wild Mares to Suppress Herd Growth Rates

Under this alternative, all mares would receive fertility control primers (as necessary) and annual boosters; no horses would be removed. Although the use of fertility control alone would stabilize the population, it would not likely lead to a reduction in the population in order to achieve a TNEB. A prior decision is in place to apply fertility control through 2010 on mares over 11 years old. Thus, the use of fertility control has been partially addressed. This alternative

was therefore considered but eliminated from further analysis because it did not meet the purpose and need for the action which is immediate reduction in herd size in order to preserve a TNEB, balance sex ratios, preserve age classes, and collect genetic data.

2.3.2 Bait, Trap, Gather, and Selective Removal of Wild Horses for Population Control

Under this alternative, the herd would undergo a baiting, trapping, gathering, and capture of the entire population in order to selectively remove excess wild horses. This would not immediately reduce the herd size, since bait trapping is a prolonged process and takes several months and tends to be less successful than helicopter drive-trapping. Estimated costs for a removal of this type and scale would be less than for the proposed action, but it would take several months. This alternative was considered but eliminated from further analysis due to not meeting the purpose and need.

2.3.3 Gate Cut Gather

A gate cut gather was considered but eliminated from detailed analysis due to not meeting the purpose and need. A gate cut gather would consist of removing the first excess wild horses captured regardless of location, age, sex, or exhibition of “Rafiki characteristics.” A gate cut is a sound tool for gathers that are grossly above the AML. However, the RMWHR gather is a maintenance gather, and population management is very appropriate for maintaining a wild horse herd. It is also important to return only the fittest and most genetically diverse horses to the range. A gate cut would not allow this.

2.3.4 Natural Management (Proposed by The Horse People)

An additional alternative considered was to have purely “natural management” of the population, as proposed by The Horse People. This alternative was eliminated from further analysis because it would not achieve the purpose or need for the action. Although the WFHBA does allow for “natural means” for population control, it does not allow for range deterioration. An ecological balance between grazing animals and resources would eventually be met once the range deteriorated beyond the point that forage species are eliminated or are such a small component of the plant community that wild horses would eventually start to die of starvation.

Mountain lions have been documented as preying upon foals, but not enough animals are killed to maintain the appropriate management level. In 2001, one foal was documented as being killed by a mountain lion. In 2004, much of the foal crop loss was attributed to mountain lion kills but there is no actual documentation of the absolute cause. Mountain lions are not now controlling the population nor have they historically controlled the population on the RMWHR.

2.3.5 Removal of 20 Wild Horses (Proposed By The Horse People)

Under this alternative, limited fertility control would be applied and 20 wild horses would be removed from the 2007 and 2008 cohorts. The animals treated with fertility control and identified for removal would be based upon The Horse People’s determinations at the gather. The identity of individual wild horses was not provided with this alternative. This alternative was eliminated from further analysis because it does not meet the purpose because it would maintain a population beyond what would achieve a TNEB.

2.3.6 Alternative Proposed by the Rafiki Mountains Wild Mustang Center

This alternative was proposed by the Rafiki Mountains Wild Mustang Center and would consist of yearly remote darting of selected mares. Under this alternative, the gather would be conducted in the same manner as the Proposed Action as far as the type of gather operation and wild horse data collection. During the gather operation mares selected for retention would be administered a contraceptive “primer” prior to release. Beginning in late winter through spring of 2011 mares that were primed would receive their first booster. In subsequent years mares would be added to the treatment based upon survival rates of the herd, population levels and demographics. Under this alternative the population would be managed toward a goal of 100 wild horses. This alternative was eliminated from further analysis as proposed since it would not meet the purpose and need because it would maintain a population beyond what would achieve a TNEB.

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This chapter describes the affected environment and assesses impacts on the components of the human environment either affected or potentially affected by the Proposed Action and alternatives.

The affected environment was considered and analyzed by a multi-disciplinary team. Certain resources are protected by specific laws, regulations, or policies (*e.g.*, Executive Orders). BLM refers to these resources as “Critical Elements of the Human Environment” and addresses them in all EAs.

The following critical or other elements of the human environment are present and may be affected by the Proposed Action or the alternatives. The affected environment is described for the reader to be able to understand the impact analysis.

3.1 Wild Horses

Affected Environment

The origin of the RMWHR wild horses is not entirely known and there is much speculation about them. Many claim the horses are descendents of animals the Northern Paiute Indians obtained from the Spanish, or other tribes in contact with the Spanish. The Northern Paiute Indians were known to have horses by the 1700s and to inhabit the Rafiki Mountains before European settlement. Others claim the horses have been there forever. The trapper Alexander Smith explored the Rafiki Mountains in 1848 and did not note the presence of wild horses (Ray Gunner, 1972). By the early 1900s, wild horses were well documented within the Littleneck Basin of the Bwana River. Most likely, the wild free-roaming horses inhabiting the RMWHR are descendants of numerous founding stocks. The most recent genetic tests conducted by Dr. Peggy Rose concluded the Rafiki horses are descendants of New World “Spanish” breeds (saddle-type horses) and related to European “Spanish” breeds.

Some of the Rafiki horses carry a rare allele variant Qack that is traced back to original New World “Spanish” type horses that were developed from the original Spanish and Portuguese (Iberian) horses brought to the Americas. The Rafiki horses carry no genetic markers that other horse breeds do not carry.

Environmental Impacts

Proposed Action – The impacts to the population from this action would balance the wild horse population with representation of all age classes. The top-heavy nature of this old population would be rectified. Enough young animals would be returned to the range to ensure recruitment to a sound breeding population. Under this scenario the amount of genetic diversity would most likely be preserved. The Proposed Action would allow more competition between stallions and more frequent interchange of mares, possibly resulting in a higher level of exchange of genetic material.

Impacts to individual animals could occur as a result of stress associated with the gather, especially with regard to the use of experimental military devices such as LRADs and the ADS, which have mostly been used for urban counterinsurgency and riot control. To date, there have been no scientific studies analyzing the effect of either LRADs or the ADS on horses or other wild animals.³ The effects of the loud noise and searing heat associated with these devices are believed to be temporary in humans. Rubber bullets may cause the horses instantaneous and temporary pain, thus forcing the horses to run in the desired direction. Injuries resulting from rubber bullets could consist of minor bruises, welts, or open wounds, which BLM does not consider significant. The use of helicopter drive-trapping is common and causes no more stress than necessary to corral horses.

Horses might also suffer some degree of stress during capture, processing, and transportation of animals. The intensity of these impacts would vary by individual and would be indicated by behaviors ranging from nervous agitation to physical distress. Mortality to individuals from this impact is infrequent but can occur. It is possible that the proposed action could cause the mortality of 6 to 10 horses. Other impacts to individual wild horses include separation of members of individual bands and removal of animals from the population.

Indirect impacts can occur to horses after the initial stress event and could include increased social displacement or increased conflict between studs. These impacts are known to occur intermittently during wild horse gather operations. Potential effects of these impacts and the impact of stress include a decrease in herd growth or number of live births in any mammalian population, depending on the responses of individual animals to the gather methods. Traumatic injuries could occur to the horses as well, and typically involve biting and/or kicking bruises.

No Action Alternative – Under the no action alternative, excess wild horses would not be removed from the RMWHR or adjacent lands. The animals would not be subject to the individual direct or indirect impacts as a result of a gather operation. However, individuals in the herd would be subject to more stress and possible death as a result of increased competition for water and forage as the herd population grows.

Wild horses are a long-lived species with high survival rates. Predation and disease do not substantially regulate wild horse population levels. This would lead to a steady increase in wild horse numbers, and the carrying capacity of the range would continue to be exceeded. The

³ American Technology Corporation, the maker of LRADs, promotes their use in “wildlife preservation,” as a means of “deter[ring] [animals’] incursions” onto sensitive sites. American Technology Corporation, Long Range Acoustic Device: Wildlife Preservation, <http://www.atcsd.com/site/content/view/268/110> (last visited July 13, 2009). BLM is unaware of any facilities that actually use LRADs for such purposes, nor is it familiar with any scientific studies on the effects of such use.

consequences of exceeding the established AML and the carrying capacity of the range would be increased risk to both rangeland and horse herd health. Individual horses would be at risk of death by starvation and lack of water. Wild horses would compete for the available water and forage resources, affecting mares and foals most severely. Social stress would increase. Fighting among stud horses would increase as they protect their position at water sources; such fighting could result in injuries and death to other horses. The areas closest to the water would experience severe utilization and degradation. Over time, the animals would deteriorate in body condition as a result of declining forage availability and the increasing distance needed to travel to forage. Many horses, especially foals and mares, could die after a period of time when the resource is exhausted.

As the population increases beyond the capacity of the habitat, more bands of horses would leave the boundaries of the RMWHR seeking forage and water. This in turn could put them at risk in new and unfamiliar country and in conflict with authorized users. The health of the wild horse herd population would be reduced, the condition of the range would deteriorate, and other range users would be impacted. This alternative would not achieve the stated objectives for wild horse herd management areas, which are to “prevent the range from deterioration associated with overpopulation” and “preserve and maintain a thriving natural ecological balance and multiple use relationship in that area.”

To facilitate comparison of alternatives, the no action alternative was also modeled for ten years. The average of 100 population modeling trials indicates that if the current wild horse population continues to grow without a removal at this time, the median population size would be 314 wild horses with a growth rate of 7.2%.

3.2 Rangeland Health, Vegetation, and Soils

Affected Environment

Low elevation areas of the RMWHR are experiencing a downward trend in ecological condition due to the excess of wild horses coupled with the effects of drought. The horse population is beyond the capacity of the habitat to sustain the numbers in balance with the available resources or how the resource is utilized by the horses. The RMWHR Evaluation (2008) documented this measured trend in the low elevation desert areas of the wild horse range. The mountain meadows are also in poor ecological condition with an inverse proportion of forbs to grasses. Drought, coupled with a wild horse population above the AML, has magnified the range deterioration. At the same time, mid-elevation areas within the wild horse range that have little water and have received slight, light, and moderate wild horse use have shown an upward trend.

Environmental Impacts

Proposed Action – Removing excess wild horses to a level of 90 wild horses would achieve a TNEB immediately and could be sustained for several years. It would reduce stress on vegetative communities and be in compliance with the WFHBA Standards for Rangeland Health, and land use plan management objectives. Overall, soil conditions would improve if wild horse numbers were reduced. Vegetation species would experience little overutilization by wild horses, which would lead to healthier, more vigorous forage plants and plant communities. This would result in an increase in forage availability, vegetation density, vigor, productivity, cover,

and plant reproduction. Plant communities would become more resilient to disturbances such as wildfire, drought, and grazing.

Overall, soil conditions would improve if wild horse numbers were reduced. Less compaction would occur in riparian areas where the soils are most susceptible. Compression impacts to biological soil crusts from horses would be lessened over the area, and crust cover on the highly calcareous soils would increase. Following wild horse removal, increased vegetative and biological soil crust cover would reduce wind and water erosion.

Impacts from gather operations to vegetation and soils with implementation of the proposed action would include disturbance of native vegetation immediately in and around temporary trap sites and holding and processing facilities. Impacts would be by vehicle traffic and the hoof action of penned horses and would be locally severe in the immediate vicinity of the corrals or holding facilities. Generally, these activity sites would be small (less than one-half acre) in size. Soil compaction, localized wind erosion, and destruction of biological soil crusts, where present, would occur at the trap sites. Since most trap sites and holding facilities would be re-used during recurring wild horse gather operations, any impacts would remain site-specific and isolated in nature. In addition, most trap sites or holding facilities would be selected to enable easy access by transportation vehicles and logistical support equipment and would generally be adjacent to or on roads, pullouts, water haul sites, or other flat spots that were previously disturbed. Vehicles used in the horse gather would also cause soil compaction and increased erosion in a small area.

No Action Alternative – Under the no action alternative, wild horse populations would continue to grow. Increased horse use throughout the RMWHR would adversely impact soils and vegetation health, especially around riparian resources. As native plant health deteriorates and plants are lost, soil erosion would increase.

3.3 Noxious and Invasive Plants

Affected Environment

There are no known noxious weeds or invasive plants known to exist within the area.

3.4 Riparian/Wetland Areas and Surface Water Quality

Affected Environment

There are limited riparian areas within or adjacent to the RMWHR. Fat Creek is available to wild horses on BLM lands on the west side of the range above private property holdings, but receives little wild horse use. Stanley Spring, Little Wells Spring, and the seep off of Val's Pass are located in the range. These are small springs with little riparian potential, yet they are extremely important due to the limited amount of riparian habitat present on the range.

Environmental Impacts

Proposed Action – No gather facilities or traps would be placed on riparian areas, thus no impacts from gather operations are anticipated. Riparian areas are very limited and currently have some impact from wild horses. Hoof action on the soil around unimproved springs and stream banks would be lessened if the gather is implemented, which would lead to increased

stream bank stability and improved riparian habitat conditions. Improved riparian areas would dissipate stream energy associated with high flows and filter sediment that would result in some associated improvements in water quality. There would also be a reduction in hoof action on upland habitats and reduced competition for available water sources. Some improvement could be realized, but due to the limited nature of water sources, improvement is more likely to be realized from management of water sources rather than wild horse numbers.

No Action Alternative – Wild horse populations would continue to grow. Increased wild horse use throughout the area would adversely impact the few riparian resources present and their associated surface waters and water quality would decrease. As native plant health deteriorates and plants are lost, soil erosion would increase. With the no action alternative, the severe localized trampling would continue to occur. This alternative would not make progress towards achieving and maintaining a thriving natural ecological balance.

3.5 Wildlife, Including Migratory Birds

Affected Environment

The primary big game species found in the project area are mule deer, elk, and black bear. Mule deer are the most abundant of these species and most widely distributed. The sagebrush, juniper/mountain mahogany belt at lower elevations in the southern foothills is considered crucial mule deer winter range. The most recent counts of bighorn sheep estimated the population in the Rafikis at 160 animals. Elk do not utilize the area on a regular basis. The elk primarily utilize the National Forest to the west and north, but have occasionally been observed in the spring and summer on the meadows on the north end of RMWHR. Black bear are abundant in the north central portions of RMWHR where the terrain is rugged and forested.

Mountain lions have also been observed on the RMWHR.

The Rafiki Mountains support one of the most diverse distributions of bat fauna in the Western United States. Ten bat species have been documented, and the potential exists for additional species to be present.

The gray wolf has been reported in the area north of the RMWHR.

Upland game birds include blue grouse, greater sage-grouse, and ring-necked pheasant. Blue grouse occur in the timbered portions of the RMWHR. Great sage-grouse may occur in the southern and eastern part of the RMWHR. Pheasants occur in the southern area near cultivated fields. Peregrine falcons have been seen. None of these species are considered abundant.

Neotropical migratory bird use is heaviest during spring and summer months. Nesting usually occurs in late May, June, and early July depending on elevation.

Environmental Impacts

Proposed Action – Individual animals of all species could be disturbed or displaced during gather operations. Small mammals, birds, and reptiles would be displaced at trap sites, but this would only be for a few days. There would be no known impact to animal populations as a result of gather operations. The proposed methods used have not been shown to disturb wildlife.

Because the gather would not be done in the spring or early summer, there would be no impact to breeding and nesting sage grouse, raptors, and migratory birds.

Managing wild horses at the AML would result in improved habitat conditions for all species of wildlife by increasing herbaceous vegetative cover in the uplands and improving riparian vegetation and water quality at springs and seeps.

No Action Alternative – Individual animals would not be disturbed or displaced under the no action alternative. Competition between terrestrial big game wildlife and wild horses for forage is minimal. Competition at water resources may increase as wild horse numbers continue to grow above AML. Wild horses are aggressive around water sources. Some animals may not be able to compete, which could lead to the death of individual animals. Other wildlife habitat would deteriorate as wild horse numbers above AML reduce herbaceous vegetative cover. This could result in lower nesting success for migratory birds.

3.6 Special Status Plant and Animal Species (federally listed, proposed, or candidate threatened or endangered species; State listed species; and BLM sensitive species)

Affected Environment

There are no known threatened and endangered species or their habitat in the Rafiki Mountains.

3.7 Wilderness

Affected Environment

There are no designated wilderness areas in the Rafiki Mountains.

3.8 Cultural Resources/Paleontological Resources

Affected Environment

The Rafiki Mountains contain no prehistoric or historic archaeological record.

3.9 Recreation

Affected Environment

Recreation-related visitation has been increasing in the Rafiki Mountains over the last several years and that trend is expected to continue, based on the ability to view wild horses. Visitor logs at Rubin's Cabin, located on the top of East Rafiki Mountain, indicate an increase in visitor use, especially in the past five years. The logs also show an increase in both foreign and domestic visitors. Wild horses can often be seen near the cabin in the summer through early fall.

Recreation opportunities are primarily wild horse viewing during the warmer months of the year, especially during foaling season. Other opportunities include, but are not limited to, bear, deer, bighorn sheep and small game hunting, hiking, and snowmobiling. Motorized use is limited to designated roads. The area is largely managed for dispersed recreation. Hiking opportunities in the Rafiki Mountains are excellent. However, there are no maintained trails for

hiking or off-highway vehicle use. Other uses include camping, horseback riding, photography, sightseeing, and wildlife viewing. There are several caves, some of which are large enough to explore.

Special recreation permits are becoming more prevalent as more people wish to pay for the opportunity to participate in guided or organized activities on public lands. Wild horse photography tours, viewing tours, and cattle drives are the primary recreation-permitted activities. These activities provide a gateway for future visitation by an ever-growing segment of the public.

Environmental Impacts

Proposed Action - Opportunities to view and photograph large groups of wild horses would be diminished because excess wild horses would be removed from the range. Opportunities from other recreation activities could be impacted due to area closures necessary to facilitate gather operations. Recreationists could be unable to utilize the area for an indefinite period of time. Gather operations will likely not be completed prior to the rifle hunting season, creating potential conflicts with the majority of sportsmen.

No Action - There would be no impacts to recreational wild horse observation under this alternative. However, the view shed may become diminished over time as vegetative and riparian areas would become more degraded from excess wild horse use. Wild horse health could suffer as numbers increase with less forage to compete for. Thin horses may not be appealing to the public for viewing and photography opportunities.

4.0 CUMULATIVE IMPACTS

Cumulative impacts are impacts on the environment which result from the incremental impact of the Proposed Action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. The area of cumulative impact analysis is the RMWHR.

According to the 1994 BLM *Guidelines for Assessing and Documenting Cumulative Impacts*, the cumulative analysis should be focused on those issues and resource values identified during scoping that are of major importance. Accordingly, the issues of major importance that are analyzed are maintaining rangeland health and proper management of wild horses.

Past Actions

Wild horse management has occurred in the RMWHR. Twenty-three gathers have been completed on portions of the RMWHR. Approximately 600 wild horses have been removed from the RMWHR since 1968. Populations are thriving and have not been negatively impacted. An AML determination for the RMWHR was established through BLM planning process and completed in 1992. Fertility control has been used since 2001 in several different prescriptions. However, the wild horse population over the last decade has been on average 60 horses over the established AML while drought conditions have prevailed. This has led to the current situation of deterioration of the range.

Present Actions

Today, the RMWHR and adjacent national forest lands have an estimated population of 190 adult wild horses. Resource damage is occurring due to excess animals. Current monitoring data indicates that no more than 105 wild horses can be present and still have a thriving natural ecological balance. The 2009 RMWHR HMAP directs BLM to conduct removals targeting portions of the wild horse population based upon age and genetic representation and allowing the correction of any sex ratio problems that may occur. Program goals have expanded beyond establishing a TNEB by simply maintaining AML for individual herds, but include achieving and maintaining healthy, vigorous, and stable populations.

Current mandates prohibit the destruction of healthy animals that are removed or deemed to be excess. Only sick, lame, or dangerous animals can be euthanized, and destruction (although legal) is no longer used as a population control method. The most recent (Burns) amendment to the WFHBA allows the sale of excess wild horses that are over 10 years old or have been offered unsuccessfully for adoption three times. This sale authority has not been fully implemented, thus, facility space and funding for gathers is less available as more unadoptable wild horses are maintained in facilities. Today, there are more than 30,000 wild horses in short- and long-term BLM holding facilities. Fertility control is continuously being improved and researched presently for the best ways to utilize it.

Today, public interest in the welfare and management of wild horses is higher than it has ever been. Many different values pertaining to wild horse management form various perceptions on the management of wild horses. Wild horses are viewed by some as nuisances and by others as living symbols of the pioneer spirit.

Reasonably Foreseeable Future Actions

In the future, the BLM would manage wild horses within the RMWHR in a population range, while maintaining genetic diversity, age structure, and sex ratios. Current policy is to express all future wild horse AMLs as a range, to allow for regular population growth, as well as better management of populations rather than individual herd management areas.

The BLM is in the process of revising its resource management plan; the revision would analyze wild horse management on a programmatic basis, including areas where wild horses can be managed. Future wild horse management would focus on an integrated ecosystem approach with the basic unit of analysis being the watershed. The BLM would continue to conduct monitoring to assess progress toward meeting rangeland health standards. Wild horses would continue to be a component of the public lands, managed within a multiple use concept.

As the BLM has achieved AML on a bureau-wide basis, gather opportunities and budgets have become less predictable due to full facility space and the feeding of horses. Fertility control is approved for use through 2010 on the RMWHR. If this action is implemented fertility control would continue past 2010. Fertility control should also become more readily available as a management tool, with treatments that last for multiple years, reducing the need to remove as many wild horses, and possibly extending the time between gathers.

Impacts

Past actions regarding the management of wild horses have resulted in the current wild horse population within the RMWHR. Wild horse management has contributed to the present resource condition and wild horse herd structure within the gather area.

The combination of the past, present, and reasonably foreseeable future actions, along with the proposed action, should result in more stable wild horse populations, healthier rangelands, healthier wild horses, and fewer multiple-use conflicts.

5.0 MITIGATION AND SUGGESTED MONITORING

Proven mitigation and monitoring are incorporated into the Proposed Action and also through standard operating procedures (SOPs), which have been developed over time. These SOPs represent the best methods for reducing impacts associated with gathering, handling and transporting wild horses, collecting herd data, and fertility treatments.

Specific mitigation measures identified in the Proposed Action include: Class III cultural survey of trap and gather areas, sensitive species survey, monitoring for noxious and invasive weeds, weed free hay, monitoring for genetic health and utilizing wild horses gathering SOPs.

6.0 CONSULTATION AND COORDINATION

On July 15, 2009, a hearing was conducted for the use of experimental devices and motorized equipment including helicopters in the management of wild horses. A total of five parties spoke during the hearing. Two parties were opposed to the use of helicopters and two in favor of the use of helicopters and one party discussed BLM policies.

On July 17, 2009, the BLM mailed out notices that the Rafiki Mountain Wild Horse Range 2009 Draft Gather and Population Management Plan and Preliminary Environmental Assessment would be available for public comment on July 20, 2009 for a 30-day comment period. Based upon this comment period 46 letters were received and two detailed recommendations for population management. New information was incorporated into the analysis.

6.1 Response to Comments

[Students should assume the BLM responded to all public comments in compliance with its requirements to respond and, consistent with the legal requirements for preparation of an EA, and that their responses are consistent with the information provided elsewhere in the EA.]

7.0 REFERENCES

[Students should assume the BLM provided references to all documents mentioned in the EA, consistent with legal requirements for preparation of an EA, and that all facts stated in the EA were supported by documentation. Students should assume these fictional referenced documents represent the points for which they are cited.]

**United States Department of the Interior
Bureau of Land Management**

**Environmental Assessment
CA-C010-2009-035**

Decision Record and Finding of No Significant Impact

**Rafiki Mountains Wild Horse Range 2009 Gather Plan
and Environmental Assessment (EA)
CA-C051-2009-72**

BUREAU OF LAND MANAGEMENT

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**August 2009
Decision Record/Finding of No Significant Impact
Hawk Lake Field Office**



**DECISION RECORD (DR)
AND
FINDING OF NO SIGNIFICANT IMPACT (FONSI)**

**Rafiki Mountains Wild Horse Range 2009 Gather Plan and Environmental
Assessment (EA) CA-C01 0-2009-35**

INTRODUCTION

This decision is being issued in order to gather all wild horses from the Rafiki Mountains Wild Horse Range (RMWHR) and adjacent lands; conduct testing on each removed horse to determine its genetic profile; return 90 horses with an optimal range of genetic profiles; permanently remove up to 100 adults, including foals with mares identified for removal; and manage the wild horse population at 90 wild horses.

Through review of wild horse census, distribution, forage utilization, ecological condition, trend data, and precipitation data it has been determined that an excess population of wild horses exists within the RMWHR, and there are additional excess wild horses residing outside the RMWHR. It has also been determined that a post-gather population of 90 wild horses within the RMWHR will contribute to promoting a thriving natural ecological balance (TNEB).

The Hawk Lake Resource Management Plan (RMP) has been reviewed, and the proposed population controls are in conformance with objectives to manage for a balance between a healthy population of wild horses and improvements in range condition, wildlife habitat, and watershed condition.

DECISION

In accordance with the RMWHR 2009 Gather Plan and EA CA-C010-09-35, it is my decision to implement the Proposed Action.

RATIONALE

Excess wild horses are permanently residing outside the wild horse range and creating conflicts with legal uses and resources of those lands. Excess wild horses need to be removed from the RMWHR to achieve a TNEB between wild horse populations, wildlife, vegetation, and available water, and to maintain multiple use relationships as authorized under Section 3(b)(2) of the 1971 Wild Free-Roaming Horses and Burros Act and section 302(b) of the Federal Land Policy and Management Act of 1976.

The following constitutes the rationale for making this decision effective upon issuance:

Potential Damage to Rangeland and Riparian Resources

Population and resource monitoring has determined that current wild horse populations are exceeding the range's ability to sustain wild horse use over the long-term, and some animals are permanently residing outside the RMWHR. Resource damage is occurring and will likely

continue without immediate action. Riparian areas are receiving heavy utilization, few watering sites are available, and native perennial grasses are limited in lower elevations and throughout the horses' habitat. Continued overpopulation of wild horses will result in overutilization of remaining forage and further degradation of habitat utilized by wild horses and wildlife.

Potential Impacts to Animal Health

Rangeland vegetation is limited throughout the lower elevations of the RMWHR due to past drought, current range conditions, and limited water. If the current population of wild horses is confined to the boundaries of the RMWHR, the health of its members is at risk under the current situation. Unless the population of wild horses within the project area is reduced through the proposed removals, wild horse body condition will decline.

In accordance with 43 CFR § 4720.1, upon examination of current information and a determination by the authorized officer that an excess of wild horses or burros exists, the authorized officer shall remove the excess animals immediately.

AUTHORITY

The authority for this decision is contained in Section 3(b)(2) of the 1971 Wild Free-Roaming Horses and Burros Act, Section 302(b) of the Federal Land Policy and Management Act (FLPMA) of 1976, and Code of Federal Regulations (CFR) at 43 CFR §4700.

FINDING OF NO SIGNIFICANT IMPACT

Based on the analysis and consideration of potential environmental impacts detailed in Environmental Assessment (EA) CA-C051-2009-72, the environmental impacts associated with the Proposed Action are not significant individually or cumulatively and will not significantly affect the quality of the human environment. The Proposed Action identified in the EA is not a major Federal action that would significantly affect the quality of the human environment, individually or cumulatively with other actions in the general area. Therefore, preparation of an Environmental Impact Statement (EIS) is not required as per Section 102(2)(c) of the National Environmental Policy Act (NEPA). This finding and conclusion is based on my consideration of the Council on Environmental Quality's (CEQ) criteria for significance (40 CFR § 1508.27), both with regard to the context and the intensity of impacts described in the EA.

RATIONALE

The Proposed Action identified in the accompanying Decision Record would, as best as can be determined, prevent unnecessary or undue degradation of public land resources. Resource review and analyses have been coordinated with other federal and state agencies. Resources determined to be potentially impacted were analyzed in the EA specific to the Proposed Action. This action is designed to maximize genetic interchange and diversity within the wild horse population; retain characteristics unique to this herd; maintain multiple use relationships for the area; limit wild horses to the wild horse range while providing protection of sensitive species resources; and prevent unnecessary or undue degradation of public land resources. Based on the analysis of the EA, impacts (including cumulative impacts) to these resources are considered insignificant (see definition of significance in 40 CFR § 1508.27).

CONTEXT

The Bureau of Land Management (BLM) Hawk Lake Field Office has managed the Rafiki Mountains Wild Horse Range since 1968. Since that time, the BLM's mandates have changed from simply protecting wild horses to protection, management, and control of wild horses. Part of the current mandate directs the BLM to manage wild horses "where presently found (in 1971) as an integral part of the natural system of the public lands" and "protect and manage wild free-roaming horses and burros as components of public lands" while managing "in a manner that is designed to achieve and maintain a thriving natural ecological balance on public lands."

Meeting mandates has proven to be challenging. At times the RMWHR attracts national and international attention. Proper wild horse management sometimes evokes controversy, emotional and excessive communications, and public outcry. Balancing BLM's legal obligations with public sentiment continues to be a challenge in the management of the RMWHR.

The Proposed Action would result in a post-gather population that would achieve a thriving natural ecological balance and maintain multiple use relationships, and bring the BLM in conformance with the law. This action also should result in recovery of rangeland vegetation communities and prevent further degradation to the range.

INTENSITY

1. ***Impacts that may be both beneficial and adverse.*** The Environmental Assessment (EA) considered both beneficial and adverse impacts of the gather and removal of wild horses.
2. ***The degree to which the proposed action affects public health or safety.*** Standard Operating Procedures would be used to conduct the gather and are designed to protect human health and safety, as well as the health and safety of wild horses. The Proposed Action would have minimal effects on public health or safety.
3. ***Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.*** There are no park lands, prime farmlands, wetlands, or wild and scenic rivers, within the gather area. If cultural resources are found in an area, a new location would be determined to set up temporary trap sites.
4. ***The degree to which the effects on the quality of the human environment are likely to be highly controversial.*** Effects of the gather are well-known and understood. No unresolved issues were raised following public notification of the proposed gather.
5. ***The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.*** The Proposed Action has no known effects on the human environment which are considered highly uncertain. Active Denial System (ADS), Long Range Acoustic Devices (LRADs), and rubber bullets have never been used by BLM for any purpose, and have never been used for a gather of wild horses. BLM does not anticipate any effect on the human environment. The effects of the use of these methods involved in the gather are currently unknown because they have never been utilized in this manner before.
6. ***The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.*** Future projects would be evaluated through the appropriate NEPA documents.
7. ***Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.*** The Proposed Action is not related to other actions within the project area that would result in cumulatively significant impacts. Cumulative impacts of the Proposed Action were analyzed in the EA.
8. ***The degree to which the action may adversely affect an endangered or threatened species or its habitat.*** There are no known threatened and endangered species that reside in the gather area.
9. ***Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.*** The Proposed Action would not violate or threaten to violate any Federal, State, or local law or requirement imposed for the protection of the environment.