

Email: R5planrevision@fs.fed.us

January 31, 2014

Land Management Plan Revision
US Forest Service
Ecosystem Planning Staff
1323 Club Drive
Vallejo, CA 94592

Attention: Inyo Staff

Subject: **Preliminary Need for Change -- Inyo National Forest -- Comments**

Per the United States Forest Service's (USFS) invitation to provide feedback, my letter responds to the document "**Preliminary Need for Change**," which can be accessed at the links below. The Need-for-Change record is intended to drive how USFS revises its management plans. I submit my comments as an interested party in behalf of the wild horses of the White Mountain Wild Horse Territory (WHT), which is located near the California/Nevada border. My comments and interested-party-status also apply to any WHTs that have been zeroed-out within Inyo National Forest (NF).

Preliminary Need for Change

<http://www.fs.usda.gov/main/r5/landmanagement/planning>

http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5444578.pdf

White Mountain Wild Horse Territory

[http://www.fs.fed.us/rangelands/ecology/wildhorseburro/territories/
WhiteMountain.shtml](http://www.fs.fed.us/rangelands/ecology/wildhorseburro/territories/WhiteMountain.shtml)

Background

Some of the last remaining wild horses on USFS land in California inhabit the Inyo NF's White Mountain WHT. However, the possibility does exist that other WHTs, previously active in Inyo, have been closed to wild horses via administrative action. If indeed there are "zeroed out" WHTs in the Inyo National Forest, they must be reinstated, and wild horses -- and / or burros -- must be returned to those federally-designated wild-horse-and-burro areas. A starting point for determining suitability of reinstatement is whether any livestock-grazing still takes place there. If so, the area is, by that very fact, suitable for wild horses.

Glaring Omission

The Preliminary Need for Change document declares that it outlines the elements of forest management that have "Importance to People." However, there is no mention of wild horses.

Wild Horses -- Aesthetically Beautiful, Living History, Inspirational Value

Wild horses are of immense importance to the American People. Their value is intrinsic. They feed our spirit. Even those of us Back East are comforted knowing the wild horses are still out there, roaming free.

The Public Lands belong to all the People, not just to those who happen to live nearby or to those who exploit the land for commercial gain. The wild horses are the People's horses. USFS must manage the Forest and the wild horses for everyone and consider our wishes in proportion to our representation.

WHTs Must Be Managed Principally for the Benefit of Wild Horses

Whatever appropriate management levels (AMLs) are established, they must result in the wild horses being the **principal users** of their WHTs. This requirement is stated plainly in the Act. The WHTs do not necessarily have to be managed exclusively for wild horses ... **although they could be**. The "principal-use" concept should be a starting point for setting the AMLs.

Genetic Health of the Wild-Horse Herd

USFS needs to conduct a 100-percent evaluation of the White Mountain herd's genetic health per DNA samples tested by the Equine Genetics Lab. Per those results, and per guidance from Dr. Gus Cothran, and per consultation with wild-horse advocates, USFS must then develop best management practices to restore and maintain gene-pool diversity via optimal population-levels. An AML is valid only if it provides for a robust population -- one that can easily self-sustain its genetic viability and bounce back from random catastrophic events. The White Mountain herd is managed for a population of 75 horses. That AML is way-too low.

New Approach for Establishing Correct Wild-Horse Herd Sizes

The concept of "appropriate management level" -- formerly referred to as the "AML" -- has outlived its usefulness and needs to be reformed and renamed. A replacement term and acronym are desirable. The low levels to which herds are being held are "appropriate" only in the sense of being administratively convenient for BLM. The limits placed on herd size are unscientific. Even the upper bounds -- the high ends of the ranges -- are typically insufficient for wild-horse herds to be genetically self-sustaining.

To remedy both issues, it is herein proposed that herd size be determined per the "**proper population parameter**" -- PPP or **P³** -- "P-Three." Each **P³** would have a

baseline -- a starting point -- of **at least 500 or 2,500 horses**. Where do these numbers -- 500 and 2,500 -- originate? They are the recommendations of the International Union for Conservation of Nature (IUCN), the world's oldest and largest global environmental organization. The IUCN is a neutral forum for practical solutions to conservation challenges and a leading authority on the preservation of genetic diversity in wild equids, including feral horses and burros.

The IUCN notes that the selective pressures wild equids have endured in the wild are likely shaping them genetically to be hardy stock that could prove useful as a **genetic resource**. The recommended population sizes for the conservation of genetic diversity fall into one of two approaches:

Captive populations -- minimum size: **500** individuals, a studbook, and careful genetic management; or
Wild populations -- minimum size **2,500** individuals (no studbook, no genetic management).

I could find no indication that USFS maintains a studbook of wild horses under its jurisdiction or that it practices any true genetic management. Lacking such, then population-size needs, in each herd, to grow to **at least 2,500**. Note that 2,500 is not a maximum but a **minimum** size. Higher numbers are recommended. Because most herds have exaggerated / estimated / extrapolated future populations that fail to reach the minimal threshold of 2,500 individuals each, lack studbooks, and have not been carefully managed genetically, they are **under-populated**. Therefore, the WHT at issue needs to increase its wild-horse herd-size-baseline accordingly.

Again, the **P³** for each WHT should be at least **2,500** because USFS does not maintain stud books and does not practice careful genetic management. By increasing herd populations, the WHT -- and, eventually, reinstated WHTs -- would be brought into compliance with up-to-date scientific thought concerning adequate herd-size. These proper population parameters -- the **P³** -- would be foundational to USFS' best management practices relative to protecting and preserving the subject wild-horse herds. Here is the link:

<http://data.iucn.org/dbtw-wpd/edocs/1992-043.pdf>

Minimum Viable Population (MVP) -- Meta-Analysis Says ~ 5,000

Just when you think the answer to MVP has been found, a newer study is published. The latest conclusions regarding MVP arose from a meta-analysis of the scientific literature spanning the preceding 30 years. The researchers filtered hundreds of studies and selected 141 sources covering 212 unique species whose distribution was skewed toward heavier animals, particularly mammals.

Across **all species**, the median MVP was **4,169**. The "bootstrapped 95% confidence bounds" MVP for all species ranged from 3,577 to **5,129**.

With regard to **mammals**, the median MVP was **3,876**. The "bootstrapped 95% confidence bounds" MVP for mammals ranged from 2,261 to **5,095**.

The conclusions: In general, conservation-practioners should aim for an MVP of approximately **5,000**. Specifically, the authors state: "... we recommend the upper 95% confidence limit of MVP..." Hence, we get a round number -- a numerical threshold of approximately **5,000** -- to inform conservation-management practices.

The link below takes you to an article discussing the meta-analysis' findings. It provides some additional information per an interview with the lead author: A minimum population of **500** could guard against inbreeding. This figure corresponds to the IUCN-recommended level that also requires maintenance of a stud book and close genetic management.

<http://www.americanscientist.org/issues/pub/a-magic-number/>

Here is the link is to the meta-analysis report itself.

<http://coreybradshaw.files.wordpress.com/2011/03/traill-et-al-2007-biol-conserv.pdf>

What's Wrong with This Picture?

Grazing on Public Lands has not been allocated equitably. While the national data for USFS is unavailable to me at this time, there are statistics for your sister-agency -- Bureau of Land Management (BLM) -- that likely reflect similar management-approaches in the National Forests.

Within BLM's wild-horse herd management areas (HMAs), wild horses are -- by Law -- supposed to be the **principal if not exclusive users**. The Law applies to USFS too. Yet, BLM currently allocates forage inside the HMAs as follows:

82-percent -- to commercial livestock
18-percent -- to Federally-protected wild horses (and burros).

This apportionment is obviously inverted. It must be corrected. Wild horses must receive the majority of the grazing slots -- the animal unit months (AUMs) -- within their HMAs and their WHTs. Moreover, both legal and scientific indicators point to the need for a massive increase in herd populations.

Biased Stocking Rates Must Be Corrected

Below are the stats for commercial livestock grazing on BLM-administered Federal Lands across the West. The corresponding national figures for USFS are not available to me at this time; however, I suspect they are similar.

150 -----> acres per cow-plus-calf *pair*
75 -----> **acres per cow or calf**

Note the stocking rate: One cow or calf per 75 acres. .

In contrast, here are the wild-horse-and-burro stats.

1,200 -----> acres per wild horse or burro -- whether adult or foal

Again, note the stocking rate: One horse or burro per 1,200 acres -- an area encompassing nearly two square miles. Moreover, while BLM counts a cow-and-her-calf as one unit, it counts a mare-and-her-foal as two units. I'm guessing that USFS does likewise on average, nationally.

The **White Mountain** herd is managed for a population of just **75** horses, which is way-below minimum viable population. It is my understanding that livestock-grazing is also permitted within the WHT. The White Mountain horses roam across USFS and BLM land as follows:

149,690 -- USFS

60,000 -- BLM

209,690 acres = 328 square miles

209,690 ÷ 75 =

2,796 -----> acres per wild horse in the White Mountain WHT

How preposterous to establish a stocking rate limited to one wild horse for every **4.4 square miles!** In its allocation of forage in this WHT, USFS is even more stingy with the wild horses than BLM.

Recommendations: Aim to implement a Plan that raises the wild-horse proper population parameter (**P³**) to **2,500** for the White Mountain WHT and for reinstated WHTs of comparable size. That would result in a stocking rate of **one wild horse per 84 acres**. Until the population rebounds, do nothing. Remove no horses. Contracept no mares. Impose no skewed gender ratios. Never even consider sterilization. Cattle-grazing must be managed differently. However, that does not have to mean fewer livestock, just a **reformed** grazing-management regime. Please see discussion regarding Holistic Management.

In WHTs without sufficient acreage to sustain 2,500 wild horses, USFS could opt to establish the AML at-or-above the **500**-equid level, keep a studbook, and practice careful genetic management. But in such cases, there should be no livestock grazing within those WHTs.

Reasons: The current approach to setting the appropriate management level (AML) has been invalidated by subsequent scientific studies. Herd size must increase significantly over. Genetic diversity is more likely to result from an optimal population level versus a minimal one. The **P³** approach will comply with the Act and the CFR *et al.* regarding a thriving, self-sustaining herd.

Holistic Management

Precisely-planned, time-controlled-grazing needs to be implemented in the Forest. By adopting Holistic Management, livestock-grazers and USFS / BLM staff can work in partnership, per a Coordinated Resource Management (CRM) process, to design grazing schedules that enable restoration of the habitat. Most importantly for the permit-holders, Holistic Management offers the essential benefit of enhancing their economic viability. While most importantly for the tens of thousands of mustang-advocates, Holistic Management will empower USFS to fulfill its mandate to protect and conserve the genetic viability of, and proper forage-allocations to, America's wild horses. Certainly, this is a win-win-win strategy.

Commensals Don't Compete -- Equids Enhance Livestock Production

Commensals are animals that eat "at the same table" -- without competing. New research has disclosed that cattle gain *more* weight when grazed with equids. Please see the Princeton University report, linked below. It is time to stop the range war. Forage-grazing is not a zero-sum game. Everybody can win without anyone losing, if the range is managed holistically. There can be more grazing, more grass, and more profits.

<http://www.princeton.edu/main/news/archive/S32/93/41K10/index.xml?section=featured>

Symbiosis — Wild Horses Graze Old Growth — Cattle Prefer New Growth

Wild horses utilize coarse, old-growth forage. Horses are like lawn mowers. They take off the top growth — the dry, unpalatable layer. This grazing method enables the plants to put down deeper roots, and it prevents weeds from maturing to produce seeds. Grasses are encouraged by the horses' frequent "mowing." In addition, the fuel-load is reduced, helping to prevent wildfires.

Livestock, in contrast, prefer tender new growth. They will even return to patches previously grazed — not rested — to get at that new growth.

http://msucares.com/livestock/beef/stocker_apr2011.pdf

Thus, wild horses make the range better for livestock. The permit-holders need more wild horses, not fewer. I bet the only reason they oppose the equids is that BLM pits the cattle against the mustangs. BLM must inform the permit-holders

that cows and horses can co-exist in a mutually-beneficial relationship. The way to help the livestock industry is by improving the range through Holistic Management. Grazing is not a zero-sum game. It's time to end the range-war that pits cattle against wild horses.

The Range -- or Forest -- Is *Under-Grazed*

Like most everyone else, I too assumed that the rangeland / forestland needed to be protected from over-grazing by limiting the number of herbivores and letting the land rest. Such an approach seemed like the logical management solution. Apparently, however, that theory was wrong.

Eminent biologist, environmentalist, and farmer Allan Savory has developed what he calls the "Holistic Management" approach to grazing -- which can be used to save the sagebrush too. Savory has made important discoveries about both the cause of, and cure for, desertification. He demonstrates how to prevent or reverse degradation of the rangeland using **increased** numbers of grazing animals -- sometimes up to 400-percent more. I was skeptical at first, but forced to consider the method, given its success and the abysmal failure in our own western states to restore rangeland health using seemingly "logical" methods.

The upshot is that in "brittle" landscapes such as those of the American West, the correct -- albeit counter-intuitive -- recommendation is to increase the number of grazing animals to create more "disturbances." Thus, rather than reduce the number of wild horses -- and/or the number of livestock -- the answer seems to be to raise those numbers, but reform the grazing-regime of the cattle. Given the continuing decline in the beef-producing sector, the trend of not using, or under-using grazing slots can be expected to continue. The wild-horse herds should be encouraged to flourish to make up for the lack of livestock (evidenced by the non-use of AUMs). Biodiversity is key. You don't want a mono-culture.

At the link below is the video of Allan Savory's lecture ***Keeping Cattle: Cause or Cure for Climate Crisis?*** There's also an 11-minute excerpt of his talk, to sample.

<http://vimeo.com/8239427>

Recommendations: USFS should send staff members that deal in range management to the next Holistic Management workshop sponsored by the Savory Institute. By learning this range-management approach and then implementing it, USFS could very well succeed in achieving harmony and cooperation among the various grazing animals and their stakeholders ...

Livestock -- permit-holders,
Wildlife -- ecologists, hunters, photographers, and
Wild horses -- photographers, recreational visitors, advocates

... while at the same time improving the rangeland and protecting the sagebrush. Wouldn't those be good things?

Below is the link to the Holistic Management International site. Disclaimer: I have no connection with this organization.

<http://holisticmanagement.org/>

Drought -- A Man-made Disaster from *Under-Grazing*

It might be pointed out that water is ultimately the limiting factor in how many animals can be grazed. Savory says **just the opposite** is the case. Increased grazing increases the effectiveness of the rainfall and leads to the restoration of previously dried up seeps and streams. Here's the link to the article.

<http://www.savoryinstitute.com/current-news/blog/posts/us-drought-a-man-made-natural-disaster/>

The Need to Keep the Greater Sage-Grouse from Being Listed

BLM and USFS are seeking ways to keep from having the Greater Sage-Grouse listed under the Endangered Species Act. The major factors that have led to the decline of Sage-Grouse populations due to destruction of habitat include:

Public-lands livestock-grazing,
Oil-and-gas drilling,
Climate change,
Fire,
Cheatgrass invasion,
Energy-development projects, and
Urban encroachment.

The above-listed impacts have reduced the extent of intact, healthy sagebrush-dominated habitats on which the ground-dwelling Sage-Grouse depend for food and cover. Studies have shown that Sage-Grouse apparently have high rates of nest-desertion and nest-predation. Thus, to sustain the species, it is imperative that the Sage-Grouse have the right amount of quality habitat. For foraging and nesting-areas, the birds need sagebrush of varied types and densities, within a preferred range of canopy-height, and an overstory of tall grass-cover to conceal the nests from predators. Adequate cover seems to determine a nest's resistance to predation. The Sage-Grouse typically select flatlands -- areas with little or no slope -- and their winter-sites are those where the sagebrush is accessible above the snow. However, there are exceptions to the sagebrush-obligate rule. Sage-Grouse chicks require insects such as beetles and ants in their diet for the first three weeks of life or else they die. The chicks also consume forbs until about 6 weeks of age. Pre-laying hens seek out high-protein forage -- such as the common dandelion and western yarrow -- which may be

essential for successful egg-production. Otherwise, it's sagebrush for them.

Clearly, the key to keeping the Greater Sage-Grouse from being listed as threatened or endangered is preservation and restoration of enough suitable habitat. Even predation can be reduced significantly by the availability of proper cover. A moratorium on hunting these birds would also help.

Wild Horses Are Not the Problem

Wild horses and burros have negligible impact on Sage-Grouse. The equids are few in number -- even to the point of herd-sizes being kept below minimum viable population (as is the case with White Mountain WHT). The wild horses are widely-dispersed across many square miles. Wild horses exhibit natural equid behavior -- they herd-up and keep on the move rather than staying put in one area. Domesticated livestock, on the other hand, do not herd-up in the absence of predators, which BLM and Wildlife Services exterminate for permit-holders' convenience. Consequently, the cattle spread out and hang out. They overgraze the area where they are placed by the permit-holder.

USFS must turn to the true causal factors -- chief among them, livestock grazing -- and mitigate in direct proportion to their impact. I note that, nationally, there are 78 times more commercial cattle than wild horses and burros on BLM-administered Public Lands. Similar disparities are likely on USFS-managed Lands. I further note that BLM (and probably USFS too) even conducted projects that cleared out sagebrush and replaced it with grasses to benefit cattle-grazing. Now "the chickens have come home to roost." Decades of mismanagement have led to the Sage-Grouse crisis. Cattle-grazing must be managed differently. However, that does not have to mean fewer livestock, just a reformed grazing-management regime.

Sagebrush, Sage-Grouse and Ranching -- a Holistic Approach

There may very well be Greater Sage-Grouse (GSG) conservation-issues to consider in the WHT. So provided herein is information on successful approaches to protecting sagebrush habitat.

A ranching-business in Utah has already demonstrated the success of Holistic Management in protecting sagebrush habitat. Rather than just being a research-project conducted by scientists with "no skin in the game," this experiment had real-world, real-time ramifications. Here is the link to the report:

<http://www.deseretlandandlivestock.com/Sagebrush%20sage%20grouse%20and%20ranching%20a%20holistic%20approach.pdf>

Interspace / Undercanopy Foraging Patterns of Beef Cattle in Sagebrush Habitats

However, in addition to the practical test referenced above, there has been academic research in time-controlled grazing. The study demonstrated the success of Holistic Management in protecting sagebrush for the Sage-Grouse.

First, here is the link to a synopsis of the study.

<http://www.deseretlandandlivestock.com/Sagebrush%20sage%20grouse%20and%20ranching%20a%20holistic%20approach.pdf>

Below is the link to the full study-report.

<http://oregonstate.edu/dept/eoarc/sites/default/files/publication/613.pdf>

How to Save the Sage-Grouse, Protect the Mustangs, and Partner with Permit-Holders

Implement Holistic Management

Leave the wild horses on the Forest at genetically-viable levels

Reinstate previously-closed WHTs for wild-horse repopulation

These actions will serve all constituencies -- Sage-Grouse, wild-horses (and their advocates) as well as livestock (and the permit-holders). Holistic Management has been shown to preserve sagebrush habitat, increase the effectiveness of an area's rainfall, and promote spring-and-stream vitality. This superior grazing-regime may even allow for more livestock, which will gain more weight due to being grazed alongside wild equids, which will finally be managed at genetically-viable levels.

Tear Down the Fences

USFS should remove fences that have been erected by the permit-holders. Tearing down those interior fences will help restore the free-roaming conditions that wild horses are supposed to enjoy in the WHTs. Fence-free ranges would provide them access to water, forage, and seasonal migratory routes -- all of which are frequently blocked by inappropriate subdivision of the Public Lands by private interests. Wildlife would benefit by the opening up of the range as well. If riparian areas need to be exclosed, then alternative water sources must be provided right away.

Holistic Management Does Not Require Permanent Fences

Some USFS offices might initially resist implementing Holistic Management on the basis of their misunderstanding about fences. Time-controlled grazing does not require the forest to be subdivided into paddocks using permanent fences. In fact, portable hot-wire -- powered by solar panels -- can be successfully used to corral the cattle. Of course, this method requires permit-holders to be true range-riders -- to "keep them doggies movin'." The Holistic Management method is

actually a traditional way of raising cattle. It harkens back to an earlier era in America when cattlemen closely watched over their herds. Livestock operators that are committed to ranching -- and aren't just in it as a hobby or for a tax write-off -- will embrace this effective approach to range and livestock management.

Healthy Predators, Healthy Ecosystems

Conservation Researcher Dr. Corey Bradshaw emphasizes "... just how important predators are for healthy ecosystems. Long story short – if your predators are not doing well, chances are the rest of the ecosystem is performing poorly."

Bending to pressure from misguided livestock-and-hunting interests that mistakenly view predators as pests, it has been USFS' and Wildlife Services' practice to exterminate native predators outright or to allow them to be hunted on a massive scale. However, on the contrary, predators at all levels function to keep the ecosystem in balance. Without them, prey species decline, as do the forage-production species on which the prey-animals feed. Dr. Bradshaw warns: "Without predators, our feeble attempts to conserve ecosystems are doomed to fail." Here's the link to his timely article:

<http://conservationbytes.com/2012/11/21/essential-predators/#more-8024>

Predator Protection

The Inyo NF should be a safe-have for predators that can serve as wild-horse population-control agents.

There can be no true "thriving natural ecological balance" without predators. Therefore, USFS should ensure the protection of native predators, instituting a prohibition on hunting them. Conservation measures will work to enable the right number of predators to establish themselves. Large carnivores will keep the wild-horse-and-burro population in check. Such an approach would favor survival of the fittest, the best genetic adaptations, and keep the herd-populations in equilibrium with minimal human-interference, just as the Wild and Free-Roaming Horses and Burros Act envisioned. Longitudinal studies have shown that mountain lions alone successfully controlled the wild-horse population of **California's Montgomery Pass Wild Horse Territory** (Turner and Morrison, 2001) and the Nevada Wild Horse Range (Greger and Romney, 1999). Mountain lions also kept Montana's Pryor Mountain Wild-Horse Range herd in check until BLM had the lions exterminated. Why? Because the Agency wanted to experiment on the horses with contraceptives.

Recommendations: USFS should concentrate on promoting and then protecting native predators to enable natural control of the wild-horse population on the range. A puma, bear, wolf, and coyote-protection program should be implemented. USFS should work with the California Department of Fish and

Wildlife and the Nevada Department of Wildlife to prohibit hunting of predators in the Forest. Concerned livestock operators should be advised to use guardian-dogs to protect their animals. There are several specialty breeds that have been developed just for this purpose, and they are reportedly effective. It's just the cost of doing business on public lands, where the grazing is cheap.

Consultation and Coordination with Wild-Horse Stakeholders

The Inyo NF needs to establish an advisory committee of mustang-advocates and to work with them to formulate policy.

Recommendations: USFS should cultivate partnerships with wild-horse advocates. Per the adaptive management model, USFS should implement coordinated resource management (CRM) -- referenced earlier herein -- with regard to your wild-horse stakeholders -- cooperating, consulting, and coordinating with them, just as USFS does with its grazing permit-holders and other constituents. The CRM approach provides the best chance of reaching consensus-based decisions and developing best management practices concerning wild horses.

Value All Comments -- Publish All Results -- Strive for Consensus

I urge USFS to publish the *number* of persons that respond to the Preliminary Need for Change. Show that you value every response on its own merits rather than labeling some as "form letters." The Constitution provides for the right of citizens to petition the Government for a redress of grievances. The Constitution does not require each complainant to formulate a unique letter. Indeed, the very word "petition" connotes a document that multiple parties sign in agreement and solidarity regarding a particular issue. At court, there are even class-action suits, wherein many plaintiffs join together to seek justice regarding a matter of mutual concern. One action, many parties.

USFS should just state the facts:

How many persons responded to the Preliminary Need for Change,
How many and what percentage favored certain courses of action and why,
What different alternatives were proposed, and
What modifications, corrections, improvements could USFS make per the public input.

USFS is supposed to build consensus. The public-involvement component is designed to get feedback from those persons interested enough to participate in the planning process. Disregarding feedback leads to decisions that are not supported by the majority of stakeholders.

Recommendations: Each and every comment must be honored fully, individually, and collectively, with the numerical results published.

Sincerely,

Marybeth Devlin
6880 SW 27th ST
Miami, FL 33155

305-665-1727

marybethdevlin@bellsouth.net