

Sustainable, Cost-Effective, Humane Management Alternatives for America's Wild Horses and Burros



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OVERSIGHT HEARING ON:

Challenges and Potential Solutions for BLM's Wild Horse & Burro Program

House Subcommittee on Federal Lands

Chairman; Congressman Tom McClintock, R-CA

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Testimony of Ginger Kathrens, The Cloud Foundation Director,
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Chairman McClintock, Committee Members, thank you for the opportunity to testify today. I am Ginger Kathrens, Executive Director of the Cloud Foundation (TCF), a wildlife documentary filmmaker, and the Humane Advocate on the BLM's National Wild Horse and Burro Advisory Board. I am here to give voice to the vast majority of Americans who love wild horses and burros and are committed to seeing them roam freely on their native home ranges as intended by the unanimously passed Wild Horse and Burro Act of 1971. Americans abhor the idea of slaughter as a possible way to manage an alleged overpopulation of wild horses. A national poll in 2013 showed that 72% of Americans favor protecting wild horses on public lands (*see Appendix A, Hart Research Poll-public lands*). A 2012 poll found that over 80% do not support horse slaughter. A startling 90% of women oppose slaughtering horses (*see Appendix B, ASPCA horse slaughter poll*).

There are reasonable, cost effective and humane ways to maintain healthy populations of wild horses and burros on their legally designated homes on the range. I will outline them in my presentation. But first let me share with you how I became involved in the wild horse and burro protection movement. On the TVs you'll notice the pictures of wild horses and burros in their natural habitats taken in all seasons of the year in 7 western states.

Behavior of Wild Horses

Over 22 years ago I was asked to create a film about mustangs for Marty Stouffer's Wild America. In this pre-internet era, the library searches turned up little on the subject and I feared that wild horses would make as uninteresting a subject as my quarter horse on our cattle operation in Ohio where I grew up. I began to film in the Pryor Mountain Wild Horse Range in southern Montana, and almost immediately realized that I was documenting a complex species living in tightly knit social bands. The black stallion, Raven and his family became my teachers. Wild horse 101 had begun. The stallion is with his family 24/7, protecting the mares and keeping the members together, even retrieving the foals that wander off. The lead mare decides where the band goes and when. Each member of the family has a role to play. It is this family band structure, which is emblematic and essential to the survival of wild horses.

Nonetheless, the BLM regularly overlooks this important point when developing their management practices. I subsequently did three films for the PBS Nature series about the life of the wild stallion, Cloud. These documentaries are used in equine veterinary and management classes to teach about the behavior of the wild, natural horse.

The National Academies of Science (NAS) in their BLM commissioned two year-study of the Wild Horse and Burro Program stressed the importance of maintaining natural behaviors (*see Appendix C, NAS Using Science to Improve the WHB Program*). A potential disadvantage of both surgical and chemical castration is loss of testosterone and consequent reduction in or complete loss of male-type behaviors necessary for maintenance of social organization, band integrity, and expression of a natural behavior repertoire. p. 142

Sterilization as a technique for management would render the wild horses vulnerable, as they would likely lose their natural wild behaviors. This has been observed in the South Steens HMA in Oregon where stallions were gelded and released back into the HMA.

The gelded males are lethargic, carry excessive body fat and spend time around water sources, behaving more like livestock than free-roaming wild horse.

Native North American Wild Horses

Despite current scientific evidence that the wild horse is native to North America, the BLM continues to refer to them as feral and refutes their native status on their website. Other organizations are also failing to recognize wild horses as a returned native species.

Ross MacPhee, curator of vertebrate zoology at the American Museum of Natural History in New York City gave testimony to the NAS (*see Appendix D, NAS Testimony*). In his summary of his written testimony he states: “On the basis of the extensive paleontological record for the presence of *Equus caballus* on the North American continent up to the end of the Pleistocene, and emerging morphological and ancient DNA evidence that these horses and modern domestic horses belong within the confines of a single species, I contend that the horse is, by any science centered definition, a native North American species. I also contend that wild horses in the American West cannot be considered alien, because they evolved in the very same grassland milieu as their fossil record abundantly illustrates. Finally, I contend that, in this case at least, the whole matter of what is or isn’t an alien/invasive species has been burdened by the unintended or unforeseen consequences of misapplied definitions. These definitions need to be examined in light of the best sources of evidence currently available, which for the wild horse issue surely includes pertinent paleontological and ancient DNA studies.”

The testimony of Dr. MacPhee is consistent with the testimony of Dr. Jay Kirkpatrick, PhD, reproductive physiologist, who with others developed the reversible vaccine PZP and contributed written testimony before Congress in 2005 (*see Appendix E Kirkpatrick Congressional Testimony*).

Dr. Kirkpatrick states: “The key element in describing an animal as a native species is (1) where it originated; and (2) whether or not it co-evolved with its habitat. Clearly, *E. caballus* did both, here in North American. There might be arguments about “breeds,” but there are no scientific grounds for arguments about “species.” The non-native, feral, and exotic designations given by agencies are not merely reflections of their failure to understand modern science, but also a reflection of their desire to preserve old ways of thinking to keep alive the conflict between a species (wild horses) with no economic value anymore (by law) and the economic value of commercial livestock. Native status for wild horses would place these animals, under law, within a new category for management considerations. As a form of wildlife, embedded with wildness, ancient behavioral patterns, and the morphology and biology of a sensitive prey species, they may finally be released from the “livestock-gone loose” appellation.”

In addition, recent discoveries that the horses that died out only 7,600 years ago was the same species that returned with the Spanish in the late 1400s are detailed on the Yukon Beringia Interpretive Center, Whitehorse Yukon website-Beringia.com, and included in an article I wrote for Natural Horse Magazine entitled “Mustang, An American Original” (*see F Appendix F, Mustang, an American Original by Ginger Kathrens*).

Lack of Genetic Viability

BLM has so marginalized wild horses that the majority of herds are too small to meet even minimal standards to ensure their genetic viability. Dr. Gus Cothran, the foremost equine geneticist in the country, has stated that an N_e of 50 (50 actively breeding animals) is essential to ensure minor losses of genetic variation--50 translates into 1/3 of actively breeding animals in a herd as 2/3 to 3/4 of a wild horse herd are non-breeders---foals, yearlings, bachelors, and mares beyond breeding age. Hence, the 150-200 horse minimum is necessary for borderline viability. Even at a herd size of just 150 horses the rare Spanish Mustang herd in the Pryors is in jeopardy (*see Appendix G, Cothran Report on Pryor Genetics*).

The NAS was particularly concerned about the threats to burro populations by current management

practices. The review stated: That due to the low number of burros on the range "removing burros permanently from the range could jeopardize the genetic health of the total population" (*see Appendix C NAS, p. 304*). Little is known about the genetic health of burros; the few studies that have been conducted reported low genetic diversity compared with that in domestic donkeys. Management actions to achieve optimal genetic diversity may involve intensive management of individual animals in HMAs, translocations of free-ranging horses and burros among HMAs or holding areas to effect genetic restoration, or some combination of these. "

The NAS wisely recommended "routine monitoring at all gathers and the collection and analysis of a sufficient number of samples to detect losses of diversity."

Clearly, genetic viability is a serious concern for the future survival of herds, particularly those that are isolated and do not adjoin another HMA. Even where herds do share common boundaries, barbed wire fences prevent the animals from freely passing from one HMA to another. This is the case in sections of the Red Desert Complex in Wyoming and was pointed out by BLM at a meeting I attending early this year at the Rawlins, Wyoming Field Office.

It is clear that genetic viability has to be considered when BLM prepares their management plans.

Appropriate Management Level (AML)

It is obvious that one solution to warehousing wild horses and burros in costly short-term holding is a reexamination of AMLs and a fairer allocation of available forage between wild horse and livestock.

According to the most recent HMA and HA statistics, of the 177 herds left out of the 339 (BLM has reported both 339 and 303 originally designated for management) only 59 have a low AML of 150 animals or more (*see Appendix H, BLM Herd Area Stats*). 118 have AMLs set below the minimum to ensure viability. Some "Appropriate" Management Levels are shocking. The Montezuma Peaks herd in Nevada on nearly 78,000 acres has a low AML of 2 and a high AML is 4. The current population is 64 horses so the BLM reports this herd is 1600% over AML. The 377,000-acre Chicago Valley is within AML in which the high AML is 12 and a low AML is 10.

The table below illustrates that the low AML for all wild horse and burro herds combined is only 16,292, far below the AML of 26,715.

Horse Low AML: 14,186 ... high AML: 23,768
Burro Low AML: 2,106 ... high AML: 2,920

	horse low aml	hi aml	burro low aml	hi aml
az	192	240	1148	1436
ca	1081	1735	365	465
co	423	812	0	0
id	391	617	0	0
mt	90	120	0	0
nv	7134	11987	463	824
nm	58	83	0	0
or	1353	2690	20	25
ut	974	1759	110	170
wy	2490	3725	0	0
	14186	23768	2106	2920

There appears to be no logical or consistent basis in for the setting of AMLs, most of whom jeopardize the future survival of many of the herds and are far lower than the 57,040 horses and burros reported after the first reported census in 1974! There are likely fewer wild horses and burro on western ranges than when the Act was unanimously passed and stated that wild horses and burros “are fast disappearing from the American scene.”

Currently livestock outnumber wild horses and burros by 47 to 1 on ranges which they share with wild horses and/or burros. And livestock graze on far more acreage than wild horses: 251 million acres for livestock compared to 29.4 million acres for wild horses. Yet wild horses are often unfairly blamed for rangeland degradation (*see Appendix I, GAO Report August 1990*). In 1990 the GAO reported: “*BLM'S decisions on how many wild horses to remove from federal rangelands have not been based on direct evidence that existing wild populations exceed what the range can support.*” While wild horses are routinely removed, livestock grazing frequently remains unchanged or increased after the removal of wild horses, increasing the degradation of public lands.

On page 11, the 2013 NAS report states: “How AML’s are estimated, monitored and adjusted is not transparent to shareholders, supported by scientific information, or amenable to adaptation with new information and environmental or social changes.”

Compensatory Reproduction

Current management practices of roundup, removal, and warehousing by BLM were highlighted in the NAS “key findings” and again in the body of the document. BLM removal of animals from the range causes populations to grow at high rates because their numbers are held below levels affected by food limitation and density dependence. “Thus, population growth rate could be increased by removals through compensatory population growth from decreased competition for forage. As a result, the number of animals processed through holding facilities is probably increased by management”(see Appendix C, NAS Report).

Cost Effective Humane Alternatives

There are reasonable, cost-effective alternatives for managing wild horses and burros, which do not require removing them from the range. Let me briefly discuss some of these alternatives.

Fertility Control: After a two-year review of the program, the NAS recommended that BLM use the fertility tools at hand. “Most promising fertility-control methods for free-ranging horses or burros are porcine zona pellucida (PZP) vaccines and GonaCon™ vaccine for females and chemical vasectomy for males. This conclusion is based on criteria such as delivery method, availability, efficacy, duration of effect, and potential for side effects. Although applying these methods usually requires gathering horses and burros, that process is no more disruptive than the current method of population control — gathering and removal — ***without the further disruption of removing animals. Considering all the current options, these three methods, either alone or in combination, offer the most acceptable alternative to removing animals for managing population numbers.***”

The NAS report states that “Contracepting 500-1,000 mares a year with a 2-year vaccine will not substantially lower the rate of growth of a population of over 30,000 horses.”

Instead BLM reduced the number of doses to only 400 mares in 2015, which drew criticism from John Fallon, BLM Advisory Board Member and former president of the Nevada Cattleman’s Association.

Since the NAS recommendations, encouraging results are being reported about mares re-inoculated with the two-year vaccine, PZP-22.

John Turner, PhD, is a pioneer in the field of fertility control and had this to say in an email exchange with me (see Appendix J, John Turner credentials): "The results of reapplication of PZP-22 are very encouraging with at least three consecutive years of infertility overall averaging >80% in re-treated mares in the Cedar Mountain and Sand Wash Basin study herds."

Regarding the cost of PZP, Dr. Turner wrote: "... the consequent cost of one un-prevented foal is many times greater than a PZP-22 dose in terms of capture, processing and adoption (estimates > \$ 2K) or lifelong warehousing (estimates up to \$ 10K). In the "treat/re-treat" scenario across 6 years, two PZP-22 treatments can potentially prevent a given mare from having 4 foals. Thus, in the most extreme comparison one 'treat/re-treat' cycle (2 doses of PZP-22) could save the public 4 lifelong warehousing costs (\$ 40K)."

Data-Based Estimated Long-Term Effect of PZP-22 Treatment and Re-Treatment on Foal Production in Free-Roaming Wild Mares^{1,2,3,4}

Total Number of Mares ⁴	Number of Foals Produced						Total Foals Produced
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	
1000 untreated	630	630	630	630	630	630	3780
1000 treated with PZP-22	140	420	500	249	288	280	1877
	treatment-effect ave. = 380			retreatment-effect ave. = 272			

¹ Estimates are based on conservative projection of 65% of initially treated mares receiving re-treatment (field data show 65-80%).

² Based on initial-treatment window Dec. through Feb. and re-treatment window Oct. through Feb. (deliverable by hand or dart).

³ Estimated values based on actual research data ± 10%.

⁴ Estimates based on expectation of eventual program-wide application to multiples of 1000 mares per year.

A forty thousand dollar cost savings to the taxpayer on each treat/retreat mare is significant and there are many mares currently on HMAs that have received an initial dose of PZP-22 within the past few years.

In preparing this document I consulted Allen Rutberg, PhD, Director of the Tufts University Center for Animals and Public Society and the former Science Advisor on BLM's National Advisory Board, on the issue of humane alternatives and he made this recommendation for managing the program:

"There is no one-size fits-all approach to applying effective wild horse contraception programs. Therefore it is essential that the BLM WH&B program establishes a process that allows each HMA to tailor its approach to its environment and its horses, while still holding each accountable for its plan and its implementation. . .creating a management system for the herds that is adapted to the Specific herd, whether it be field darting with PZP, water and bait trapping to treat with either PZP or PZP-22." Dr. Rutberg suggests that each Field Office develop their own plan and review all data after three years.

Public/Private Partnerships: There are bright spots in the BLMs Wild Horse and Burro program where herds are managed nearly exclusively with PZP or PZP-22, breaking the roundup and removal cycle. The goal of using PZP or PZP-22 is to limit reproduction humanely so that every foal born has the opportunity to live its life in freedom. Of course, the savings to the taxpayer is enormous.

In only 3 years, the McCullough Peaks Herd east of Cody Wyoming is being maintained at the high AML level exclusively through remote darting, working with the volunteer assistance of Friends of a Legacy (FOAL).

The nearby Pryor Mountains is nearly at the point where natural mortality and reproduction are equal. TCF partnered in the field darting program with the Billings Field Office in the Pryor Range. (see Appendix K, "Partnership in the Pryors.")

Similar programs are succeeding in Colorado in the Little Book Cliffs Wild Horse Range east of Grand Junction and the Spring Creek Basin HMA in southwestern Colorado as well as Sand Wash Basin in northern Colorado and Challis in Idaho. The Onaqui HMA in Utah is successfully field darting and TCF will be partnering with the Rawlins Wyoming Field Office in the 184,000 Stewart Creek HMA to work toward zero population growth goals.

TCF Director of Volunteer Programs, Sandra Sell-Lee, an organization and management consultant for over 35 years and skilled in understanding and creating systemic organization change, is currently creating a Handbook which outlines a private/public partnership with BLM to manage wild horse and burro herds utilizing volunteers.

TCF hopes to have the guide completed this year. Sandra writes in the introduction to the guide that: "We now know how to successfully manage the remaining 177 herds on their allocated HMA's. We know that when the BLM partners with community volunteers who are themselves experienced and have expertise working with Wild Horses and Burros, that the job of population control can be done. At each herd site, local BLM field staff have the ability to recruit and select qualified "citizen scientists" to work as a team, performing the various labor-intensive "boots-on-the-ground" tasks at very little cost to the taxpayers.

With the right mandates, the BLM can unleash 100's if not 1000's of community volunteers to work alongside the BLM field staff.

Another PZP project is a partnership in the Virginia Range of Nevada with the State of Nevada and The American Wild Horse Preservation Campaign (AWHPC) designed to humanely manage iconic animals on Nevada's historic Virginia Range to keep them roaming wild and free. This innovative program is using PZP, a safe, scientifically proven and humane approach to manage the more than 1,500 wild horses that inhabit the Virginia Range, which encompasses more than 280,000 acres in northern Nevada. By year two, it will be the largest humane management program for wild horses in the world.

The program is being implemented through a cooperative agreement between AWHPC, under the auspices of its founding organization, Return to Freedom, and the Nevada Department of Agriculture (see Appendix L, AWHPC/Virginia Range).

Accurate Monitoring/Censusing of Herds: An additional advantage of using volunteers is the creation of a real world knowledge base of the herds. Citizen scientists would take photographs of the individual bands and members in each band, plus their GPS location at various times of the year. Information would be entered in a database that is already up and running.

This approach could also resolve a shortcoming of the program identified as a "key finding" of the NAS who criticized the monitoring of wild herds, "Management of the Wild Horse and Burro Program is not based on rigorous population monitoring procedures" (see Appendix C Pp55-56).

Drones could be employed to identify the locations of band. Trails cams could be put up in remote areas, allowing for detection of elusive horses or burros. Using technology can work for the BLM and for the horses. It is a new world in which management can be humane and cost effective.

Grazing buyouts/Compensation for reducing grazing: Currently being written by our TCF Public Lands Liaison, this is a project proposal whereby a financial incentive is offered to HMA or HA Livestock permit holders to swap some portion of their allowed livestock AUMs for use by wild horses and burros, in exchange for at least fair market value payment as well as opportunities to profit from wild horse and burro tourism.

These agreements would be voluntary and designed to support livestock producers while keeping wild horses and burros in the wild, as our original protection laws intended. Permittees would document and support wild horse herds in their shared permit areas. Further responsibilities could be contracted for through additional fee for service arrangements. Preliminary calculations show it would clearly be cost effective for taxpayers, permit holders, and the BLM/USFS while also facilitating more humane wild horse and burro management.

Repatriation: Returning short-term holding horse to zeroed out HMAs or available HAs has long been discussed as a way to quickly relieve a significant drain on the BLM budget. Six years ago, TCF proposed returning horses in short-term holding to areas identified for their use in 1973-1974 but where they no longer live. These would be non-reproducing animals so they would die out of course. 22 million acres have been removed from the program since that initial census in 1973-74.

My TCF colleagues Ann Evans, Makendra Silverman and I had a meeting with Director Bob Abbey in 2010 to discuss returning the short-term holding horses back onto 5-7 million acres where wild horses once lived. The BLM agreed that there was a possibility for reintroduction. The meeting abruptly ended when Interior Under-Secretary Sylvia Baca entered the room, sat down, and within minutes told us we should thank BLM for not killing the horses in holding.

Regardless, I still believe that this is the best way to save money and provide a natural environment for the horses. This could be completed quickly, reducing the financial burden of horses in holding.

In April 2015, we revived this proposal and added to it. We suggested applying PZP as well as negotiating Grazing Buyouts to save money and to put the program on a fiscally responsible track. We gave the proposal to Mike Tupper, who was briefly the go-to person, acting directly under BLM Director, Neil Kornze (*see Appendix M, Altering the WHB Program-TCF*).

We believe this proposal deserves consideration, but would want to incorporate the common sense comments of Allen Rutberg, PhD who points out that "one size does not fit all". Rutberg suggests that each Field Office would develop a program that fits with their HMAs and Allotments/Permittees, and needs (*see Appendix N, Rutberg email comments*).

In my role as the Humane Advocate on the Advisory Board I serve on the sub-committee investigating what ranges are available for the return of horses in holding. We are currently exploring the possibility of returning horses in holding to an HMA in Utah, which currently contains no horses.

Natural Management: The USDA's Wildlife Services (formerly Animal Damage Control) regularly kills thousands of carnivores on public land, diminishing the opportunity for natural predation to help create a balance of predator and prey on Federal Lands. Jim Baca, a former director of the Bureau of Land Management in the 1990s, called Wildlife Services, "... a carpet bomber of the West because of the scale of indiscriminate killing of native wildlife." He added, "If Congress is serious about saving money, this is where they should start."

In the Pryor Mountains of Southern Montana the wild horse herd experienced zero population

growth for four years in a row due to mountain lion predation. Then BLM called in hunters to kill the cats. These were not the current managers of the herd.

We recommend that BLM work with USDA, State and Federal wildlife agencies to restrict lion permits and to discourage the killing of mountain lions or other predators on Wild Horse HMAs by Wildlife Services (*see Appendix O, Wild Earth Guardians-Wildlife Killing*).

PZP vs. Sterilization: BLM is funding \$10 million of research projects that will likely take years to complete. The research includes invasive and/or experimental sterilization procedures, which have little practical application in the field, unless the BLM is willing to accept inevitable significant mortality levels.

I personally spoke with those present at the spaying of a mare and four burros in Phoenix in which the mare died and one of the burros died (*see Appendix P, TCF Press Release-May 17, 2017*). The ovariectomy procedures were conducted by the same veterinarian selected to perform surgeries on wild mares as part of the Oregon State University (OSU) research project this year (2016).

The announcement of this research with Oregon State University has drawn a storm of protest from the American public. The surgeries on wild mares would be conducted at the BLM Hines holding facility outside Burns, Oregon.

Don Moore, a respected Veterinarian who has extensive knowledge about wild horses and wild horse behavior, had this to say about the proposed OSU/BLM research projects: “The three surgical procedures for permanent sterilization of mares described in the mare sterilization research project, ovariectomy via colopotomy, tubal ligation and hysteroscopically-guided laser ablation of the oviduct papilla all require certain pre-operative and post-operative considerations for aseptic surgical protocol and pain management. Pre-operative bloodwork and a thorough examination are always performed on the relatively few domestic mares which are spayed. Other options other than surgery are always considered first due to the risk involved with any of these procedures. Aseptic surgical protocol and pain management is the standard of care for each and every surgery or the performing veterinarian would undoubtedly be sued by the owner and reprimanded by the state veterinary board.

Wild mares will not have their surgeries performed in a sterile surgical suite. Their surgery will be performed in a non-sterile chute or standing in stocks at the local BLM facility without benefit of routine standard of care. Unlike domestic mares who are easily handled, the very handling of these wild mares presents additional pre-operative stressors, which cannot be mitigated.

BLM does not possess the statutory authority to treat America’s wild free roaming mares as research test subjects to perform surgeries which are not the standard of care for domestic mares.



Leon Pielstick, DVM, inserting a chain ecraseur (and his arm) via colpotomy incision

Case in point, is a photograph of Dr. Leon Pielstick as he was beginning to perform a surgery attired in bibs used predominately for working cattle and performing the surgery with a non-sterile plastic sleeve that is used to pregnancy check cattle. This is not acceptable for a domestic mare, why wild mares? To learn this procedures has been performed on some of the Sheldon wild mares, undoubtedly in a similar manner, is gross negligence and inhumane on the part of the Department of Interior and the veterinarians who performed the surgery in less than sterile conditions.

This type of trial and error butchery is a violation of the least feasible management clause of the Wild Free Roaming Horses and Burros Act.”

“Mass experimental surgeries performed under these conditions outlined in the proposal, amounts to negligence and abuse. I believe experiments such as this proposal are unethical, inhumane and unwarranted. Any veterinarian(s) who would perform these experiments is in violation of the oath taken as a graduating veterinarian, “above all else, do no harm”. If a veterinarian in private practice performed these procedures in the manner described in this document they would most certainly be reported to and disciplined by the regulatory board of that state. Discipline would likely mean suspension of that veterinarian’s license to practice in that state.”

Dr. Moore specifically address one of the procedures in more detail: “Hysteroscopically guided laser ablation is not a preferred method by board certified equine surgeons because it is considered experimental even under the best of conditions. Field veterinarians and veterinary students are woefully inadequate to perform any of these surgeries, which in my opinion should only be done by board certified equine surgeons in appropriate surgical suites and with post- operative care performed by educated and expert staff in an equine veterinary hospital setting” (*see Appendix Q, Don Moore Testimony-Sterilization Procedures*)

Sterilizing fillies and young mares using any of the proposed procedures ensures they will not contribute their genetics to the herd and will lead to further loss of genetic variability in herds already challenged with loss of genetic variability. The NAS did not recommend invasive procedures.

Conclusion:

In summary, I have carefully studied wild horse behavior on federal lands for over 22 years -- and filmed and documented their behavior for PBS/Discovery and others as well as for public advocacy groups across the nation. Wild horse family structures and daily interactions are complex and wondrous to behold – and social, family bands should be preserved in their natural environment, on their designated herd management areas on federal lands.

America’s wild horses and burros have a legal and historical right to live freely on federal lands as established by constitutional provisions and public support in general.

Reputable national polls report that over 70% of the general public support the protection of wild horses and burros on federal lands and resoundingly repudiate any attempts at using slaughter as a means of managing populations in the wild or in captivity. According to the latest polls, 90% of women oppose slaughter – as they should!

Overgrazing, overpopulation and unsustainability are over-generalized and non-scientific claims by the BLM to justify removals of horses and burros from public lands.

Castration, sterilization, and long-term confinement in holding facilities are unnecessary, cruel, unhealthy, and fiscally irresponsible methods of controlling horse and burro populations – ultimately leading to the potential extermination of rare and native wild horse herds.

We know from successful PZP programs and alternative management approaches that the government does not need to remove wild horses and burros from federal lands to effectively manage them.

There are reasonable, cost effective and humane alternatives to current and/or proposed BLM wild horse and burro management policies/approaches; namely those including proper PZP application.

Maintaining wild horse and burro herds in the wild can be financially and culturally beneficial to local communities as well as fulfill an iconic image of western heritage. Revenue from wild horse viewing and photography is the main economic driver in the small towns of Maybell Colorado and Lovell Wyoming due to the presences of wild horse herds.

Thousands of caring, thoughtful, well-informed, and well-trained volunteer field experts are available to assist federal agencies and organizations in implementing healthy and cost-effective alternative management approaches in the wild.

America's federal lands belong to us all – genetically viable wild horses and burros deserve a permanent and a fairly allocated piece of that land -- a lasting home on the range.

I would like to personally thank all the individuals and organizations who assisted me in preparing this document I couldn't have done it without you – Ginger Kathrens Volunteer Executive Director of the Cloud Foundation

Appendix :

A:<http://thecloudfoundation.org/images/pdf/POLLS.pdf>

B:<http://www.aspc.org/about-us/press-releases/aspc-research-confirms-americans-strongly-oppose-slaughter-horses-human>

C:<http://www.nap.edu/read/13511/chapter/1>

D:http://thecloudfoundation.org/images/pdf/ROSS_MACPHEE_TO_NAS.pdf

E:http://thecloudfoundation.org/images/pdf/Wild_Horses_as_Native_North_American_Wildlife.pdf

F:http://www.thecloudfoundation.org/images/pdf/GK_NaturalHorse_MustangAmOriginal_2012-nocover.pdf

G:<http://thecloudfoundation.org/images/pdf/PZPPositionPaperandResearch/PryorMNTS2012GeneticReport.pdf>

H:http://www.nacdnet.org/doc_download/1810-estimates

I:<http://www.gao.gov/assets/150/149472.pdf>

J:<http://www.utoledo.edu/med/depts/physpharm/faculty/turner.html>

K:http://www.blm.gov/style/medialib/blm/mt/main_story.Par.31432.File.dat/TopStoryHorse.pdf

L:<http://www.wildhorsepreservation.org/media/iansomerhalder-foundation-announces-20000-grants-wildhorse-fertility-control>

M:<http://www.thecloudfoundation.org/images/pdf/GingerTestimony2016/TupperProposal-AlteringCourseBLMWHBProgram.pdf>

N:http://thecloudfoundation.org/images/pdf/A_Common_Sense_Management_Approach_by_Allen_Rutberg.pdf

O:http://www.wildearthguardians.org/site/PageServer?pagename=priorities_wildlife_war_wildlife_killed_table#.V2gqKZMrKEJ

P:<http://thecloudfoundation.org/news/press-releases/569-new-information-reveals-unreported-death-in-experimental-wild-mare-burro-sterilizations-performed-by-dr-leon-pielstick>

Q:<http://www.wildhoofbeats.com/DonMooreCommentsOregonSpayProposal.pdf>