September 30, 2022

U.S. Forest Service (USFS)
Modoc National Forest
Attention: Supervisor Christofferson and Heidi Lowery, East Zone District Ranger
225 W 8th St
Alturas, CA 96101

submitted online: https://cara.fs2c.usda.gov/Public//CommentInput?Project=62741

To: Mr. Christofferson, Ms. Lowery and USFS Modoc National Forest Office:

On behalf of The Cloud Foundation (TCF), a 501(c)3 nonprofit organization committed to protecting and preserving America's wild horse and burros on our public lands through education and advocacy, and our more than 500,000 supporters, we respectfully submit these comments on the USFS scoping notice regarding the Devil's Garden Plateau Wild Horse Territory (DGPWHT) Supplemental which is intended "to develop and implement a revised Territory Management Plan, including the Middle Section." I, along with TCF's board, staff and supporters, enjoy and appreciate the wild horses currently living in the DGPWHT. We appreciate wild horses specifically for their natural behaviors – their social bonds, herd

The Agriculture Secretary is instructed by the 1971 Wild Free-Roaming Horses and Burros Act to consult with the NAS. USFS' sister agency, the Bureau of Land Management, commissioned the 2013 NAS report "Using Science to Improve the BLM Wild Horse and Burro Program: A Way Forward" (NAS Report) (Attachment 1) clearly states:

> *"Horse and burro management and control strategies … should engage interested and affected parties and also be responsive to public attitudes and preferences. Three decades ago, the National Research Council reported that public opinion was the major reason that the Wild Horse and Burro Program existed and public opinion was a primary indicator of management success (NRC, 1982). The same holds true today." p. 292*

The NAS Report notes:

> "*Horse and burro management and control strategies cannot be based on biological or cost considerations alone; management should engage interested and affected parties and also be responsive to public attitudes and preferences*." p. 292

> "*Livestock grazing occurs on 160 million acres of land (65% of BLM land) with a maximum of 12.5 million AUMs of grazing authorized and 8.6 million AUMs used. By contrast, wild horses exist on 26.9 million acres of BLM land and are authorized 318,060 AUMs and are estimated to have used 447,689 AUMs. Put another way, of forage allocated on BLM land to wild horses and livestock, wild horses account for just 5% of consumption, while livestock account for 95%*."

We request the future EA disclose and address the below-outlined data – such actions are necessary to an objective decision-making process as outlined by the National Environmental Policy Act (NEPA) and to take a hard look and analyze the information contained herein.

I. OVERVIEW, CUMMULATIVE CONSIDERATION

USFS permits livestock grazing on over 74 million acres of 193 million acres within the National Forest System lands spread across 28 states.[1]

USFS only allows wild horses and burros to live on approximately 2.5 million acres of USFS-managed public lands.[2]

USFS issues livestock grazing permits for 5,492 permittees, authorizing approximately 6.6 million AUMs of authorized grazing by commercial livestock.[1]

USFS national Allowable Management Level (AML) is "roughly 2,400 wild horses/burros" according to the Congressional Research Service.[3] (USFS states this number is ~2,300.)

USFS states on its website that it manages only ~7,100 wild horses and 900 wild burros – equivalent to 88,800 AUMS.[2] That is nearly the same number of USFS livestock PERMITTEES!

Over the past 50 years, USFS has zeroed-out a significant portion of the original Congressionally-designated wild horse habitat under USFS management. Due to USFS' withholding of information on its public website, we do not have that data.

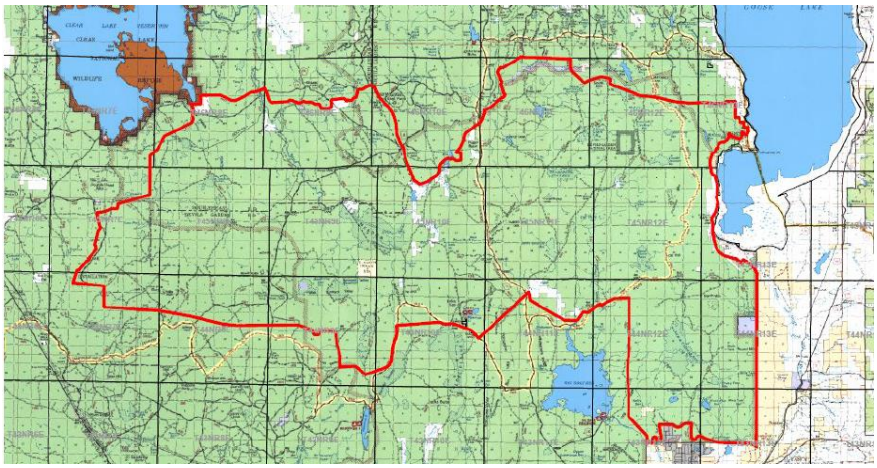
The EA must disclose the acreage surrounding the HMA that has been zeroed out and cite the basis.

Mapping shows that lands to the east of the HMA were also originally designated as Herd Area which logically leads one to understand the herd had originally used the entire Skull Valley. The EA should disclose the original Herd Areas just east of Skull Valley and provide the reasons and dates for the zeroing out of these original public lands designated for the welfare of wild horses.

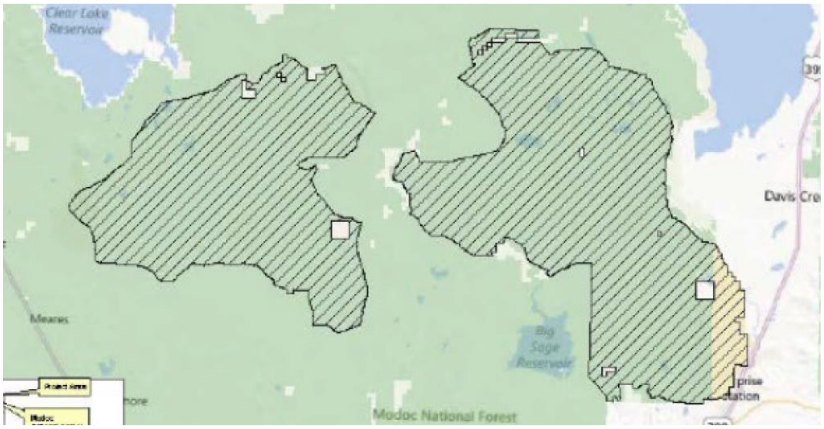
II. "MIDDLE SECTION"

The middle section of the WHT is highly desirable grazing lands and is essential wild horse habitat. Wild horses, by law, have the principal use of these public lands. The original WHT is depicted below. This was the area wild horses have always had access to (USFS Figure 3).

[1] https://www.fs.usda.gov/rangeland-management/reports/index.shtml
[2] https://www.fs.usda.gov/wild-horse-burro/territories/index.shtml
[3] https://crsreports.congress.gov/product/pdf/IF/IF11060



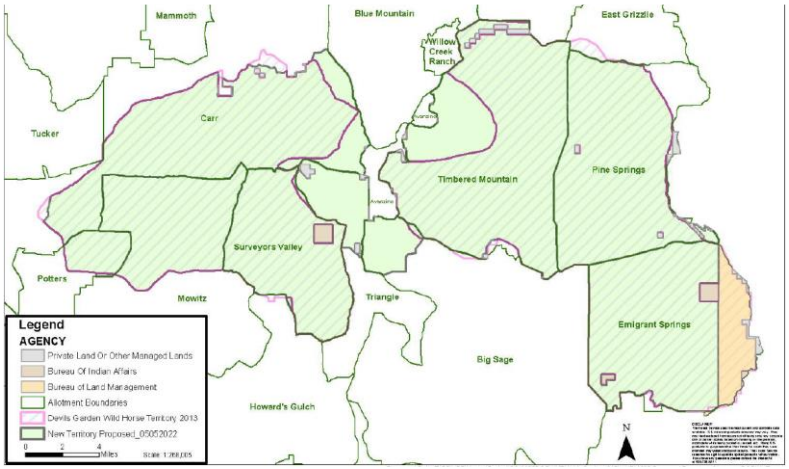
In a move to accommodate commercial livestock grazing, the USFS tried to illegally eliminate the coveted middle section of the WHT – dividing in half the WHT (USFS Figure 2). This map clearly outlines in white the private property in and around the WHT. Clearly the Avanzino property does not make a large portion of the middle section.



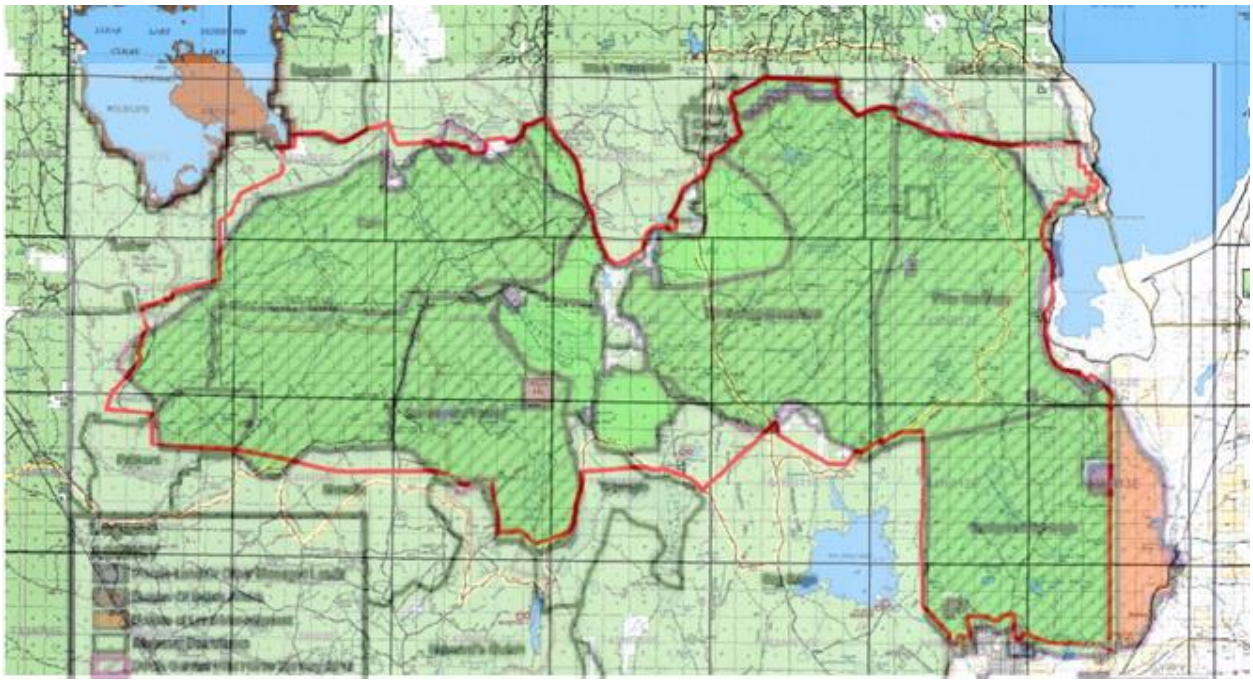
This division of the WHT would have disastrous impacts to the herd. Not only would genetics (which according to the scoping documents may be in jeopardy) be negatively impacts, but the middle section, having the most productive rangelands that are important for the wild horse season and year-round use would have been eliminated. This biased, anti-wild horse move by the USFS and its livestock proponent cohorts goes against the interests of the American people who have repeatedly called on the federal government to stop zeroing-out wild horse habitat.

The Proposed Action's map (Figure 1) and documents appear to propose eliminating a large-swatch of the middle section (far beyond the boundaries of the private property in the middle section); although the mapping provided fails to provide sufficient details. While we understand private lands can be fenced off, we oppose eliminating any of these public lands from the WHT. The proposal to zero-out portions of this important habitat (in the middle section) based on allotments, livestock fencing or roads is not based on science but further shows the USFS bias against wild horses in DGPWHT. While including the small southern portion of the middle section provides some connectivity between the now mostly divided WHT, it is insufficient for adequate movement. Based on USFS maps, it appears much of the public lands in the middle section continues to be eliminated for wild horse use. The Proposed Action must maintain all

public lands in the middle section for wild horses and any private land owners should be required to fence their private property if they do not want wild horses on their property.



Superimposing the two maps (USFS Figure 1 and Figure 3), it appears public lands are being eliminated from portions of the WHT. Again, eliminating the private property is understandable and reasonable, but eliminating public lands to accommodate commercial livestock grazing at the detriment of wild horses is not.



The Proposed Action must acknowledge of the USFS regulation 2265.2 - Removal of Animals at Landowner's Request which states:

> *When fences on boundaries between private lands and National Forest do not exist or are not adequate,* ***advise the landowners of their responsibilities, what the Forest Service position is, and come to an agreement about who will construct, improve, or maintain such fences****…****Return all wild free-***

roaming horses and burros from private lands to their normal herd territories with minimum physical damage or stress to the animals.

III. EA MUST ADDRESS LIVESTOCK GRAZING IN AND AROUND WHT

The USFS' proposed Management Plan fails to consider livestock grazing in and around the WHT. USFS cannot make management decisions in a vacuum. The EA must take a hard look wholistically at all contributing factors, consider alternative actions that could mitigate the need for the Proposed Action and must weigh the balance of public good in reaching a decision. In order to sufficiently analyze management actions pertaining to wild horses, the following information must be provided, considered and analyzed in the EA:

- Disclose the breed and weight of cows that graze in the WHT.

- A list of all allotments within each WHT, including percentages of each allotment that fall within the WHT.

- The Animal Unit Months (AUM's) permitted for livestock (and wildlife) and the *actual use* of AUMs by livestock in and around the WHT for ***each*** of the past five years. Data more than five years old and averages are not helpful given that the most recent actual data is more helpful to understanding the USFS' perceived range conditions.

- Disclosure of any illegal livestock grazing in the WHT or surrounding area.

- Rangeland assessments (full assessments MUST be provided in the Appendix) conducted over the past 10 years for all areas within the original WHT – including pastures, allotments, etc.

- Scientific data and criteria utilized to differentiate livestock usage impacts from wild horse impacts.

- Maps that provide all data on fencing in and around the WHT.

- Maps that show all water sources in the WHT (with complete information about water that is made available to livestock but fenced off from horses or seasonal water sources including how they are regulated and the months of operation).

- Consideration of voluntary retirement of grazing allotments or compensation for non-use of livestock AUMs.

- Disclosure of the number of livestock grazing AUMs throughout the Field Office and Modoc Forest jurisdiction compared to AUMs allocated for wild horses. This must be disclosed and considered because the National Environmental Policy Act (NEPA) requires the agency to consider the cumulative effect each decision has. If there are excessive numbers of AUMs utilized by livestock in and around the WHT, the EA must disclose this and provide a scientific rationale for the agency's failure to provide balanced use of the resource. The EA cannot simply state that implementing an action outlined in a land use plan (LUP) is exempt from further analysis. LUPs only become effectuated through an EA when a Proposed

> Action is decided upon. Therefore, all alternatives must be considered prior to deciding on a management decision through an EA.

The EA must consider accommodating the current wild horse populations in conjunction with range improvements (such as fencing off sensitive areas, protecting riparian areas, etc.) and temporary or permanent reduction or elimination of livestock grazing.

This alternative would forgo or greatly reduce removals and accommodate the current wild horses by using Adaptive Management.

Modern-day cattle have been bred large over the past few decades since the AUM system was created. The USFS and EA must consider the size/weight of cows compared to the current AUM allocation. The USFS continues to use the outdated 1,000 lb cow measurement that was established prior to the 1980's and it is well documented cattle are bred at least 20% larger today. (Attachment 2a-b)

These statements highlight that the EA understates forage usage by livestock, as documented by Dr. John Carter, range specialist and Utah Director for the Western Watersheds Project in the attached report: "***BLM is understating forage consumption by cow/calf pairs by a nominal 50% based on the average body condition and frame scores****. The implication of this on stocking rates is obvious. Based on forage consumption alone, not considering proper utilization, forage capacity and capability factors,* ***BLM is over stocking allotments 33% based on failure to take into account current cattle weights and calves****.*" (Attachment 2a-b)

BLM and USFS allocation of resources when it comes to livestock and wild horses is very similar – meaning USFS allocates far more AUMs to livestock than wild horses. USFS exhibits the same anti-wild horse bias that BLM exhibits – scapegoating wild horses for range impacts that are caused by livestock.

The Public Employees for Environmental Responsibility (PEER), a non-biased NGO, found that the BLM has been found to weigh wild horse impacts to the range much more heavily than livestock. Meaning the method used by the agency is "seriously skewed towards minimizing impacts from domestic livestock and magnifying those from wild horses and burros…" (Attachment 3a) The USFS manages livestock in much the same way as BLM and therefore – unless contrary data is provided – this biased management is just as prevalent at USFS as it is at BLM.

As a result, both the USFS and BLM approach to range management targets wild horses and burros while ignoring far more numerous cattle. PEER, an independent environmentally-based organization, repeatedly has outlined the BLM's refusal to take a hard look at the negative environmental impacts of livestock and instead focuses on wild horses. (Attachments 3b-c)

The 1982 NAS (formerly known as the National Research Council) stated (Attachment 3d):

> *All of this may seem to be a circuitous route to assigning a* ***meaning to the term excess****. But it constitutes the background for saying that the term has both a biological and social aspect to it. Biological excess, in our judgment, exists when the number of herbivores present degrades the ecosystem to the point where it is producing goods and services well below its potential, and particularly where the long-term productivity*

> *and capacity for ecological recovery are impaired. Excessive water runoff and soil erosion might be indicators of this state of affairs.*
>
> *Such excess can occur with only a single species of grazing animal or with some combination of two or more. For an oversimplified example,* ***if a given area can properly carry 1,000 grazing animals but has 1,500, then 500 are in excess. It makes no difference whether the 1,500 are horses, cattle, or a combination of both. An excess still exists, hypothetically assuming equal substitution. In effect, there is a carrying capacity for 1,000 mouths, and the 500 additional constitute the excess.***
>
> ***Which of these species of animals should be carried in a given area becomes one of human values or preference. Biologically, the area may be able to support 500 cattle and 500 horses, and may be carrying them. But if the weight of public opinion calls for 1,000 horses, the area can be said in this context to have an excess of 500 cattle.***
>
> ***For these reasons, the term excess has both biological and social components. In the above example, biological excess constitutes any number of animals, regardless of which class, above 1,000. Social excess depends on management policies, legal issues, and prevailing public preference.***

IV. EA MUST DISCLOSE SCIENTIFIC DATA THAT IS THE BASIS OF AML

Given that the EA is based on the "Appropriate Management Level" (AML) as a measurement to determine whether horses are deemed excess, the EA must include the following:

- Complete description of how and when AML was set for the WHT.
- List of groups consulted in setting AML.
- Full disclosure of the scientific basis upon which the AML was set.
- Disclosure of science that supports the AUMs allocated for livestock in the WHT.

V. EA MUST DISCLOSE & ANALYZE SOCIETAL PREFERENCES

According to the White House Council on Environmental Quality (CEQ), under NEPA, "agencies are required to determine if their proposed actions have significant environmental effects and to consider the environmental and related social and economic effects of their proposed actions."

The agency is facing an escalating fiscal crisis off-the-range as a result of the mass removal of wild horses and burros from the range and the stockpiling of captured mustangs and burros in government holding facilities.

The National Academy of Sciences (NAS) reiterated the importance of these factors as was highlighted in a 1982 National Research Council report (Attachment 1):

> *Attitudes and values that influence and direct public priorities regarding the size, distribution, and condition of horse herds, as well as their accessibility to public viewing and study, must be an important factor in the determination of what constitutes excess*

numbers of animals in any area. . . [A]n otherwise satisfactory population level may be controversial or unacceptable if the strategy for achieving it is not appropriately responsive to public attitudes and values. . . .

*Biologically, the area may be able to support 500 cattle and 500 horses, and may be carrying them. But if the weight of public opinion calls for 1,000 horses, the area can be said in this context to have an excess of 500 cattle. For these reasons, the term excess has both biological and social components. In the above example**, biological excess constitutes any number of animals, regardless of which class above 1,000. Social excess depends on management policies, legal issues, and prevailing public preference**..."*

"It continues to be obvious that the major motivation behind the wild horse and burro protection program and a primary criterion of management success is public opinion. Attitudes and values that influence and direct public priorities regarding the size, distribution, and condition of horse herds, as well as their accessibility to public viewing and study, must be an important factor in the determination of what constitutes excess numbers of animals in any area. The choice of control strategies, when and if they become necessary, must also be responsive to public attitudes and preferences and cannot be based solely on biological or cost consideration. The issue of excess numbers is conceptually severable from the strategies questions. However, an otherwise satisfactory population level may be controversial or unacceptable if the strategy for achieving it is not appropriately responsive to public attitudes and values."

"*Personnel attitudes must also be accounted for in the decision-making process. We have, in the process of our inquiries, encountered a broad range of attitudes toward the wild horse and burro management program among BLM employees. We are not, however, confident that attitudes are evenly distributed throughout the Bureau. Indeed, we have met many employees who are sincerely committed to wild horse and burro management in the spirit of the 1971 Act. But our experience also suggests that the Bureau must be sensitive to considerable pockets of resistance to the program within its own ranks and to the pressures which many district and area personnel feel to depict range, population, and other conditions in an antihorse and antiburro context."*

The EA must disclose and consider the public comments received during scoping. The EA must consider the interests of those who cherish the opportunity to observe, photograph, and otherwise enjoy wild horses and their natural behaviors in the DGPWHT… these are the very horses which Congress declared to be "*national esthetic treasure*[s]" when it enacted the Wild Free-Roaming Horses and Burros Act of 1971.

VI. EA MUST TAKE A HARD LOOK AT APPLICABLE STATUTES AND LAWS

USFS claims it strives to manage for "balanced use" as a part of its multiple-use sustained yield mandate. Clearly, based on the AUM allocations within the WHT no such balance exists. The EA must fully analyze the following applicable statues and laws.

A. 1971 WILD, FREE-ROAMING HORSES AND BURROS ACT (WHA)

The EA must adequately analyze the 1971 WHA mandates for the USFS management of wild

horses/burros on public lands.

Congressional Intent Is Clear: The Designated "Range" or "Wild Horse Territory" Is "Devoted Principally" for Wild Horse and Burro Use.

Congress clearly outlined in the Act that wild horses and burros have a special, protected status. The Act specifically identifies the "range" where wild horses and burros were presently found (in 1971) as "*the land necessary to sustain an existing herd or herds of wild free-roaming horses*." The Act then states this wild horse and burro habitat "***is devoted principally*** *but not necessarily exclusively to their [wild horses and burros] welfare..."* [Public Law 92-195 § 1332]

Congress' usage of the word "is" clearly indicates Congressional intention, which does not grant USFS any discretion in whether the public lands should be devoted principally for wild horses and burros. Had Congress wanted to provide USFS with discretion, the word "may" would have been used. Again, the clear language of the Act leaves **no possible ambiguity** about the intent of Congress, or that wild horses and burros "*are to be considered in the area where presently found,* ***as an integral part of the natural system of the public lands***."

"*If the intent of Congress is clear, that is the end of the matter; for the court, as well as the agency, must give effect to the unambiguously expressed intent of Congress*." [Chevron, U.S.A., Inc. v. Nat. Res. Def. Council, 467 U.S. 837, 842–43 (1984)].

Congress' intention is written in the plain language of the Act – these public lands which have been designated as wild horse habitat are to be devoted **principally** to wild horses.

Definition: principally (adverb): mainly
Synonyms: chiefly, mainly, primarily,
Cambridge Dictionary

The creators of the scoping documents clearly fall into one of the two categories of government personnel as noted in the 1982 National Research Council's report (Attachment 3d): "*Our experience also suggests that the Bureau must be sensitive to* ***considerable pockets of resistance to the program within its own ranks and to the pressures which many district and area personnel feel to depict range, population, and other conditions in an antihorse and antiburro context*****.**"

While the NAS/NRC reports focused on BLM, as the agency responsible for the management of the largest number of wild horses and burros, the recommendations are equally applicable to the USFS.

B. Federal Land Policy and Management Act of 1976 (FLPMA)

FLPMA requires that USFS "balance wild horse and burro use with other resources" which equates *at minimum* to a 50-50 allocation of available forage between horses and livestock in WHTs. FLPMA requires that:

"(c) . . . consideration being given to the relative values of the resources and not necessarily to the combination of uses that will give the greatest economic return or the greatest unit output."

The intrinsic value of wild horses and burros falls under the non-market definition specified by both laws.

Sec. 302 of FLPMA states:

"(a) The Secretary shall manage the public lands under principles of multiple use and sustained yield, in accordance with the land use plans developed by him under section 202 of this Act when they are available, except that where a tract of such public land has been dedicated to specific uses according to any other provisions of law it shall be managed in accordance with such law," [43 U.S.C. 1732] and Sec. 102 "(b) The policies of this Act shall become effective only as specific statutory authority for their implementation is enacted by this Act or by subsequent legislation and shall then be construed as supplemental to and not in derogation of the purposes for which public lands are administered under other provisions of law" [43 U.S.C. 1701]

In addition, FLPMA requires the public lands to be administered for "multiple-use," which Congress defined as:

"the management of the public lands and their various resource values so that they are utilized in the combination that will best meet the present and future needs of the American people . . . with consideration being given to the relative values of the resources and not necessarily to the combination of uses that will give the greatest economic return or the greatest unit output." [43 U.S.C. § 1702(c)].

While commercial livestock grazing is permitted on public lands, it is not a requirement under the agency's multiple use mandate as outlined in the Federal Land Policy and Management Act of 1976 (FLPMA). Indeed, public land grazing is a privilege and not a right and the USFS is mandated by law to protect wild horses and burros.

Grazing on public lands is a privilege, and not a right See 43 U.S.C. § 315b & 16 (1943 Taylor Grazing Act, stating that grazing preferences "shall not create any right, title, interest, or estate in or to the lands" belonging to the U.S. Government); 43 U.S.C. § 580l (FLPMA similar provision); Omaechevarria v. Idaho, 246 U.S. 343, 352 (1918) ("Congress has not conferred upon citizens the right to graze stock upon the public lands. The government has merely suffered the lands to be so used"); U.S. v. Fuller, 409 U.S. 488, 494 (1973) (grazing permittee does not acquire a property interest in grazing permit); Swim v. Bergland, 696 F.2d 712, 719 (9th Cir. 1983) ("license to graze on public lands has always been a revocable privilege"); Osborne v. United States, 145 F.2d 892, 896 (9th Cir. 1944) ("it has always been the intention and policy of the government to regard the use of its public lands for stock grazing. . . as a privilege which is withdrawable at any time for any use by the sovereign without the payment of compensation"); Diamond Bar Cattle Co. v. U.S.A., 168 F.3d 1209, 1217 (10th Cir. 1998) (permittees "do not now hold and have never held a vested private property right to graze cattle on federal public lands"); Alves v. U.S., 133 F.3d 1454 (Fed. Cir. 1998) (holding that neither grazing permit nor preference is a compensable property interest).

C. Taylor Grazing Act (TGA)

The TGA provides the government broad discretion to decide whether to allow livestock owners to use the public lands i.e., the issuance of a grazing permit does not confer any entitlement or right to use the public lands; rather, it is a privilege that can be taken away, if necessary, to

protect the health of the range and even if necessary, to protect the wild horses. See 43 U.S.C. § 315b (USFS, is "authorized" to issue permits for the grazing of livestock on public lands "upon the payment . . .of reasonable fees"); id. ("the creation of a grazing district or the issuance of a [grazing] permit . . . shall not create any right, title, interest, or estate in or to" these public lands. Id. (emphasis added). Indeed, the TGA also provides that the Secretary "is authorized, in his discretion, to . . . classify any lands within a grazing district, which are . . . more valuable or suitable for any other use," 43 U.S.C. § 315f, including use by wild horses that are required to be protected under the WHA (Wild Horse Act). See 16 U.S.C. § 1333(a); see also 43 C.F.R. § 4710.5(a).

Livestock grazing on public lands is a privilege that can be taken away if necessary, to protect the health of the range and even, if necessary, to protect wild horses.

VII. EA MUST ADEQUATELY ANALZYE FERTILITY CONTROL ALTERNATIVES AND PRIORITIZE PROTECTING NATURAL BEHAVIORS

The NAS determined "*preserving natural behaviors is an important criterion*" for wild horse management. Therefore, the following should be precluded from management actions:

- sex ratio skewing which causes stallion aggression due to the unnatural ratio of males to females;
- castration, ovariectomy and other surgical sterilization that alters the animal's ability to produce natural hormones; and
- any fertility control (e.g., Gonacon) that alters the production of natural hormones.

In 1971, Congress unanimously passed the Wild, Free-Roaming Horses and Burros Act. It was not called the "American Horses and Burros Act" for a reason. The word "Wild" has distinct meaning, especially when it comes to wild horses. Wild behaviors are the basis for the rich and complex natural social structure of wild horses.

A. Gonacon

The EA must clarify for the public the number of injections of Gonacon that will be authorized under the duration of the EA. The number of injections of Gonacon is necessary to adequately analyze the effects of Gonacon which effectively destroys the ovary and/or ovary function after just two injections or applications.

The EA must not misconstrue the NAS' stated position regarding Gonacon. The NAS specifically addressed Gonacon on page 149 (Attachment 1):

> "*Thus, to the extent that Gonacon **preserves natural behavior patterns** while effectively preventing reproduction, it is a promising candidate as a female-directed fertility-control method. **However, further studies of its behavioral effects are needed***."

The EA must disclose the most current research the USFS relies on relating to Gonacon. The BLM-funded research conducted by Dr. Baker is available to BLM (and USFS must obtain and disclose this most recent data) that shows 10 years *after* receiving two injections of Gonacon 75% of mares remained sterilized – there is no data to show that the majority of mares will return to fertility after just **two injections of Gonacon.**

The EA must provide all scientific data that disputes the understanding that Gonacon destroys natural "wild" horse behaviors. The NAS recommended scientific data is needed to show that wild behaviors are not destroyed prior to implementation on the range. Merely claiming that "free-ranging" behaviors are maintained are not the "wild" behaviors that differentiate wild horses from their domestic cousins. More on this below.

Behavioral endocrinology is the scientific study of the interaction between hormones and behavior. Biologically speaking, hormones change cellular function and affect behaviors. Hormones achieve this by affecting individuals' sensory systems, central integrators, and/or peripheral effectors. Hormones are chemical messengers released that influence the nervous system to regulate the physiology and behavior of individuals. (Attachment 4) The natural "wild" behaviors of wild horses are largely dependent on the natural production of hormones.

Just as ovariectomy removes the ovaries, thereby destroying natural hormone production (Attachment 5), Gonacon act as a "chemical" ovariectomy because it has a similar effect through the reduced functionality or destruction of the ovaries and/or the function of the ovaries.

Gonacon is specifically designed to manipulate the pituitary glands and shut down and destroy the ovaries, which in turn destroys natural hormone production necessary for the natural "wild" behaviors. Gonacon is designed to permanently sterilize mares with as few as two applications; the EA must disclose scientific data that shows whether horses return to fertility after 2 or more applications of Gonacon. **The EA must disclose the complete data, including the BLM-funded data generated by Dr. Baker's most recent Gonacon study.**

Gonacon literally shuts down a mare's estrus cycle destroying the natural production of hormones which are known to have behavioral consequences; with repeated application, Gonacon is akin to a chemical ovariectomy. The EA fails to provide scientific data that shows that Gonacon is reversible after repeated application. In fact, the data shows that after three or more applications, it is likely not reversible. Sufficient studies have not been undertaken to determine how many applications results in permanent sterilization. The EA acknowledges that there is insufficient data on Gonacon's reversibility after several applications. Therefore, based on the USFS's mandate to implement actions based on science and data, Gonacon should not be included in the final Proposed Action

The EA must provide and analyze whether there is sufficient data that demonstrate Gonacon's short- and long-term efficacy, safety and the ability to preserve natural wild and social behaviors which are valued attributes of wild horses.

Additionally, the EA must specify if more than one injection of Gonacon is proposed and the EA must acknowledge that more than two injections of Gonacon is done with the intent to permanently sterilize the mares based on the currently available data on Gonacon.

The USGS researcher, Dr. Holyoak, highlights the effect of Gonacon and its potential use, noting a significant difference in responsibility between managing feral horses and managing wild horses. "The IUD, if administered to the original mustang pools, will maintain their genetic line **while a product like Gonacon EQ can be used to shut down the reproductive cycle of abandoned feral horses**." (Attachment 6) This makes clear the permanent sterilization impacts intended by the use of Gonacon.

Data shows that Gonacon is designed to literally shutdown and destroy the ovaries, thereby shutting down a mare's estrus cycle and destroying the natural production of hormones which are known to have behavior consequences.

Much like castration to males, Gonacon shuts down the natural production of hormones cause changes to wild horses' natural behaviors including:

- behavioral disruption of social structure and band integrity
- physiological disruption of hormones that play a vital role in survival ability in the harsh and rugged wild environments
- environmental impacts caused by sterilization procedures which may alter the way horses utilize the land

The EA must address that the WFRHBA requires USFS to manage wild horses and burros in a manner that protects their wild and free-roaming behavior.

While Section 3(b)(1) as modified by the Public Rangelands Improvement Act of 1978, outlines options for population management that include sterilization, it is to be read with (not in substitute for) the overarching intent of the WFRHBA: to protect wild horses. In addition, the Act directs USFS to work with independent experts such as the NAS which has clearly stated the importance of preserving natural wild behaviors in all management actions:

> "*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*."

The same need to preserve behaviors necessary for maintenance of social organization, band integrity and expression of natural behaviors applies to mares. Gonacon research in other species highlights, "there are potentially large ecological effects—such as changes to natural selection, effects on social structures and reproductive behavior, timing of mating and birthing seasons, changes to longevity, and effects on migratory or movement patterns—that still need to be examined in free-ranging populations prior to use as a management tool." (Attachments 7, 8)

It appears from the limited studies of the application of Gonacon to wild mares (Theodore Roosevelt National Park) that social behaviors were defined as "herding, reproduction, agonism, harem-tending, and harem-social behavior" and "harem-social (e.g., allogrooming, pair-bonding, female-female urine marking), harem-tending (e.g. stallion defense of a band female or recruitment of a new female into the band), herding (e.g., driving or snaking behavior by the stallion), interaction-with-humans" (Attachment 9) These identified social behavior categories are inadequate to determining the behavioral impacts that relate to inter-horse bonds, individual bonds with the band, social status within the band, survivability behaviors necessary to thrive during inclement weather, etc.

These studies did not identify lead mares or distinguish whether individual horse behaviors and/or personalities were altered due to the treatment. Behavioral observation for studies conducted in the Theodore Roosevelt National Park were conducted for three to four months (April-July/August, 2009 and 2010) and five months (March-July, 2014). Roundups occurred in

2009 and 2013. If human studies on behavior changes were done with a similar behavioral protocol – peoples suffering from mental illness may never be identified as long as they continued to groom, interact with other people, had sex, slept, etc. Clearly behavioral changes which could negatively impact a mare's standing with the herd or her bonds with other members of the herd would not be captured through this methodology.

Gonacon shuts down estrus cycles in mares and impacts production of various natural hormones. Gonadotropin-releasing hormone (GnRH) suppression, whether by agonist, antagonist or vaccine has been based on the disruption of regulatory feedback between gonads and the pituitary, which, in turn, disrupts reproductive function (Dawson et al. 2006). The hypothalamus secretes GnRH, which, in turn, stimulates the release of the gonadotropin follicle stimulating hormone (FSH) and luteinizing hormone (LH) from the anterior pituitary. FSH causes follicular growth and elevated estrogen secretion from the ovary, and LH causes ovulation, luteinization and elevated progesterone levels. Both estrogen and progesterone have far-reaching biological actions not only for successful reproduction but also provide feedback upon behavioral platforms in the brain, causing important reproductive behaviors to occur. In most mammals, the pituitary gland secretes factors into the blood that act on the endocrine glands to either increase or decrease hormone production. This is referred to as a feedback loop, and it involves communication from the brain to the pituitary to an endocrine gland and back to the brain. This system is very important for the activation and control of basic behavioral activities, such as sex; emotion; responses to stress; and eating, drinking, and the regulation of body functions, including growth, reproduction, energy use, and metabolism. [Society for Neuroscience, Hormones: Communication between the Brain and the Body, 2012].

"In the US, these vaccines are not commercially available, leading Donovan et al. (2013) to instead test a commercially available canine GnRH in mares. The findings of that study revealed the vaccine inhibited ovarian function, but also altered reproductive behaviours that are integral to the maintenance of the complex social structure of herd animals such as horses." (Attachment 10)

Commercial vaccines that have been tested in mares include Equity, Improvac and GonaCon. The inhibition of GnRH will cause an absence of FSH and failure of follicular development (Checura et al. 2009), and ovulation failure. *Ibid.*

Unfortunately, the Baker, DL (2018) study (Attachment 9), which BLM relies on heavily to administer Gonacon in wild horses, is not forthcoming with, at minimum, questionable safety issues for treatment in pregnant mares. In one instance Baker, DL (2018) claims, "We found this vaccine to be safe for pregnant females and neonates." Yet, it is documented that Gonacon use in pregnant mares the first trimester (and may extend further) may cause abortion. Baker, DL (2018) also states, "inoculation with GonaCon-Equine vaccine, during approximately the second trimester of pregnancy, does not affect the existing pregnancy of treated females or neonatal health and survival" and "revaccination could be applied to pregnant mares, during mid-gestation, without risk to the existing pregnancy." However, the key is "during mid-gestation," supporting other data that Gonacon causes abortions if administered prior to "mid-gestation." Again, Baker (2018) can only summarize its data on neonate safety "when applied at approximately mid-gestation."

The reversibility of Gonacon, after multiple treatments, remains highly uncertain based on current data available. The Baker, DL (2018) study **only claims** that some mares recovered to fertility after a **single dose** of Gonacon, "demonstrating reversibility of the primary vaccine

treatment." The EA should not intentionally misconstrue that there is data on reversibility after 2 or more treatments. Unlike PZP, no long-term studies have been done to establish reversibility.

Based on Baker, DL (2018) data, mares treated with one application of Gonacon experienced a 30% reduction in foaling in the first year of results; 22% reduction in the second year and no reduction in the third year. "Gonacon is one of the rare exceptions among animal vaccines in that the formulation initiates high antibody titers that remain elevated in some individuals after a single-injection; however, little research has been conducted to evaluate booster doses of this vaccine in any free-ranging wild ungulate [17, 24] or domestic species." The second treatment in 2013 resulted in no foals for all treated mares, 4 foals for treated mares in 2016 and 1 foal for treated mares in 2017. This highlights the high uncertainty of permanent or long-term sterilization impacts and efficacy with more than one application/multiple uses of Gonacon. Clearly, additional years of observation are needed to ascertain what percentage of these mares can return to fertility. The data to date remains incomplete with highly uncertain short- and long-term effects.

The side effects of Gonacon on wild mares are equally uncertain; the Baker, DL (2018) references two unpublished citations which were also authored by Dr. Baker, "Evaluation of biological side effects has been reported for numerous wild ungulate species including white-tailed deer [13, 34], elk [15, 16, 35], feral pigs [36], bison [21], and free-ranging horses [17, 24]." Baker, DK (2018) claim that Gonacon "does not significantly change social behaviors [37]" relies on Ransom, J (2014) which narrowly defined social behaviors as "associated with herding, harem-tending, reproduction, and agonism from stallions toward females." So Baker, DL (2018) claims that, "A summary of results from these investigations indicate that GonaCon is reversible, safe for use in pregnant females, does not significantly change social behaviors [37]" are highly questionable because reversibility after more than one application has not been established, safety during first trimester and possibly later has not been established and changes to social behaviors have not been adequately studied due to the narrow identification of social behaviors.

Gonacon remains an experimental drug that should not be used outside a tightly controlled study and as Baker (2018) states, "additional research is needed to complete the objectives of this study including: 1) to define the duration of effective contraception postrevaccination, 2) to determine if long-term or permanent infertility is a possible outcome, and 3) to assess if return to fertility (if it occurs) results in altered birth phenology of treated mares."

B. IUDs

In a May 2020 EA, the BLM stated, "Up through the present time, BLM has not used IUDs to control fertility as a wild horse and burro fertility control method on the range." (DOI-BLM-UT-W020-2018-015-EA, p 10) The USFS should specify that IUDs will not be used in DGPWHT or the EA must provide adequate scientific data that shows IUDs have been scientifically proven to be safe or effective for a longer period than PZP-22. The EA must fully disclose and analyze the application of IUDs in wild, free-roaming mares in the Swasey WHT; such disclosure must include the limitations of the study, frequency of mare monitoring, long-term success rate (beyond PZP-22 capabilities), deleterious impacts to the mares, behavioral impacts, ability to capture all mares to remove the IUDs, etc.

While IUDs may be a useful fertility control method, current scientific data does not support the on-range application outside of another highly controlled research project that would entail a thorough protocol. Should such a research project be initiated, it should be on horses easily

tracked and monitored on a daily/weekly basis. Only soft IUDs should be used in free-roaming horses. Implementation of IUDs in domestic horses is not applicable to wild, free-roaming mares because, unlike domestic animals, wild free-roaming horses are not in a domestic setting whereby they are afforded medical observation and treatment as needed. There is no data that provides adequate length of monitoring a mare after insertion of an IUD. Additionally, there is currently insufficient data available on the best type of IUD to be utilized in wild mares or if IUDs in wild mares create complications, discomfort, short- or long-term health issues, etc. Therefore, an EIS is necessary before implementing the administration of IUDs in wild mares living on the range.

A previous BLM EA DOI-BLM-NV-S030-2020-0003-EA states, "…O-ring IUDs, the IUDs fell out at unacceptably high rates over time scales of less than 2 months (Baldrighi et al. 2017). Subsequently, the USGS / OSU researchers tested a Y-shaped IUD to determine retention rates and assess effects on uterine health; retention rates were greater than **75% for an 18-month period..**." However, there is no data or documentation that demonstrates IUDs have long-term safety in wild mares (this is due to the lack of available science supporting the usage of IUDs in wild free-roaming mares).

IUDs are known to fall out of mares and may cause complications which would never be detected, given that wild horses are free-roaming and cannot be regularly monitored. If implemented on the range, it would be impossible to determine whether an IUD fell out of position, causing the horse pain, infection and health concerns.

Before subjecting free-roaming mares to the potentially painful and dangerous condition of a partially-ejected IUD – the complications of which could be serious – further limited on-range study is need and an EIS is required. This is precisely the type of situation that calls for an EIS to ensure the safety and efficacy of implementing this precedent-setting government action.

"For IUD-treated mares, 80% (12/15) were infertile after Year 1, but **only 29% (4/14) and 14% (2/14) were infertile after Years 2 and 3,** respectively. For IUD mares that were infertile, it was possible to visualize the IUD by ultrasonography, leading us to conclude that mares that became pregnant had lost their IUDs." (Attachment 11) This shows that there is no scientific justification to utilize IUDs over PZP-22. In fact, PZP-22 is proven more effective and safer. More recent studies, which were not on free-roaming horses, only tracked horses for a short time period report, "The study resulted in a 75% retention rate" for the Y design IUD conducted by Oklahoma State University." (Attachment 12) Questions regarding negative impacts to wild horses resulting from IUDs (including but not limited to scar tissue, physical damage, infertility, etc.) remain unanswered and further study is needed prior to implementation in situ. However, pen trials are not sufficient because they (a) did not follow the mares for living in "pasture" settings with multiple stallions for an extended period of time – a minimum of three to five years is minimal given the BLM (or USFS) has no plan to remove the IUDs from free-roaming mares who are subjected to this experiment.

The BLM and USFS have failed to conduct in situ trials **with horses that are known and monitored on a daily/weekly basis for the duration of the implant.** This is necessary so that the horses can be monitored in the wild over a period of years to determine the short- and long-term deleterious psychological and physiological effects of this new and relatively untested surgical sterilization. The EA must disclose that IUDs are not commonly used in domestic mares who have their movement confined and are regularly administered medical care and provided feed and water.

Subjecting mares who are living in harsh and rugged environments – with no access to medical care – to this experimental surgical implant is inhumane and irresponsible. At minimum, USFS or BLM must conduct additional pen trials which must be followed by limited in situ trials. Trials of these IUDs should be undertaken first in well-known free-roaming mares who are easily monitored for a minimum of five years. Such in situ trials must be conducted with sufficient protocols in order to record behavioral, physiological effects before proceeding with implementation on mares outside of a well-controlled in situ study.

IUDs (o-ring) cause "mild chronic endometritis" or inflammation of the inner lining of the uterus (endometrium). (Attachment 13). Endometritis is an inflammation of the inner lining of the uterus (endometrium). Symptoms may include fever, lower abdominal pain, and abnormal vaginal bleeding or discharge and has been found to be related to infertility.

Currently, there is insufficient scientific data available to support the use of IUDs in free-roaming horses without the necessary scientific study with acceptable protocols.

The NAS, citing the NRC 1980, noted that, "IUDs often dislodged and surgery was impractical in field conditions…" (Attachment 1, page 109)

Further data is needed to determine whether different types of IUDs suppress estrus (Attachment 14), which would in turn destroy natural hormone production which are necessary for natural wild behaviors (as discussed in these comments).

The above are just a few examples of the medical issues that must be thoroughly analyzed in an EIS which includes:

1. identify the specific type of IUD that would be utilized.
2. conduct adequate pen trials and then to conduct limited on-range trials with mares that are known and easily monitored prior to implementation in wild, free-roaming mares who cannot be monitored or administered follow up medical care.
3. determine the short- and long-term affects to mares.
4. determine whether the specific IUD model proposed for use would destroy estrus cycles.
5. determine how IUDs would be removed from mares and when removal would occur.

If IUDs are found to be safe, effective and preserve natural behaviors, they may be an added form of fertility control. However, removal of IUDs would remain a challenge for horses in the wild and would need to be adequately analyzed in an EIS.

To summarize, the USFS must conduct or cite extensive pen trials prior to implementing on a limited number of in-situ studies involving easy-to-monitor free-roaming mares; such monitoring should continue for a number of years until the IUD is to be removed. Such in situ studies, after the pen trials, should adhere to a rigorous protocol in order to extract usable data that addresses concerns expressed in these comments.

The EA must consider and analyze how or when IUDs would be removed from wild mares. Future studies and data are needed before IUDs can be humanely and effectively implemented in situ.

C. Sex Ratio Skewing

As outlined in the scoping documents, natural wild horse populations favor females and altering that natural ratio to favor males would create competition and aggression between males, and may cause a decline in male body condition. Female foraging would like be disrupted to varying degrees due to elevated male-on-male aggression. The severity of the social disruption would correspond to the increased percentage of males.

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SEX RATIOS AND DIFFERENTIAL SURVIVAL OF FERAL HORSES

BY R.A. GARROTT

Department of Ecology, Evolution and Behavior, University of Minnesota, Minneapolis, Minnesota 55455, U.S.A.

SUMMARY

(1) Sex and age data were collected on 60 111 feral horses (*Equus caballus* L.) removed from eighty-nine areas in Nevada, Wyoming, and Oregon between 1976 and 1987.

(2) Sex ratios of young seldom differed from parity; however, sex ratios of adults were commonly skewed toward females. No evidence of differential capture probability between adult males and females could be detected; therefore, skewed adult sex ratios were attributed to differential survival.

(3) Age-specific trends in sex ratios indicated that the proportion of males steadily decreased from near parity in foals, to lows of 0·61–0·77 in the 4–5-year age-classes. The trend then reversed with males becoming predominant (1·08–1·36) in the >10 years age-class.

(4) Population simulations suggest that survival diffentials of 0·05–0·07, favouring females to 4 years of age, and 0·02–0·04 favouring males in older age-classes were required to mimic observed age-specific sex ratio changes. To obtain the high proportion of males in the >10-years age-class, onset of senescence also had to be earlier for females.

(5) Causes for differential survival in the immature age-classes are uncertain, but may relate to behavioural or metabolic differences between the sexes. Differential survival between adult males and females is attributed to differences in the energetic costs of reproduction and disparity in their reproductive life spans.

Effect of stress induced by gathers and removals on reproductive success of feral horses

Michael C. Ashley and Dale W. Holcombe

Abstract Successful management of many species often relies on actions that involve intensive handling of individuals. Knowledge of how such handling may affect reproduction of a particular species is important and may be applicable to managing other species. We used pregnancy testing, field observation, Bureau of Land Management (BLM) records, and adopter surveys to determine effects of stress induced by gather and removal management practices on the reproductive success of feral horses in the Garfield Flat (GF) Herd Management Area (HMA) in Nevada. We analyzed pre-release confinement effect data from gathers conducted in August 1993 and January 1997 and data on the additional effect of removal in 1997. We used data for an ungathered population in the Granite Range HMA (GR) in Nevada as controls both years. Data from ungathered GR horses also were used as controls for habitat effects on reproduction. Granite Range and ungathered GF mares in 1997 had similar reproductive success rates (P=0.42). Pregnant removed mares in 1997 had less reproductive success than ungathered mares at GR (P=0.003) and GF (P=0.005). Gathered and released GF mares had less reproductive success than ungathered GF mares (P=0.05). The results suggest that minimizing time that mares are held prior to release will reduce fetal loss.

Key words abortion, horses, management, reproductive success, stress

In several studies, fetal loss in feral and domestic horses has been attributed to stress, often associated with frequent and extensive handling of pregnant mares (Mitchell 1971, Osborne 1975, Roberts 1986). Berger's (1983) study of feral horses in the wild found that forced copulation and social environment change after band takeovers in the Granite Range of Nevada caused abortions.

Most feral horse herds in the United States are managed intensively by the Bureau of Land Management (BLM, Boyles 1986). The Public Rangelands Improvement Act of 1978 authorized excess feral horse removal to preserve the quality of range habitat. Gathers and removals are the principal means to reduce populations to acceptable management levels (AML) for individual herd management areas (HMA; Boyles 1986). Each HMA is assessed by BLM range-condition specialists to determine stocking levels for livestock, feral horses, and game species. A 3- to 5-year interval between gathers and removals is necessary as many horse herds increase ≥20%/year (Wolfe 1980, Eberhardt et al. 1982, Berger 1986, Garrott and Taylor 1990). The removal magnitude depends on number of excess horses and the desired ending population size relative to the AML.

Gathers and removals may induce stress in several ways and for varying periods of time. Large-scale BLM gathers involve helicopter use to chase horses into a funnel trap leading to a corral. Trapped horses are individually restrained, aged, examined for physical

Address for Michael C. Ashley: Ecology, Evolution, and Conservation Biology Program, Biology Department/314, University of Nevada-Reno, Reno, NV 89557, USA; e-mail: ashley@scsr.nevada.edu. Address for Dale W. Holcombe: School of Veterinary Medicine, University of Nevada-Reno, Reno, NV, 89557, USA.

The BLM Beatys Butte EA DR FONSI 2009[4] (Attachment 15) states,

> "*If selection criteria leave more studs than mares, band size would be expected to decrease, competition for mares would be expected to increase, recruitment age for reproduction among mares would be expected to decline, and size and number of bachelor bands would be expected to increase*. . . ."

The BLM EA for the South Steens Wild Horse Gather[5] (Attachment 16) states,

> "*Skewing the sex ratio of stallions v. mares would result in a destabilization of the band (stallion, mare and foal) structure moving it from five to six animals to three animals. Social band structure will be lost resulting in combative turmoil as surplus stallions attack a band stallion trying to capture his mare. This could result in the foal being either killed or lost. The mare and foal will not be allowed to feed or water naturally as the stallion tries to keep them away from the bachelor bands of stallions, resulting in stress to the mare during her lactation condition*."

The BLM EA for Black Mountain and Hard Trigger HMA EA (Attachment 17) states:

> *"Band size would be expected to decrease, competition for mares would be expected to increase, recruitment age for reproduction among mares would be expected to decline, and size and number of bachelor bands would be expected to increase. Fighting between band stallions and surplus stallions could result in the mares and foals not being allowed to feed and water naturally as the herd stallion tries to keep them away from bachelor bands."*

The USFS must provide scientific information or quantitative data to support that altering the natural sex ratio would have population growth benefits. Before implementation and given the grave negative and life-threatening impacts of sex ratio skewing, the USFS must disclose the effectiveness of sex ratio skewing – what was the resulting reduction in population growth, what was the length of the reduction of population growth and how did that change from year to year, and at what point did the action cease to provide any change in population growth. The USFS (and BLM for that matter) does not have any concrete data that shows sex ratio skewing has a lasting or significant impact on the suppressing population growth. Altering sex ratios increases aggression among males and causes stress and social disruption; it would create dangerous situations for females, who are subject to repeated rape by stallions as a result of the lack of mares.

D. Castration/Gelding

While the Proposed Action does not include castration, we provide these comments on the alternative. The 2013 National Academy of Sciences conducted a scientific review of the BLM's Wild Horse and Burro Program. The NAS stated that maintaining natural behaviors in free-ranging horses is in the public interest and that BLM should be more responsive to public sentiment.

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[4] http://www.blm.gov/or/districts/lakeview/plans/files/Revised_BButte_EA_FONSI_DR_09012009.pdf page 33

[5] http://www.blm.gov/or/districts/burns/plans/files/SSteensGatherEAandFONSIFinal.pdf, page 41

> "*Individual males vary in their behavioral response to castration—for example, in the loss of male-type behavior, such as aggression and sexual interest, depending on the age and sexual experience of the male. However, some or total loss of sex drive would be likely in castrated stallions, and this is counter to the often-stated public interest in maintaining natural behaviors in free-ranging horses*." p123
>
> "*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*." p142
>
> "*The very essence of the wild horse, that is, what makes it a wild horse, is the social organization and social behaviors. Geldings (castrated male horses) no longer exhibit the natural behaviors of non-castrated stallions. We know this to be true from hundreds of years of experience with gelded domestic horses. Furthermore, gelded stallions will not keep their bands together, which is an integral part of a viable herd. These social dynamics were molded by millions of years of evolution, and will be destroyed if the BLM returns castrated horses to the HMAs … Castrating horses will effectively remove the biological and physiological controls that prompt these stallions to behave like wild horses. This will negatively impact the place of the horse in the social order of the band and the herd*." – Dr. Jay Kirkpatrick, wildlife reproductive biologist, Science and Conservation Center, Zoo Montana. Dr. Kirkpatrick explains that altering natural hormone production through castration essentially changes how that animal feels and behaves.

The EA must specifically prohibit the castration of stallions on the range.

Arbitrarily deciding which males will become permanent bachelors is also altering natural behaviors. Castration is done in domestic settings largely to alter the horse's natural behaviors and to make him more docile and manageable – making him a lifelong bachelor without stallion drives. Castration destroys natural stallion behaviors, not just breeding behaviors but social behaviors, which are essential for that individual to participate with other female and male horses and establish the natural social structure of harem bands; most stallions do not naturally remain in bachelor bands for life.

Bruce Nock, Ph.D., at Washington University School of Medicine and an expert in the physiological effects of stress, states that gelding may compromise a horse's ability to survive in the rugged and extreme natural environment:

> *Gelding (removing a horse's testes) will have irreversible effects on both the individual horse and the herd. A gelded horse does not behave as a "wild" or "free-roaming" horse. . . It decreases muscle mass and strength, reduces bone density, and increases frailty. These deficits put the horse at a significant disadvantage on the range in terms of survival. A gelding will still have to compete with intact stallions for resources. His smaller size and strength, however, will not only put him at a competitive disadvantage, it increases the likelihood that agonistic encounters with intact stallions will result in severe injuries.*
>
> *The compromised physical capacities that accompany gelding are likely to endanger castrated horses in a number of ways. In addition to undermining their ability to compete with intact stallions, it may diminish their ability to traverse the harsh terrain and great*

distances normally travelled to acquire food and water. This would jeopardize their survival particularly during challenging weather conditions, like droughts or heavy snow storms. A limited geographical home range is also likely to deplete local resources and negatively impact the ecological system as a whole. To survive in the wild, a horse must be able to achieve a certain fitness level that may be impossible to attain once the animal is castrated. In my professional opinion, releasing a castrated horse into a wild herd is an inhumane management approach that certainly does not "protect" or "help preserve" wild horses in any sense of the word.

VIII. EA MUST DISCLOSE AND CONSIDER STERILIZING MALES IS NOT EFFECTIVE

The BLM has acknowledged that sterilizing stallions on the range does not provide effective suppression of population growth. "Research has shown that while neutering males can slow population growth to a **minor extent, a single intact stallion can breed a larger number of mares. Therefore, the BLM continues to concentrate its research on finding an effective and long-lasting fertility control agent for mares."** (Attachments 18, 19, 20). Additionally, it is well established that limiting the number of breeding stallions will decrease genetic health of the herds due to the limited and reduce genetic contribution by a small number of males compared to a health breeding population of males.

IX. EA MUST ADDRESS THAT NEPA REQUIRES REVIEW AND ANALYSIS OF CURRENT CONDITIONS

The Proposed Action should not exceed a one-year duration given the uncertainty of the short- and long-term safety, efficacy and impacts that will likely result from the actions. Additionally, a Decision Record that spans over numerous years is not in the best interests of implementing the best possible alternative given changes in environmental conditions, evaluating understanding of wild horse management, improving fertility control options, and is not supported by the agency's claim that it operates in a transparent manner. Given that the scoping letter includes insufficiently tested fertility control methods, the Proposed Action should be limited to one year.

National Environmental Policy Act (NEPA) requires that agencies review current data and seek public input and information regarding governmental actions. Due to changing environmental conditions, a multi-year EA cannot be considered sufficient under NEPA. The final EA must fully disclose, describe and analyze specific and current range data, water availability, range usage (differentiating usage by livestock and horses), and the agency's intended actions, and allow the public ample opportunity to review the data and comment on the proposed action, as required by NEPA. Additionally, NEPA requires that agencies review *current* data and seek public (and other agency) input and information regarding *current* governmental actions. A 2021-EA could not possibly satisfy the NEPA requirement for future actions beyond a one-year period and a multi-year EA would sidetracks Congress' intent to include the public and ensure that agencies have the best current information when making decisions.

X. EA MUST CONSIDER RELOCATING HORSES OUTSIDE WHT

The EA must disclose mapping of all horses inside and outside of the WHT, fence lines and water sources (preferably on one map) and an analysis of how horses are moving outside of the

WHT (given the fencing for livestock management in the area).

The must consider an alternative for returning horses who have moved outside the WHT back within the WHT boundaries.

The EA must analysis alternatives that would allow a higher number of horses (above AML) to live in the WHT – this must include the removal of fencing to allow full utilization of range, improved access to water sources to ensure grazing distribution, eliminating or reducing livestock grazing to make more forage available for wild horses, etc.

XI. EA MUST CONSDER EFFECTS OF COMPENSATORY REPRODUCTION

If the Proposed Action includes the removal of wild horses, the EA must consider and analyze how the removal will impact reproductive rates – specifically compensatory reproduction must be considered and analyzed.

The National Academy of Sciences (NAS) stated that the roundup-remove practice is "facilitating high rates of population growth." (Attachment 1, page 5-6) NAS went on to state that this mismanagement policy causes increased reproduction 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" … and that this "business as usual" approach must be reconsidered. *Ibid.*

XII. EA MUST DISCLOSE & ANALYZE COSTS OF PROPOSED ACTION & ALTERNATIVES

The EA must provide the estimated costs of the Proposed Action:

(1) Costs of long- and short-term and long-term holding of removed horses based on the agency's current average cost per animal;
(2) Costs of the capture and removal of horses based on the current average contractor costs for a similarly sized roundup

The scoping notice lists roundups conducted since 2016 – the details of all removals conducted *prior* to 2016 must be disclosed.

Deaths of animals removed from the range (both animals killed during the roundup and after in holding facilities or transport) must be disclosed.

The EA must include this data in order to evaluate and understand the long-term impacts and costs of the Proposed Action. Additionally, the EA must disclose the current disposition of each of wild horses removed from the WHT since 2016. This would include, but is not limited to, the number of horses that died in USFS, BLM or contractor custody, number of horses sold (sale authority), adopted, and the number of horses still in government holding facilities.

XIII. EA MUST ANALYZE WATER/BAIT TRAPPING INSTEAD OF HELICOPTER USE

The EA must analyze alternative methodologies for wild horse control application and/or

removal including the use of bait/water trapping and eliminate the use of helicopters. Helicopter roundups are known to inflict stress, trauma, injury and death on wild horses and collateral damage to sensitive sagebrush, grasslands, and riparian habitat areas and disruption to other wildlife species. Bait/water trapping will minimize stress to the horses and burros, eliminate collateral environmental damage (as horses and burros will not be stampeded through sensitive desert habitat) and maintain herd social structures.

The USFS must not simply state that the use of bait or water trapping is not cost-effective or practicable due to water sources or other factors. Rather the USFS must analyze how bait/water trapping *could* be implemented – how water sources could be controlled allowing the USFS to turn off water during water/bait trapping efforts. In addition, there are numerous pastures throughout the WHT, which are practicable for trapping operations. The use of water/bait trapping can be used to greatly reduce the stress of roundup operations, maintains the social structure of bands thereby reducing stress to the animals and is a minimal feasible management.

XIV. EA ANALYZE ALTERNATIVES TO CAWP

Removal of wild horses and burros from public lands negatively impacts the human environment for those who enjoy observing, photographing and researching these wild horses and burros. Given the tremendous public interest and in fulfillment of the agency's claims to operate with full transparency, the following actions should be considered, analyzed and implemented to ensure that the Proposed Action is conducted in a manner that minimizes stress and injuries to wild horses and burros.

Before the can utilize the agency's "Comprehensive Animal Welfare Program" (CAWP), the EA must consider whether alternatives would improve the stated goal of protecting wild horses from inhumane treatment and reducing stress that may result from the Proposed Action. The current BLM "Standard Operating Procedures for Wild Horse Gathers" and the "Comprehensive Animal Welfare Program" are inadequate and the USFS should not rely on them. The EA must analyze existing information available to determine if improvements could be made to reduce potential stress and harm to the horses and burros during the roundup. Information to minimize stress and injury to horses and burros during roundups must be analyzed including the following:

i. Limit the distance wild horses may be chased by a helicopter to no more than five (5) miles.

ii. Require that the helicopter not chase/move wild horses at a pace that exceeds the natural rate of movement of that specific animal. Every effort should be made to keep older, sick and young animals together with their companions or mothers as they are moved to the trap. The helicopter should not move or capture compromised, old, weak or young animals.

iii. Establish strict requirements for suspending helicopter roundup operations in temperatures below 32 degrees F (freezing) or over 90 degrees F. Roundups outside of this temperature range would be blatantly inhumane.

If helicopters are included in the Proposed Action, the human standards for use of helicopters as outlined in the Addendum (below) must be considered to address inadequate humane standards currently employed and to address public concerns.

XV. EA MUST ANALYZE ALTERNATIVES TO IMPROVE TRANSPARENCY AND IMPROVE PUBLIC OBSERVATION

The USFS is aware of the significant public interest in the agency's management of wild horses and burros and its roundup operations. The National Academy of Sciences (NAS) specifically recommended to need to improve the transparency in the management of wild horses. To ensure interested parties have the ability to adequately monitor the management of wild horses in and around DGPWHT all removal operations must be located on public lands to allow public observation of all activities. No government operations should be located on private lands for which the owners will not give permission for public observation of activities.

XVI. EA FAILS TO CONSIDER ALTERNATIVES TO ADDRESS TRANSPARENCY DURING IMPLEMENTATION OF THE PROPOSED ACTION

As USFS is aware, NEPA requires agencies to consider all reasonable alternatives to a proposed action. *See*, *e.g.*, *W. Watersheds Proj. v. Abbey*, 719 F.3d 1035, 1050 (9th Cir. 2013). "The existence of a viable but unexamined alternative renders an EA inadequate." *Id.* "The scope of reasonable alternatives that an agency must consider is shaped by the purpose and need statement." *Ilio'ulaiokalani Coal. v. Rumsfeld*, 464 F.3d 1083, 1097 (9th Cir. 2006). An agency "must consider all reasonable alternatives within the purpose and need it has defined." *Id.*

USFS's broad statement of its purpose and need means that it must consider any alternative that will accomplish the stated purpose and need—particularly if such an alternative can reduce the adverse impacts on the human environment. Any alternative that allows USFS to achieve this stated purpose and need is an alternative that NEPA obligates the agency to consider.

As USFS is also aware, its management of wild horse and burro populations using the methods described in the EA routinely causes injuries and deaths of wild horses and burros and, as a result, also harms the members of the public who cherish these animals. Further, the public, including The Cloud Foundation and its members and supporters, have a very strong interest in transparency and oversight of the agency's management of wild horses and burros. This interest entails (but is not limited to) documenting and educating the public regarding the agency's treatment of federally protected animals before, during, and after roundups.

The interests of The Cloud Foundation, its members, and supports in the transparency of USFS's management of wild horse and burro populations are an aspect of the "human environment" which the agency must consider under NEPA. *See* 42 U.S.C. § 4332 (requiring consideration if impacts on "the quality of the human environment."); *see also id.* § 4331 (describing national policy of requiring agencies to "use all practicable means and measures . . . to create and maintain conditions under which man and nature can exist in productive harmony" and "to use all practicable means . . . [to] fulfill the responsibility of each generation as trustee for the environment for succeeding generations"). As courts have repeatedly found, transparency in federal agency activities significantly improves substantive environmental outcomes. For example, in the specific context of considering public access to wild horse gathers, the Ninth Circuit found that transparency has improved awareness of environmental decision-making and resource management. *See Leigh v. Salazar*, 677 F.3d 892, 897 (9th Cir. 2012) (reasoning that "transparency has made possible the vital work of Ida Tarbell, *Rachel*

Carson, I.F. Stone, and the countless other investigative journalists *who have strengthened our government by exposing its flaws*." (emphases added)). Likewise, in the specific context of wild horse management, courts have found that "public access to gather activities plays an important role in the function of the gather, namely protecting the interests of the overpopulated horses and news gathering for the benefit of the public." *Leigh v. Salazar*, 954 F. Supp. 2d 1090, 1101 (D. Nev. 2013).

Against this backdrop, it is clear that transparency can improve USFS's management of wild horse and burro populations and reduce adverse impacts from USFS's activities to federally protected animals and reduce adverse impacts to the members of the public who have recreational, emotional, and aesthetic interests in these animals and their welfare. Accordingly, it is important that USFS consider all reasonable alternatives that can improve the transparency of its actions—especially alternatives that are reasonable because they do not impair USFS's ability to achieve its stated purpose and need.

Hence, the EA must consider and implement the following issues and specific alternatives with regards to ensuring transparency, First Amendment rights and public observation of the Proposed Action:

- Improve public observation of all agency actions in order to provide meaningful observation of these proposed government actions. There is significant public interest in the agency's management of wild horses and burros, including but not limited to the government activities at roundups. The NAS specifically recommended that wild horse programs improve the transparency of its management of the Wild Horse and Burro Program (Attachment 1). The treatment of the wild horses and agency transparency are paramount and include all aspects of the highly-controversial roundups ("gathers").

- Ensure members of the public are provided with meaningful observation and the ability to clearly see the trap site, clearly view wild horses in temporary holding; observe from a vantage point that allows observation of the handling of the animals at the trap, being loaded into trailers, sorted at temporary holding and all aspects of the removal and handling of the animals.

- All removal operations must be located on public lands to provide meaningful public observation of all activities. No government operations should be located on private lands for which the owners will not give permission for public observation of activities.

A. USFS Must Install Cameras on Helicopters, at Trap Sites and Temporary Holding Pens to Provide Meaningful Public Observation in Compliance with First Amendment Rights

Citizens have the right to observe the activities of their own government. *See Leigh*, 677 F.3d at 896–97. However, USFS often cites public safety as a reason to restrict and obstruct public observation of roundups ("gathers") without providing meaningful consideration of reasonable means to improve public access without compromising any purported interest in safety. The Cloud Foundation has a long history of sharing obtained information with the public. The public has a long history of interest in the well-being of America's wild horses and concern over government management tactics.

The EA fails to provide for meaningful public observation of government activities at wild horse/burro roundups. The current level of public observation provided by the USFS is insufficient under the First Amendment.

TCF staff members have attended roundups where members of the public have been wrongly and needlessly confined to a viewing area miles away from the trap. (Attachments 21, 22) Other times, trap sites have been obstructed by terrain or vehicles and have been entirely unviewable. And still, USFS has use private lands which were not made available for public observation throughout all aspects of the roundup activities. Although the USFS gives nominal reasons or excuses for many of these situations which prevent observers from viewing and documenting government activities, in fact public observation poses no threat to the safe conduct of gathers or to the safety of observers. Moreover, USFS has consistently failed to consider what reasonable means exist within its authorities, or in cooperation with interested members of the public, to ensure that the agency does not violate the constitutional rights of the public to observe its government in action while also ensuring that USFS can conduct its operations safely and effectively. USFS's activities take place on public lands, they are perpetrated on the American public's wild equids, and they are conducted with taxpayer funds. American citizens have the right to meaningful, uninterrupted observation of all roundup activities from the time the helicopter takes off until the day's work is concluded. They have the right to see how the animals are found, chased and trapped, with vehicles paid for out of their tax dollars. They have the right to view the captured animals in holding, yet temporary holding pens often have plastic snow-fencing (to shield the captured horses) which makes observation of the horses nearly impossible. However, reasonable means clearly exist that will allow for meaningful and consistent observation of USFS's activities without causing any safety hazards or logistical difficulties for the agency.

To ensure the public's First Amendment right is fulfilled, real-time cameras with GPS should be installed on all aircraft and/or helicopters, trap sites and holding pens used in government operations and this video should be live streamed on the Internet and recorded and made available to the public online. Doing so will dramatically improve the transparency and accountability of roundup operations and enable the American public to observe their government's activities during wild horse roundups, as well as the impacts of that activity on – and treatment of – their wild horses and burros.

Video cameras will improve the transparency of the operations and enable the USFS and the public to monitor the direct impact motorized vehicle usage has on wild horses and the environment. TCF would like to work with the USFS to provide technical assistance and financial assistance, and to ensure safe installation and operation of these real-time cameras as described herein.

The recommendation of real-time cameras is also supported by a report commissioned by Cattoor Livestock Roundup, a long-time roundup contractor hired by the USFS which states:

> "*Video monitoring of animal operations is a good way to ensure humane handling is taking place on a daily basis. Video cameras mounted in helicopters and in the capture and holding pens can also render the activists' videos as simply nothing more than proof that your business 'walks the walk' when it comes to upholding animal welfare standards*." The report was prepared by Mark J. Deesing, Animal Behavior & Facilities Design consultant for Grandin Livestock Handling System. Deesing was an

assistant to the highly regarded livestock industry consultant Dr. Temple Grandin. (Attachment 23)

Because USFS's own longstanding contractor for helicopter-based roundups has attested to both the general fact that cameras can be safely and unobtrusively mounted on helicopters for use during roundups—and has advocated specifically for the installation of such cameras on the contractor's helicopters—it is clear beyond any legitimate dispute that the installation of cameras for use during helicopter roundups of wild horses and burros is a reasonable alternative that will not in any way impair USFS's ability to achieve the stated purpose and need for the proposed activity. Moreover, this fact would be clear even without the explicit advocacy of USFS's contractor. Helicopter-mounted cameras are routinely used in videography for the production of motion pictures or in association with journalism.

Cameras, preferably livestreaming, must also be allowed at the trap site and at the temporary holding pens ensuring all pens, corals and interaction with horses are recorded. Moreover, in light of TCF's willingness to help USFS with the expense (or completely cover the expense) and logistics of procuring and installing cameras, it is clear beyond cavil that an alternative that includes cameras on helicopters during roundups is entirely feasible. TCF would like to work with the BLM to safely install and operate cameras to record all roundup activities that involve wild horses and/or burros. TCF is offering to cover the cost to install and operate the cameras. To accomplish this, TCF would need access to the helicopters, traps, chutes, loading areas and holding pens at the start and finish of the roundup operation for installation/removal. Our personnel would then need access to the cameras twice daily, to turn the cameras on and off, install/replace/ remove equipment, if necessary, retrieve footage, change batteries and ensure that all equipment is functioning properly. Once the entire roundup operation is completed, TCF will remove the cameras from all USFS and private equipment. Alternatively, TCF would be willing to pay for the cameras and necessary equipment with the understanding USFS will ensure video is made available to the public either via live-online streaming or posted for the general public to access online within 24 hours the video is taken. Our preference, technology and logistic allowing, is that video is streamed live.

Additionally, TCF notes that cameras are not a meaningful expense considering USFS's budget. TCF is a nonprofit organization with limited resources, while USFS is a federal agency that receives hundreds of millions of dollars annually for the management of wild horses and burros. If TCF can afford to finance the purchase and installation of cameras for use during helicopter-based roundups, as it has offered to do here, USFS certainly can too.

USFS must consider an alternative of using cameras at roundups and making the footage available to the public to provide TCF and the public with meaningful observation of these government activities. To do this we request the cameras as outlined in Attachment 24 be employed. We specifically request that, if or when possible, all footage be live streamed either to a receiver or online and recorded to internal SD cards. In the event live streaming is not available, video should be recorded to an internal SD card and the video should be made available to the public the same day. TCF would work with the USFS to ensure safe installation and operation of these cameras, along with supplying any and all necessary equipment including but not limited to, cameras, mounts, batteries, SD cards, hard drives, and other required items; in addition to providing its own trained personnel to install, operate, and maintain all cameras and devices. No cost or additional requirements, outside of oversight, would be needed of the USFS if the USFS agrees to install these cameras as a necessary component of transparency and ensuring the public's rights to observe USFS roundup activities. As

technology continues to improve (e.g., better cameras, smaller batteries, improved livestreaming capabilities, etc.) modifications to the attached technical specifications would be adjusted to improve transparency at USFS roundup operations.

B. Modern-Day Technology Must Be Considered and Used to Provide Much-Needed and Requested Public Transparency of Government Actions at Roundups

Cameras are an effective tool to address USFS concerns of public safety and the effectiveness of roundups while ensuring meaningful public observation of the government's helicopter roundup activities.

The current level of transparency is woefully inadequate in the USFS's management of wild horses and burros, particularly in the lack of meaningful observation during and after helicopter roundups. Occasionally, an observer at a roundup will capture an image or video footage of cruelty despite the great distance they are placed away from the operation and despite every effort of the USFS to hide what occurs from the public's sight. The American public and members of Congress have expressed outrage after witnessing the cruelty of helicopter roundups.

We understand that USFS, may be reluctant to have the public witness the horrific abuse of the animals that Congress tasked it with protecting. *See Leigh*, 677 F.3d at 900 ("When wrongdoing is underway, officials have great incentive to blindfold the watchful eyes of the Fourth Estate."). However, the American people have a constitutional right to see exactly what these private contractors are doing, from start to finish, to America's wild horses and burros with public funds. *See id.* ("The free press is the guardian of the public interest . . . .").

The goal of these cameras is to provide clear and comprehensive real-time video observation of all aspects of the roundup – as well as the reactions and treatment of the horses. The cameras and recordings would provide the transparency the American public desires from the government during wild horse/burro roundup activities, and citizens have the right to this information. The government should be accountable to the citizens whom it is supposed to serve. The majority of Americans do not feel that helicopter roundups are a humane way to manage wild horse populations. If citizens were able to view the government roundups in action, perhaps that would change.

Meaningful observation is currently not possible under the USFS's current practices for public observation at roundups. Historically, members of the public were allowed to stand at trap sites during USFS roundups of wild horses. However, as public sentiment became more critical of USFS management of wild horses, increased restrictions were implemented at roundups, suggesting that while government agencies' stated motivations are to preserve public safety and the efficacy of its roundup operations, its real motivation is to control public perception of the agency's activities. *See Leigh*, 677 F.3d at 900 ("When the government announces it is excluding the press for reasons such as administrative convenience, preservation of evidence, or protection of reporters' safety, its real motive may be to prevent the gathering of information about government abuses or incompetence."). Regardless, small, unobtrusive cameras would solve such stated concerns regarding safety and the effective conduct of roundups while also helping the public understand how wild horses and burros are treated at roundups, which is often a controversial issue. Without these cameras we, Congress, and the public at large, have little to no access to see and understand how tax dollars are used in the management of wild horses and burros.

The presence of small, unobtrusive cameras would in no way present any impediment to the USFS's stated "overriding interests" in safety or in "effectively and efficiently" performing the roundup activities.

C. First Amendment

The need for USFS to consider and implement the use of cameras during and after roundups of wild horses and burros is particularly acute here because any restrictions that USFS may elect to impose on the public's ability to observe its activities must be narrowly tailored to serve an overriding governmental interest. Because small, unobtrusive cameras do not present any obstacle to safety or USFS's effective conduct of its roundup operations (and do not even come at any cost to the agency or taxpayers in light of TCF's offer to finance the purchase, installation, and maintenance of such cameras), USFS will have extreme difficulty persuading a court that a decision not to use cameras during and after roundups is narrowly tailored to serve any interest beyond the illegitimate desire to unilaterally control public perception of the agency's activities.

The First Amendment to the U.S. Constitution establishes the public's right to observe government activities, and the Ninth Circuit has held that this right extends to the USFS's management of wild horses. See Leigh, 677 F.3d at 898. Where the public has a right to observe government activities, any restrictions on public observation must be narrowly tailored to serve an overriding government interest. Id. In other words, the limits on observation must be the least restrictive limitations that will achieve the government's overriding interest.

"[T]he Supreme Court has long recognized a qualified right of access for the press and public to observe government activities" protected by the First Amendment. Leigh v. Salazar, 677 F.3d 892, 898 (9th Cir. 2012). This right is rooted in the fact that "[o]pen government has been a hallmark of our democracy since our nation's founding" and that constitutionally protected "transparency has made possible the vital work of . . . countless [] investigative journalists who have strengthened our government by exposing its flaws." Id. at 897.

Because "[t]he free press is the guardian of the public interest, and the independent judiciary is the guardian of the free press[,] . . . courts have a duty to conduct a thorough and searching review of any attempt to restrict public access." Id. at 900. The judiciary's scrutiny is especially important because "[w]hen wrongdoing is underway, officials have great incentive to blindfold the watchful eyes of the Fourth Estate." Id. Accordingly, "a court cannot rubberstamp an access restriction simply because the government says it is necessary." Id.

D. Wild Free-Roaming Horses and Burros Act Supports TCF's Request for the Use of Cameras During and After Roundups

In response to overwhelming public outcry over the inhumane treatment and slaughter of wild horses, Congress passed the Wild Free-Roaming Horses and Burros Act (WHA) in 1971 to ensure that "wild free-roaming horses and burros shall be protected from capture, branding, harassment, [and] death." 16 U.S.C. § 1331. Congress found that wild horses and burros "are living symbols of the historic and pioneer spirit of the West," and "contribute to the diversity of life forms within the Nation and enrich the lives of the American people." Id.

The WHA embodies Congress's intent which requires the USFS to manage wild horse populations humanely. Congress repeatedly stressed its intent to require humane management. See id. § 1333(b)(2)(iv)(B) (requiring that USFS ensure that wild horses removed from the range are "humanely captured" and that USFS "assure [the] humane treatment and care" of wild horses made available for adoption").[1] To ensure that USFS honors the WHA's commitment to humane wild horse management, Congress instructed USFS to regularly consult with experts in wild horse protection. To that end, Congress required BLM to create the National Wild Horse and Burro Advisory Board to include individuals with "special knowledge about protection of horses and burros" who can "advise [the agency] on any matter relating to wild free-roaming horses and burros and their management and protection." 16 U.S.C. § 1337. Thus, Congress specifically stated that BLM "shall consult with . . . individuals . . . as have been recommended by the National Academy of Sciences, . . . and such other individuals whom [it] determines have . . . special knowledge of wild horse and burro protection" when determining whether to manage wild horse populations "by the removal or destruction of excess animals, or other options (such as sterilization, or natural controls on population levels)." Id. § 1333(b)(1).

USFS's failure to consider the social acceptability of how they treat and manage wild horses/burros during roundups, or to allow for meaningful independent public observation, constitutes a significant violation of the WHA. As described above, Congress enacted the WHA precisely because of the social and cultural importance of wild horses. *See* 16 U.S.C. § 1331 ("Congress finds and declares that wild free-roaming horses and burros are living symbols of the historic and pioneer spirit of the West" and "that they contribute to the diversity of life forms within the Nation and enrich the lives of the American people"). Further, in enacting the WHA, Congress mandated that in managing wild horses, the USFS "shall consult" with the National Academy of Sciences ("NAS") and individuals with expertise in wild horse protection. 16 U.S.C. § 1333(b)(1).

BLM has twice commissioned the NAS to issue comprehensive reports on wild horse management. Each time, the NAS has reaffirmed the critical importance of considering the social acceptability of the agency's methods for managing wild horse populations.

"In 1982, the National Research Council noted that public opinion was the 'major motivation behind the wild horse and burro protection program and a primary criterion of management success." (Attachment 1).

NAS wrote an entire chapter on "Social Considerations in Managing Free-Ranging Horses and Burros." *Id.* In this 2013 report, the NAS reaffirmed its 1982 finding and noted that this "suggest[s] that control strategies must be responsive to public attitudes and preferences and could not be based only on biological or cost considerations." *Id.* The NAS specifically recommended "conducting research to understand stakeholder values," *id.*, and stressed that "policy to manage the free-ranging population should be carefully attentive to divergent public values[.]" *Id.* at 240. The NAS Report considered four methodologies for considering public input and recommended that public's concerns be taken seriously—i.e., that consideration be given whether proposed actions are socially acceptable.

As is particularly relevant here, the NAS noted that "[i]n a participatory process, stakeholders may participate in the setting of goals, design of experiments, monitoring and interpretation of results, and adjustment of management practices to various degrees that depend on the situation*." Id.* at 450.

Against this backdrop, it is clear the WHA and NAS report strongly support TCF's request for the agency to use cameras during and after roundups to improve the transparency of its management of wild horses and burros. Because cameras will promote transparency and thus allow the public to better understand how USFS treats the animals it is tasked with protecting, transparency is likely to promote more humane treatment of these animals in accordance with congressional intent. *See Leigh*, 677 F.3d at 897 (noting that transparency can "strengthen[] our government by exposing its flaws"). Likewise, because the use of cameras, and the resulting increase in transparency, will promote a better public understanding of the agency's operations, it will further the interests identified by the NAS. Accordingly, TCF's request for the USFS to use cameras during and after roundups is well supported by the WHA itself and by recommendations that USFS itself commissioned for how to improve its Wild Horse and Burro Program.

E. USFS Must Make Unedited Video Publicly Available

In association with the request for USFS to use cameras during and after roundups to increase the transparency and accountability of its management of wild horses and burros, TCF notes that it is critically important for USFS to make raw, unedited video evidence available to the public. Unedited video evidence will allow the public to receive an honest, unvarnished accounting of USFS's treatment of wild horses and burros, rather than a self-serving account that the agency may wish to provide in order to control the public's perception of its activities.

As the Ninth Circuit has stressed, "citizens must have reliable information" about the government's activities to determine whether they are "fairly and humanely administered." *California First Amendment Coalition v. Woodford*, 299 F.3d 868, 876 (9th Cir. 2002). to that end, "[t]his information is best gathered first-hand or from the media, which serves as the public's surrogate." *Id.* In contrast, because government agencies have an obvious interest in controlling the narrative to support their activities and desired outcomes, the Ninth Circuit has recognized that government agencies cannot be trusted with control over what the public is able to see of their actions. *See Leigh*, 677 F.3d at 900 ("When wrongdoing is underway, officials have a great incentive to blindfold the watchful eyes of the Fourth Estate.").

Indeed, veteran observers of how wild horses are managed have noted the skewed and self-serving accounts given by of wild horse managers which are designed to serve essentially as advertisements promoting the agency's activities rather than as neutral or candid assessments. For example, Ginger Kathrens—an Emmy-award-winning documentarian of wild horses who served on the BLM Wild Horse and Burro Advisory Board—notes that "In my 28 years of experience observing, documenting and educating the public through eyewitness observations of the BLM's management of wild horses and burros, I have noticed that there is a vast difference between what the videos of public observers depict and how they perceive the BLM's actions, and the BLM's own descriptions of its activities." Accordingly, no government agency should be allowed to edit video of its activities before releasing them to the public and cannot pick and choose what portions of video evidence the public may be allowed to see. *See Associated Press v. Otter*, 682 F.3d 821, 826 (9th Cir. 2012) ("To say that the plaintiffs will not suffer harm because they will be able to witness part of [the government activity] is like saying that the public would not suffer harm were it allowed to read only a portion of the *New York Times*.").

The USFS must acknowledge that the American public's perceptions and preferences have a place in the discussion around wild horse and burro management. Transparency, meaningful

observation, and documentation of helicopter roundups will ensure that members of the public can see for themselves what these wild horses endure. They can then make their own judgments about whether management activities are humane or socially acceptable. Only if the public is given the opportunity to see the entire operation will they then be informed enough to determine whether the USFS should be employing these methods on their (the American public's) wild horses and burros.

XVII. CONCLUSION

We encourage the USFS to (1) restore the full area of the DGPWHT (excluding private property), (2) increase AML, (3) reduce livestock grazing in order to manage the HWT "principally" for wild horses and (4) eliminate from the Proposed Action management actions that destroys natural hormone production (Gonacon, OGF, etc.) or causes increased stallion aggression (sex ratio skewing). The Proposed Action should provide for the current population of wild horses and to implement an PZP or PZP-22 birth control program to humanely manage the population within a new AML that has a low AML of at minimum 500 horses.

We request that the important issues raised in this letter are disclosed, analyzed and adopted in the EA. The vast majority of Americans greatly cherish our iconic wild horses. The USFS management of wild horses is highly controversial due to the very issues facing the DGPWHT wild horses today. We urge the USFS to be responsive to the public's concerns and follow the NAS recommendations. The public wants a fair and equitable program for our wild horses in Utah, one that humanely manages the WHT primarily for wild horses not privately-owned livestock and preserves natural wild behaviors.

Thank you for your consideration,

Dana Zarrello
Dana Zarrello
Executive Director
The Cloud Foundation

Attachments:
1. "Using Science to Improve the BLM Wild Horse and Burro Program: A Way Forward," National Academy of Sciences, June 2013.
2a. "Updating the Animal Unit Month," Dr. John Carter
2b. Walker, R.S., "Impact of Cow Size on Efficiency," Louisiana Agriculture (2015)
3a. PEER press release "BLM Weights Horse Impacts Much More Heavily Than Cattle"
3b. PEER 2021 letter
3c. PEER "Number and Area of BLM Allotments Within HMAs…"
3d. NAS/NRC "Wild and Free-Roaming Horses and Burros: Final Report (1982)
4. Nelson, R.J., Hormones and Behavior: Basic Concepts, Ohio State University, 2010.
5. Hedberg Y, Dalin AM, et al. Effect of ACTH (tetracosactide) on steroid hormone levels in the mare. Part B: effect in ovariectomized mares. Anim Reprod Sci. 2007 Jul;100(1-2):92-106.
6. Blakeney, OSC-Holyoak IUD research (2020)
7. Gonacon articles
8. Gonacon Baker elk
9. Baker (2018)
10. Hall (2017) Gonacon

11. Killian, Diehl 2006
12. OSU IUD
13. Daels o-ring IUDs 1995
14. New IUD for Suppressing Estrus in Mares
15. BLM Beatys Butte EA DR FONSI 2009
16. BLM EA for the South Steens Wild Horse roundup
17. BLM Black Mountain and Hardtrigger HMA EA
18. Castration expert opinions
19. Castration articles
20. BLM castration population control
21. Statement Ginger Kathrens
22. Statement Deniz Bolbol
23. Temple Grandin letter (2012)
24. Camera technical details

ADDENDUM

Standards for Wild Horse Treat-and-Release Gathers
The following humane recommendations are made for the use of helicopters in wild horse management. These recommendations should be utilized to conduct humane fertility control through a comprehensive PZP treat-and-release program that will maintain the integrity of wild horse family bands in order to minimize trauma and disruption and facilitate successful release of treated bands back to the range. Family bands and social groups shall refer to bachelor bands as well as stallion-led harem bands.

A. Pre-capture Evaluation of Existing Conditions
1. If possible, in advance of the roundup, field observation (game camera, observation, etc.) should be conducted and documented for identification of bands, individuals within bands and locations of bands to be gathered. Individual health or lameness issues should be noted. If a helicopter is to be utilized, documentation of the target horses should be made day(s) before the roundup; documentation should include an assessment of the location, number of bands and individuals in each band to be gathered, as well as color markers that distinguish individual bands. Photographic document should be utilized.

2. This information should be used to plan capture operation and configuration of the trap and holding pens.

B. Humane Standards for Helicopter Roundups
1. To keep horses in a band together, the rate of movement of the animals should not exceed the natural rate of movement of the slowest animal in the band. Every effort should be made to keep older, sick and young animals together with their bands as they are moved into the trap.

2. If a member of a band is separated during the roundup, the USFS manager should make an assessment on a case-by-case basis as to whether that animal should be pursued by the helicopter or rounded up. In the event the animal is captured, every effort should be made to place and hold that animal with its original band members after the animal is brought into the trap.

3. Solitary animals should not be pursued by a helicopter or rounded up.

4. Every effort should be made to bring individual bands into the trap separately. If this is not possible, the number of bands brought into the trap per run should be kept at a minimum to ensure the integrity of the social groups. Pens for each band should be available to prevent stallions from fighting.

5. The number of bands captured per day should be planned according to the pre-capture evaluation and should not exceed the capacity of the holding pens to maintain horses within their family bands.
C. Construction of Traps and Holding Facilities
1. The temporary holding pens should be constructed at the trap site. Both trap pens and holding pens should be constructed to accommodate the maintenance of intact family groups and should be configured based on the number and size of bands identified during the pre-capture evaluation. Pens should be made as large as possible to reduce stress and tension among the animals.

2. A number of holding pens should be constructed away from other pens and can be separated by alleyways in order to provide adequate space to reduce tensions between bachelor and harem bands.

3. Pens with shared paneling should have snow-fencing or a similar visual barrier on the shared paneling to minimize stallion interaction.

4. Bands, including bachelor bands, should be housed individually. No mixing of social groups should occur.

5. The on-site holding pens should be equipped with stationery or mobile chutes and other necessary equipment to allow for processing and application of fertility drugs at the trap location.

6. In the event that holding pens are constructed at a separate location from the trap site, family bands members should be identified and documented and should be kept together at all times during the holding period.

D. Holding and Release of Wild Horses
1. Horses should be held in intact family bands, including bachelor bands.

2. Every effort should be made to treat and release horses in the shortest time possible, after the horses have been given time to rest and recover from the roundup, with the goal of treating and releasing horses within 24 hours of capture.

3. Bands should be released at the same trap location where they were captured.

4. Bands should be released individually, with sufficient time between band releases to allow the safe dispersal of horses back to the range.

# # #