April 22, 2021

M. Stephen Best, Forest Supervisor
Attn: Heber Wild Horse Territory
PO Box 640
Springerville, AZ 85938

Submitted online: https://cara.ecosystem-management.org/Public/CommentInput?Project=18916

Subject: Heber Wild Horse Territory Plan #18916

Dear Supervisor Best:

Thank you for the opportunity to comment on the Draft Environmental Assessment for the Heber Wild Horse Territory Plan #18916 on behalf of the Cloud Foundation, a 501(c)3 nonprofit organization committed to protecting and preserving America's wild horse and burros on our public lands through education, advocacy and public participation in our government.

I. OVERVIEW

The U.S. Forest Service (USFS) is soliciting public comments for Heber Wild Horse Territory (WHT) Management Plan. The WHT, which is about 2.5 to 3 miles wide by about 7 miles long, is located in the Apache-Sitgreaves National Forest, in the Black Canyon area of the Black Mesa Ranger District.

TCF, its board of directors, staff and supporters greatly appreciate the Heber wild horses. Having the opportunity to visit and read about these wild horses provides us with enhanced enjoyment of our public lands. We have a strong appreciation for the Apache-Sitgreaves National Forest, and specifically the Black Canyon area of the Black Mesa Ranger District because the Heber wild horses live in that area.

Despite raising these issues in the scoping comments we submitted last year, the Draft Territory Management Plan and Draft Environmental Assessment fail to address or adequately analyze the following issues and consider viable Alternatives:

- **Territory Boundary and AML**
- **Fencing Issues Interfering with Natural Horse Movements**
- **Protecting Wild Horse Natural Behaviors**
- **Standards to Ensure Humane Fertility Control**
- **Standards to Ensure Humane Management**
- **Current Census**

We refer to our attached 2020 scoping comments (Attachment 1) for reference and will not repeat those comments.

II. HISTORY

The "Scoping Summary, Heber Wild Horse Territory Environmental Analysis," states:

> *During the west's settlement period it was common practice to use the wild horse herds as a pool from which stock could be drawn for use as needed by anyone who could catch them…. the practice of keeping free ranging horses for potential use by a livestock association or an individual is still active on some Indian Reservations. This is true of the Fort Apache Indian Reservation (the Reservation) that shares a boundary with most of the Lakeside and Black Mesa Ranger Districts…. Reservation horses moved freely back and forth between ownerships (Klein, 1993) …* ***The territory was established in an area where it was known that seven horses ranged. The first recorded census (1974) of the HWHT showed seven horses, with notations that the stallion was thought to be sterile because no foals were seen for several years. By 1975 five horses were being reported and their numbers remained stable for the next several years. By the early 1990s, only two mares could be found****… During the 1980s-1990s other horses continued to move back and forth between the Reservation and the ranger districts, especially whenever boundary fences needed repair. It was common for the fence to fall into disrepair during winters….* ***Horses arriving onto public lands after December 15, 1971, do not automatically acquire the status of a wild horse under the Act.*** *Any horse introduced onto the Forest on or after December 15, 1971 by accident, negligence or willful disregard of private ownership is not a wild horse.*

The EA includes an "ethnographic study" conducted by "a Forest Service historian to inform the deciding official about the relationship of the current horse population to the horses on the territory when it was designated (USDA Forest Service 2017)." No information is provided on the identity or credentials of the "historian" or the ten people interviewed for the "study" – essential data in evaluating the validity of a "study."

The "ethnographic study" states that one of the people interviewed claimed: "There were around 7 horses in the 1960s and 1970s when the territory was first created. A hard winter in 1967-1968 left the stud or stallion sterile (one source indicates 1983). There were no more foals within that original herd after that winter or any subsequent years. The herd dwindled down to 2 horses, which likely died of old age." Each individual relied upon for this information must be disclosed in order that the public is given the opportunity to provide meaningful comments. Clearly credibility of these individuals is of the utmost importance given that their statements are being utilized to support the USFS Proposed Action.

The EA fails to include the entire "ethnographic study" in order that the public may provide meaningful comments. Instead, USFS promotes "the study" which appears to include synthesizing oral histories given by ten people with questionable associations with the territory. The study was not meant to be exhaustive or definitive, rather to provide the deciding official with various perspectives of the history of the horses. Since the deciding official is considering the perspectives included in the "ethnographic study" the validity and credibility of the sources of these "perspectives" must be subject to public review/scrutiny so that meaningful public comments may be presented. The ethnographic study concluded, "it is the recommendation of the author that the Forest and interested parties determine future direction and management of the Territory based on the current condition and population of horses" (Kline 2017) Sadly, the rumors and unsubstantiated claims made by anonymous

individuals are repeatedly cited in the EA and used as foundational information for all management actions of the Heber wild horses.

USFS states that aerial surveys prior to September 2007 did not indicate if horses observed were within the delineated territory and that observations indicate the cover and space may be insufficient, additional monitoring is needed to better understand how horses are using the territory.

III. WHT PLAN AND EA FAIL TO ADEQUATELY ADDRESS TERRITORY BOUNDARY AND AML

The WHT Plan and EA fail to take a hard look at:
- modern-day scientific understanding of wild horse movement patterns,
- historic limitations affecting the validity of prior population censuses of wild horses (especially in forested areas),
- the lack of historic documentation for the Territory,
- USFS assumptions based on unsubstantiated claims made in a "ethnographic study,"
- site-specific geographical conditions impacting year-round habitat availability, and
- natural horse seasonal movement patterns in relationship to determination of whether the current Territory boundary is a rational and reasonable portrayal of a habitat boundary that would sustain a wild horse herd.

Despite the problematic and highly questionable basis for the current Territory Boundary, the EA states:

> *This alternative* [revising the Territory boundary] *was not analyzed in detail* ***because the interdisciplinary team did not identify any unusual circumstance or other rationale to justify expanding the territory*** *in contravention to the established Forest Service policy to manage horses and burros on territories as established in 1971 to the extent possible while adhering to all land management acts.*

In 1974, when the Heber Wild Horse Territory was designated, USFS claims that it was "purported" there was a population of six mares and one stallion occupying the territory. Throughout the years, no actual scientific data or monitoring was documented on the population.

1. WMT Plan and EA Fail to Adequately Consider and/or Analyze Boundary Errors

The WHT Plan and EA fail to adequately analyze historic and scientific information that establishes the WHT boundary was incorrectly drawn.

a. USFS Claims Territory Established for 6 Mares and a Sterile Stallion

The USFS states:

> *"**The territory was established in an area where it was known that seven horses ranged. The first recorded census (1974) of the HWHT showed seven horses, with notations that the stallion was thought to be sterile because no foals were seen for several years.**"*

> "***In 1974, when the Heber Wild Horse Territory was designated, it was purported there was a population of six mares and one stallion occupying the territory. Throughout the years, no actual scientific data or monitoring was documented on the population***. *In 1993, the population was purported to be two mares. Due to a lack of understanding in administrative procedures, the Black Mesa Ranger District and Sitgreaves National Forest determined the Heber Wild Horse Territory should be closed and ceased all activities associated with monitoring as well as the development of a management plan*. *Following a large wildland fire in 2002, horses began to be observed. The exact source of the current population of horses utilizing the Sitgreaves National Forest is unclear, and they may or may not have any relationship to the original population of seven horses."*

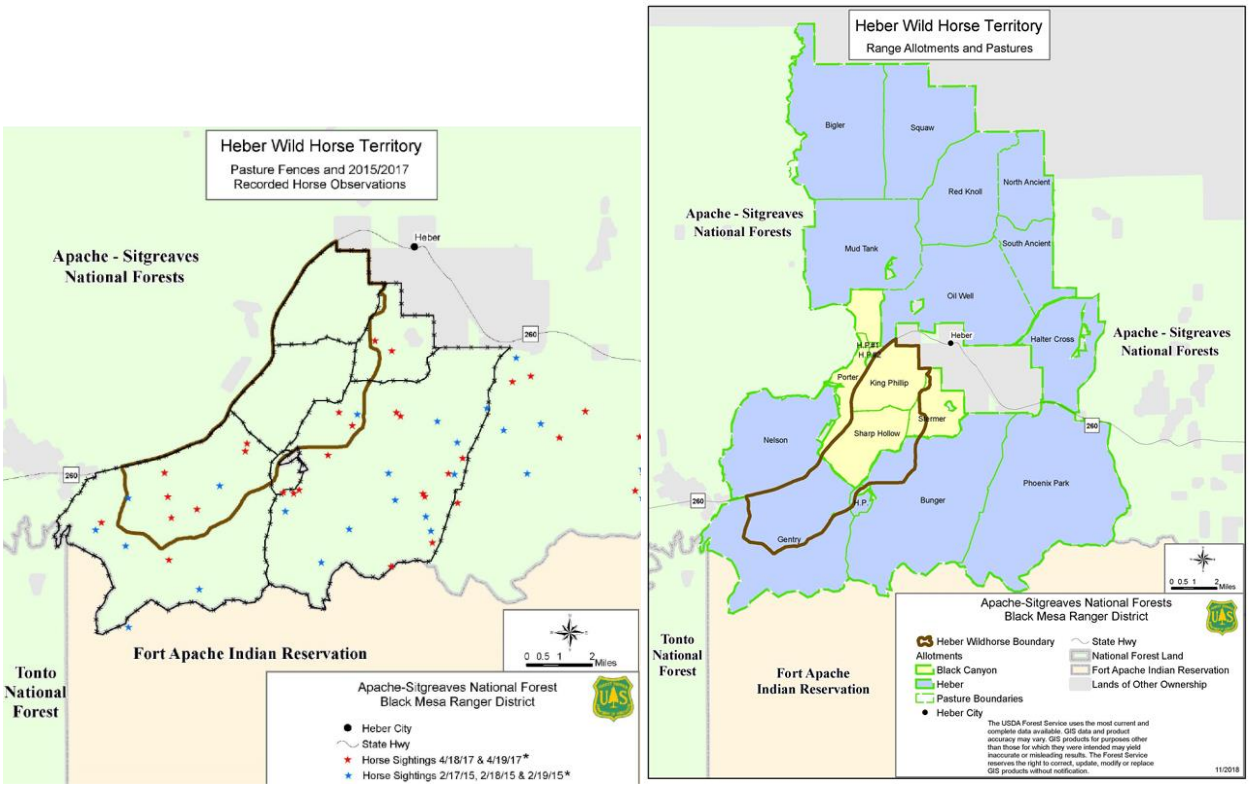
This is the basis for the current Territory Boundary and suggests: (1) the 1974 "wild horse" census found seven non-reproducing horses who somehow got into the Territory, the sole stallion was "purportedly" rendered sterile, that this information was an accurate population census and would be used to establish the Territory Boundary; (2) all fencing of the Territory boundary was always secure prior to December 15, 1971 prohibiting horses from entering/exiting the territory; (3) adjoining USFS lands had no horses.

Firstly, the EA outlines that "Throughout the years, no actual scientific data or monitoring was documented on the population." This dispels any validity of the premise on which the Territory Boundary is based: that there were only seven non-reproducing horses in the area, that these were the only "wild horses" in the area as per the Wild Free-Roaming Horses and Burros Act and that there were no wild horses outside the Territory Boundary. It defies logic and common sense that seven horses got into a secured area – now known as the Territory – and that there were no other horses either in the Territory, moving in and out of the Territory or on adjoining Forest Service lands.

Secondly, the USFS map shows the boundary of the Territory is not fenced. The USFS stated, "The fences in the area (see figure 14) are grazing allotment fences that were in place when the territory was delineated and remain in place today." The USFS map shows **no Territory boundary fencing** in the Gentry and Bunger pastures (see maps below), which suggests wild horses have *always* moved freely across this section of the Territory Boundary. In addition, outside of the claim, the EA and accompanying documents fail to provide any evidence that there was secured fencing along the Territory boundary prior to December 15, 1971. The EA fails to consider that the lack of Territory boundary fencing directly contradicts the USFS claim that fencing has since December 1971 kept wild horses within the Territory Boundary. The WHT Plan and EA must consider this lack of fencing or secure fencing in 1974 and reconsider and analyze the current Territory boundary. Based on this information, it is impossible that wild horses have not historically had access to and utilized Forest Service lands outside of the current Territory Boundary.

Lastly, the ***entire basis*** for the Territory Boundary is that there were no horses on Forest Service lands outside the current Territory Boundary prior to December 15, 1971. The EA acknowledges there were free-roaming horses in the Reservation but provides no data or documentation that there was a secure and effective fence between the Reservation and the Forest Service lands (Gentry and Bunger pastures in the Heber allotments) prior to December 15, 1971. The EA provides no evidence that this fence line was maintained at all times prior to December 1971. The WHT Plan and EA fail to provide any empirical evidence that shows such a secure fence existed and instead appear to rely on the unsubstantiated claim that wild horses

couldn't move back and forth from the Reservation to Forest Service lands prior to December 1, 1971. The above stated claims appear to be based on hear-say from the "ethnographic study" which has questionable and anonymous sources. In fact, USFS officials state that wild horses have always moved between the Reservation and Forest Service lands (more below with USFS map). The USFS provides only a two-page document that authorizes the Territory Boundary – no data is provided in that document. The WHT Plan and EA fails to provide any other supporting documentation to support the Boundary as drawn. The WHT Plan and EA fail to consider, with regards to the Territory Boundary issue, current scientific understandings of wild horse behaviors, social structures and natural geographic-seasonal movements. Instead, the EA claims USFS could "***not identify any unusual circumstance or other rationale to justify expanding the territory.***"



b. Horses Always Moved Between Forest Boundary and Reservation

The USFS documentation highlights horses moved freely between the Forest boundary and the Reservation:

> *According to a letter from then District Ranger Klein (USDA Forest Service 1993a),* ***until the boundary was first fenced, horses moved freely back and forth between ownerships****. Historically, as livestock production on National Forest System lands became more regulated, free-ranging horses were steadily removed either by herding them back across the boundary or by removing them to auction. According to allotment inspection notes, filed correspondence, and general allotment notes (District 2210 files****), from the 1980s to the 1990s, horses continued to move back and forth across the boundary fence wherever the fence needed repair or gates were left open.***

*"During the west's settlement period it was common practice to use the wild horse herds as a pool from which stock could be drawn for use as needed by anyone who could catch them…. the practice of keeping free ranging horses for potential use by a livestock association or an individual is still active on some Indian Reservations. This is true of the Fort Apache Indian Reservation (the Reservation) that shares a boundary with most of the Lakeside and Black Mesa Ranger Districts…. **Reservation horses moved freely back and forth between ownerships** (Klein, 1993)"*

c. USFS Aerial Surveys Prior to 2007 Show No Horses Within Territory

The WHT Plan and EA state that "A letter from the forest supervisor to the regional forester, dated 1974, indicated the territorial use of the area, as it was known at the time of the passage of the act (USDA Forest Service 1974)." Later the USFS states, "**Aerial surveys prior to September 2007 did not indicate if horses observed were within the delineated territory. Census 0 horses in territory; all outside**." This USFS documentation makes clear that the Territory boundaries were **never accurate** – not in the 1970s, 1980s, 1990s, 2000, or today – "2014 shows similar with few horses in territory."

Instead of acknowledging the obvious, that the Territory Boundary was misdrawn based on the biological needs of wild horses, the EA states, "Observations indicate the cover and space may be insufficient" to accommodate wild horses suggesting the herd should be zeroed out. This biased interpretation of the facts suggests that the agency is not taking an unbiased, hard look at the facts and instead is bending the facts to suit the agency's desired outcome.

d. USFS Documentation Establishes Insufficient Habitat in Territory Further Supports Boundary Is Erroneous

The USFS documentation states:

There are no perennial streams within the territory …while the canyons to the south of the territory offer more shelter from the wind than the area within the territory.

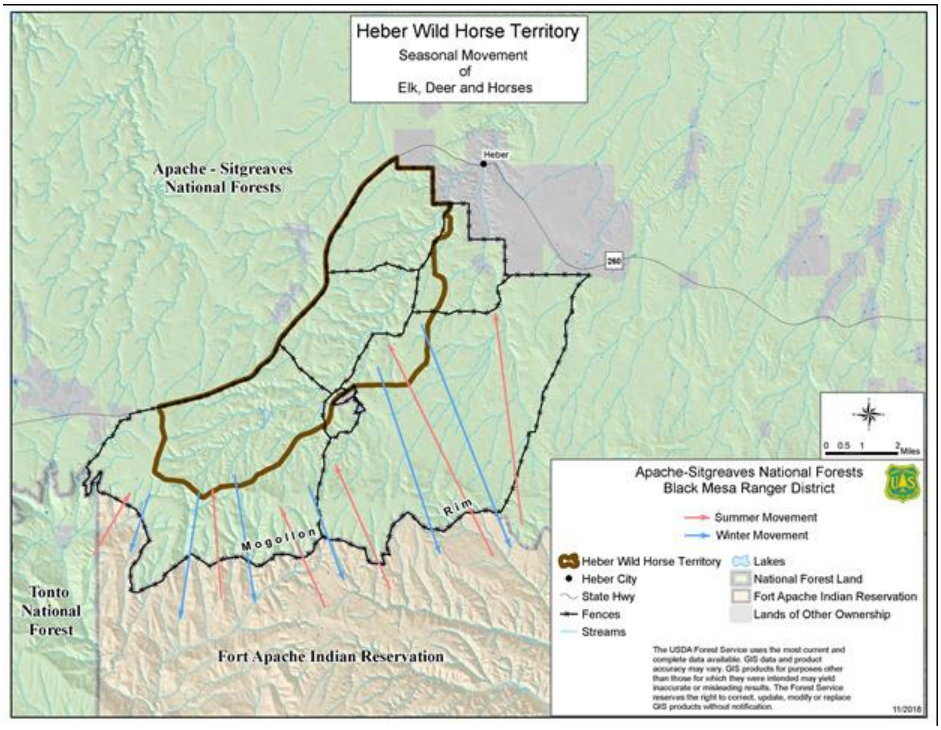
Crane and others (1997) found horses move from lower to higher elevations in the summer and back to lower elevations in the winter where access to feed is less hampered by snow accumulation.

Wockner and others (2003) found horses prefer lower elevation and drier habitats during the winter. However, in the summer horses prefer flatter areas with higher elevations, lower canopy cover, and proximity to water.

All of these studies corroborate what appears to be happening in this project area. Large ungulates are known to migrate off the Mogollon Rim in the winter to the canyons located to the south, *as displayed in figure 13 (Arizona Game and Fish Department 2014, personal communication).* ***The horses in the area may be behaving similarly, but there is a lack of monitoring data to support or dispute this assumption.***

The USFS map below shows wild horse movement between the Reservation and Forest Service lands (Gentry and Bunger pastures) including the Territory. Clearly horses engage in this natural seasonal migratory behavior and have done so since horses inhabited this area. The EA contradicts itself by stating the natural seasonal movement of the horses is from the

Reservation to Forest Service lands inside and outside of the Territory, yet on the other hand states the agency could "***not identify any unusual circumstance or other rationale to justify expanding the territory.***"



The USFS acknowledges it (1) lacks monitoring data, (2) that the Heber wild horses are doing what all wild horses do "*in the summer horses prefer flatter areas with higher elevations, lower canopy cover, and proximity to water*" and (3) ***<u>All of these studies corroborate what appears to be happening in this project area</u>***. The USFS knows the historic horse use of the project area, understands the lack of fencing which would have confined horses to the Territory, acknowledges that there are horses inside and outside of the Territory, cites experts that discuss seasonal migratory patterns which would affect where horses would be during certain times of year and during specific environmental conditions.[1] Yet, based on its own data the

[1] To further understand how horses are using the area, historic and current district files (USDA Forest Service 2210 files) were examined, as well as incidental observations and the aerial survey results discussed above. District files included range inspection forms, correspondence, allotment management plans, stocking records, production and utilization studies, and general file notes. These all indicate spring-to-fall horse use is currently occurring in the southern (higher elevation) portion of the territory and locations outside of the territory.

The fences in the area (see figure 14) are grazing allotment fences that were in place when the territory was delineated and remain in place today. If the areas of known horse use are compared to the existing fences in the area, it appears the fences (other than the boundary fence between the Apache-Sitgreaves National Forests and the Fort Apache Indian Reservation) may be restricting the horses to the southern and eastern portions of the analysis area, with most horse use occurring outside the designated territory. The above discussion indicates the horses have not been and are not consistently utilizing all the delineated territory. There is an assumption the horses may move to areas of lower elevation outside the territory or off the Mogollon Rim during severe winters following the behavioral patterns observed with the wildlife, but monitoring data specific to horse use patterns is lacking.

USFS fails to consider revising the Territory boundary to address the problems that have been ongoing since the first population census in 1974 due to the erroneous Territory boundary.

e. USFS Data Supports Re-Evaluation of Territory Boundary

The WHT Plan and EA fail to analyze, based on consistent census mapping, that the boundary be re-evaluated to reflect the actual habitat needed to sustain wild horses year-round.

Instead of addressing this glaring administrative error, the USFS is literally doing gymnastics trying to rationalize the low AML which the agency created based on the erroneous boundary; an AML which is acknowledged to lead to genetic inbreeding due to the artificially low population level which will force fathers to breed with daughters, sisters to breed with brothers, etc.

The WHT Plan and EA fail to (1) provide adequate documentation to support the current Territory boundary and (2) fail to provide sufficient data to support that wild horses were able to be sustained within the current Territory boundary. Rather USFS documentation provided shows that lands to the south and east of the Territory (Gentry and Bunger pastures in the Heber allotments) have historically been used by wild horses; these areas were erroneously excluded in the original Territory which has contributed to the intense controversy over the management of these wild horses.

The USFS position as outlined in the WHT Plan and EA supporting the current boundary is illogical and defies experts cited in the EA and modern-day biological understanding of wild horses' seasonal movement. The WHT Plan and EA fail to provide any documentation that states horses did not move across the Reservation boundary prior to December 1971, states there *were* horses that moved across the Reservation boundary and yet then claims the only wild horses in the area were seven horses in the current Territory Boundary area. To suggest that horses were not found outside of the WHT prior to December 1971-1974 when the first federal census was conducted – and only seven horses were within the WHT – is illogical and nonsensical. The USFS must provide documentation to support its claim – without such documentation the claim is baseless and must be re-evaluated. Additionally, the EA fails to provide any documentation that the neighboring Reservation laid claim to all the wild horses on Forest Service lands (outside of the claimed seven horses in the WHT) during that 1974 census.

We urge the USFS to utilize Adaptive Management to revise the WHT Plan simultaneously with a LMP amendment to address this WHT boundary error which jeopardizes the Congressionally protected horses.

National Forest Management Act, 16 U.S.C. §§ 1600-1687("NFMA") By refusing to consider revising the WHT boundaries the USFS will fail to take a "hard look" at the environmental impacts arising from the loss of the natural wild horse habitat and the impact that has on the well-being of these federally protected animals. USFS cannot ignore the error in boundary placement of the WHT without being in violation of NEPA.

The National Environmental Policy Act, 42 U.S.C. §§ 4321-4370 USFS has the same authority as BLM to change Herd Area or Burro Area (Territory) boundaries: "*Decisions to change HA boundaries, to designate HMAs for the maintenance of WH&B, or to remove all or a portion of an area's designation as an HMA must be made through a LUP amendment, revision or new RMP"* (cite BLM 43 CFR 4710.1 and H-1601-1: Land Use Planning Handbook).

The Apache-Sitgreaves National Forests cover 2.76-million-acres of public lands and the Black Mesa Ranger District encompasses approximately 616,000 acres of timber. The Heber WHT is limited to under 20,000 acres. A revision of the WHT boundary will "not significantly alter" the multiple-use goals and objectives for long-term land and resource management.

"Adjustments of management area boundaries or management prescriptions resulting from further on-site analysis when the adjustments do not cause significant changes in the multiple-use goals and objectives for long-term land and resource management." Forest Service Manual § 1926.51 Clearly, the WHT boundary revision would ***not*** "have an important effect on the entire land management plan or affect land and resources throughout a large portion of the planning area during the planning period" and therefore would not be considered "significant" according to the USFS Manual. Forest Service Manual § 1926.52

2. WMT Plan and EA Fail to Adequately Address AML

Given the extensive livestock allotments/pastures on USFS-managed lands in the area, it is clear that excluding livestock from the Heber WH Territory would not significantly impact livestock stocking rates in the region.

USFS has the authority to reduce or eliminate livestock grazing

III. WHT Plan and Proposed Action Fail to Adequately Address Fencing Issues

The WHT Plan and EA suggest widening or opening gates will sufficiently address the problem caused by livestock fencing in the Territory:

> *It appears the fences within the territory are likely limiting movement to the lower elevations in the north; while snow accumulation in parts of the territory effectively push large ungulates to lower elevations during severe weather.*

It is clear, based on the USFS pasture fence/horse observation map provided, that fencing is impeding horses from fully utilizing much of the Territory. Any fencing within the Territory that prevents free movement must be removed - merely widening gates is not sufficient. The EA makes no reference to how the gates will be kept open – so instead, fencing must be removed. The fencing in the Heber WHT is inhumane and not in conformance with Congress' intent in the 1971 Act. The WHT Plan and EA acknowledge that the Heber horses **are literally fenced out of the Territory** and that the Territory itself is not fenced, but rather fencing is along allotment/pasture lines.

Just as USFS takes actions (e.g. fencing, etc.) to enhance livestock grazing on our public lands, USFS should include as a part of its Territory Plan enhancing habitat for wild horses by removing (or preventing) fencing that inhibits the wild horse natural migratory patterns. Wild horses move daily, seasonally and annually – these movement patterns have developed over time to accommodate the well-being of the horses. Fencing prevents these natural movements and can jeopardize the well-being of the horses – preventing the horses from accessing lifesaving water sources or forage. Gates can be closed - and given that USFS is not checking gates on a daily basis – widening gates is not sufficient to enable wild horses to freely roam the Territory. Lastly, the EA fails to address that if the pasture fencing remains, the horses either

inside or outside of the Territory would not have full access to the Territory since the fencing currently bifurcates the Territory into numerous sections.

IV. WHT Plan and EA Fail to Analyze Importance of Natural Wild Horse Behaviors In Relationship to Management Actions

A. Wild Behaviors

Despite our scoping comments, the WHT Plan and EA fail to address the National Academy of Sciences recommendation that "preserving natural behaviors is an important criterion" for wild horse management. Despite our scoping comments that highlighted this fact, the Plan and EA fail to address or acknowledge this key component to wild horse management: preserving natural “wild” behaviors in all management activities.

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 and burros. Wild behaviors are the basis for the rich and complex natural social structure of wild horses.

The 2013 National Academy of Sciences conducted a BLM-commissioned scientific review of the agency’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. (Attachment 2) Much as castration destroys the production of important hormones for stallions; destruction (either surgical or chemical) of the ovary has the same effect on mares.

Wild behaviors begin with each individual animal, applies to their inter-personal relationships and extends to the herd dynamics. On an individual level, wild behaviors impact behaviors starting at a young age. At a relatively young age males leave the family band to join bachelor bands and later become stallions with families of their own. Stallions are protectors of their family bands; they push-out maturing offspring which prevents inbreeding. Castration is done in domestic settings primarily to alter behaviors in order to have more docile horses who can be more easily manipulated and managed. This elimination of natural hormone production would put castrated stallions at a disadvantage. Living in rugged and extreme environments increases the need to preserve natural hormone production which has direct impacts on physical abilities, instincts and physiological and psychological well-being in order to survive.

Mares, likewise, each play different but important roles within the band – from auntie to lead mare – each horse contributes to the wonderous and complex social fabric of wild horse bands and herds. Lead mares are known to drive the movements of their bands. Because most mares do not experience what is referred to as “menopause,” most mares continue to cycle throughout their lives. Thus, elimination of ovary function has unintended physiological and psychological-social consequences.

As we previously stated, The Cloud Foundation has documented that mares – especially lead mares – play a critical role in wild horse social structure. Mare hormone production would be altered through spaying or ovariectomies or use of drugs that shutdown mares’ estrus or cycles. The resulting changes to their natural behaviors would only be known on an individual basis.

We know that mammals’ behaviors, especially social behaviors, are related to hormone production. Therefore, it’s understandable that shutting down the production of certain

hormones would likely cause the loss of natural behaviors essential to “wild horses” – including stallion behaviors for winning and keeping mares, lead-mare behaviors necessary for maintenance of social organization, band integrity, and expression of a repertoire of natural behaviors.

Additionally, wild horses and burros living in extreme environments rely on their natural instincts for survival -- destroying natural behaviors may jeopardize the well-being of these animals and put their lives at risk.

B. Sex Ratio Skewing

The WHT Plan and EA fail to provide any scientific analysis or data to support the artificial skewing of the sex ratio. Wild horse natural sex ratios naturally favor females. Creating unnatural 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. The increased aggression between stallions and against mares puts foals at great risk of injury and death. This ill-conceived management strategy has no basis in science and would have a devastating impact on both individual horses and family bands.

The BLM Beatys Butte EA DR FONSI 2009 (Attachment 3) 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 (Attachment 4) 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 5) 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*.”

It is well established that sex ratio skewing **does not** significantly reduce population numbers and that it destroys the important and complex structure of wild horse society – and puts horses in danger by causing stallion aggression for limited mares. The WHT Plan and EA fail to address these important issues that put the well-being of wild horses at risk.

In summary, the WHT Plan and EA fail to acknowledge the importance of “wild” behaviors. Therefore, the Plan and EA must be amended to analyze this issue and **preclude** the following from management actions:

- **fertility control that destroys ovary functions or alters the production of natural hormones** (including Gonacon, SpayVac, GDF-9, BMP-15)

- **sex ratio skewing** which causes stallion aggression due to the unnatural ratio of males to females.

V. WHT PLAN AND EA FAIL TO CONSIDER CRITERIA TO ENSURE HUMANE POPULATION GROWTH SUPPRESSION

The WHT Plan and EA fail to consider establishing criteria that would be used to determine whether specific population growth suppression actions would be appropriate for management of the Heber herd. The final EA must adopt criteria that would be based on peer-reviewed data that shows (1) natural wild behaviors (as described above) are preserved, (2) establish short- and long-term safety, (3) established efficacy, (4) established reversibility (should be after more than 3 applications), and (5) safety during pregnancy.

The EA states, “It must be acknowledged that long-term or permanent sterility could be a result for some number of mares receiving multiple repeat porcine zona pellucida (PZP) vaccinations, although this has not been quantified. While long-term infertility or sterility is not the intended consequence of contraceptive use, it is not inconsistent with the purpose of reducing the population growth.” The EA cites no data source for this statement. The EA and accompanying documents make no such statement regarding the other injectable fertility control substances Gonacon, SpayVac, GDF-9 or BMP-15 all of which are specifically designed to destroy the ovaries and cause permanent sterility after just a few injections. It is important to note that PZP is not designed to destroy the ovaries.

A. The WHT Plan and EA Fail to Consider that Gonacon, SpayVac, GDF-9 and BMP-15 Destroy Ovaries and Shutdown Natural Hormone Production

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 6) 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 7), Gonacon, SpayVac, GDF-9 and BMP-15 act as a “chemical” ovariectomy because they have a similar effect through the destruction of the ovaries.

Gonacon, SpayVac, GDF-9 and BMP-15 are specifically designed to shut down and destroy the ovaries which in turn destroys natural hormone production necessary for the natural “wild” behaviors. Gonacon, SpayVac, GDF-9 and BMP-15 are designed to permanently sterilize mares with a few applications. Gonacon SpayVac, GDF-9 and BMP-15 lack sufficient data that

demonstrate short- and long-term efficacy, safety and the ability to preserve natural wild and social behaviors which are valued attributes of wild horses.

The EA fails to acknowledge and consider that currently there is insufficient data to know the long-term impacts of Gonacon and SpayVac on wild horses. While the EA acknowledges the experimental nature of GDF-9 and BMP-15, it fails to acknowledge the same for Gonacon and SpayVac; the EA fails to supply adequate data to establish these drugs as anything but experimental. The EA fails to acknowledge that there is no data that suggests the reversibility of Gonacon, SpayVac, GDF-9 and BMP-15 after repeated application or that these substances intentionally destroy the ovaries.

The USGS researcher, Dr. Holyoak, highlights the difference of managing feral horses to wild horses who, "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 8)

The NAS stated in its 2016 Report:

> "*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*." p. 149

Data shows that GonaCon, SpayVac, GDF-9 and BMP-15 are designed to literally destroy the ovaries via injection of the substance there by shutting down a mare's estrus cycle destroying the natural production of hormones which are known to have behavior consequences.[2]

Much like castration to males, GonaCon, SpayVac, GDF-9 and BMP-15 shut 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 fails to address that the WFRHBA requires BLM 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

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[2] SpayVac reduced the size of ovaries and reduced the number of follicles resulting from abnormal hormone levels which prevent follicles from growing and maturing to release egg cells.
https://wildlife.onlinelibrary.wiley.com/doi/abs/10.1002/jwmg.600
https://medlineplus.gov/genetics/condition/polycystic-ovary-syndrome/

GDF-9 and BMP-15 are shown through genetic studies to play critical roles in ovarian function. Application of GDF-9 and BMP-15 prevents ovulation and/or accelerate depletion of the oocyte reserve altering estrous behavior as intended.
https://onlinelibrary.wiley.com/doi/full/10.1002/mrd.21265
https://pubmed.ncbi.nlm.nih.gov/29534827/

substitute for) the overarching intent of the WFRHBA: to protect ***wild*** **horses.** In addition, the Act **directs** BLM 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 highlight, "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." Yet the EA fails to adequately analyze material scientific evidence on Gonacon and the issues raised above and an EIS is required. (Attachments 9a-b)

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 10) 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, distinguish whether individual horse behaviors 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 cycle in mares and impacts various natural hormone production. 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].

Commercial vaccines that have been tested in mares include Equity (CSL, West Ryde, NSW, Australia), Improvac (Pfizer Animal Health, Sandton, South Africa), and GonaCon (USDA). The inhibition of GnRH will cause an absence of FSH and failure of follicular development (Checura et al. 2009), and ovulation failure. (Attachment 11)

Unfortunately, the Baker, DL (2018) study (Attachment 10) 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, continues to remain highly uncertain based on current data available. In fact, 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." In fact, 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 and multiple use 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."

Other findings have revealed that Gonacon "altered reproductive behaviours that are integral to the maintenance of the complex social structure of herd animals such as horses." (Attachment 11)

B. The WHT Plan and EA Fail to Adequately Analyze Use of IUDs

In May 2020, 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***." (Draft Environmental Assessment DOI-BLM-UT-W020-2018-015-EA, p 10) The EA states, "The initial management use was in mares from the Swasey HMA, in Utah." However, the Heber EA and accompanying documents fail to provide or consider any data regarding this experimental fertility control mechanism. The Heber EA fails to consider what we believe may be the singular application of IUDs in mares (in the Swasey HMA) – how many mares were implanted, what type of IUD, how the mares are being monitored, the success rate, any deleterious impacts to the mares, etc. In fact, the Heber EA fails to conduct sufficient research to determine which type of IUD to utilize or how IUDs will be tolerated by wild mares who are not available for monitoring or medical care. BLM has not provided any data that supports the adequate length of monitoring a mare after insertion of an IUD. 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 Environmental Impact Statement (EIS) is necessary before implementing the administration of IUDs in wild mares living on the range.

The EA fails to provide adequate data that supports the use of the Y-shaped silicone IUD yet includes it as a device "for feral horses may be used" on Heber horses returned to the Territory.

The BLM's 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 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.

Before subjecting free-roaming mares to the potentially painful and dangerous condition of a partially-ejected IUD – the complications of which could be serious – 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 12)

More recent studies which only tracked horses for a shorter time period report, "**The study resulted in a 75% retention rate" for the Y design IUD conducted by Oklahoma State University**." (Attachment 8[3]) 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 has not plan to remove the IUDs from free-roaming mares who are subjected to this experiment.

The BLM has failed to conduct in situ trials with horses that are known by either BLM or BLM volunteers. 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. 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 environments – with no access to medical care – to this experimental surgical sterilization is inhumane and irresponsible. At minimum, 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 at minimum 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.[4]

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 EA fails to consider the likely negative effects and short- and long-term implications for mares.

The National Research Council in 1980 noted that *"..IUDs often dislodged and surgery was impractical in field conditions*…" (Attachment 2, page 93) This is supported by the studies on IUDs in mares. "*20 percent of the IUD-treated mares were pregnant*" because "*the pregnancies of the IUD-treated mares were due to loss of the relatively small IUDs, not to failure of efficacy, because no IUDs were found on ultrasound examination of the pregnant treated mares*." (Attachment 2, page 122) "*Mares that had IUDs in place continued to exhibit estrous cycles with the same frequency as control mares*." *Ibid*.

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[3] Note the Dr. Holyoak who conducted the IUD research for USGS states, "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**."

[4] https://www.healthline.com/health/endometritis

Further study is needed because 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 alternative to the humane, reversible PZP 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.

The Proposed Action fails to specify which type (marble, metal, soft, hard, etc.) of IUD would be utilized – the EA refers to all types and therefore providing meaningful comments on the specific IUD cannot be provided.

To summarize, the BLM must conduct extensive pen trials prior to implementing on a limited number of 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 fails to indicate how or when IUDs would be removed from wild mares. An EIS would allow all these issues to be adequately analyzed and would provide the public with an opportunity to provide more meaningful comments.

VI. THE WHT PLAN AND EA FAIL TO ADEQUATELY CONSIDER MANAGEMENT OF HORSES OUTSIDE TERRITORY

While the Proposed Action includes management of wild horses outside the Territory, the EA fails to adequately consider the unique situation facing the Territory and slow recovery from the history of catastrophic fires in the area (June 2002, the Rodeo-Chediski Fire which burned approximately 78% of the territory). The Proposed Action must be modified to include the managing horses outside of the Territory through PZP and relocations not removals. While we appreciate the incremental removals over time, the EA fails to consider the long-term sustainability issues created by the confinement of wild horses to a Territory that knowingly does not provide year-round habitat needed for their welfare. The Heber wild horse population, in and outside of the Territory, can be easily controlled and reduced through natural attrition and with the use of PZP over time. As stated previously, wild horse advocacy organizations would be happy to work with USFS to implement this humane management that prevents and excludes removals and allows wild horses to live and die wild as intended by the WFRHBA.

The EA fails to provide the most recent rangeland health assessments of the Gentry, Bunger and Phoenix Park pastures outside the Territory currently utilized by wild horses. In order to continue to permit private commercial livestock to graze these pastures, rangeland health conditions must be sufficient. If rangeland health standards are met, then there is no legitimate and pressing need to remove wild horses. The Proposed Action must revise the following "thresholds" that would trigger any removals:

- Reaching the upper limit of AML – instead, range conditions should be the determining factor.
- Horses identified outside of the WHT – rather, horses outside the WHT should be relocated to the WHT (current WHT boundaries are erroneous and must be corrected).
- 35% utilization on 30%+ of the monitoring area for two of five years -- this should be revised to be in conformance with the livestock grazing standards in the livestock grazing permits in the area (the final WHT Plan and EA must include copies of most recent pasture and allotment rangeland health assessments).
- Drought conditions – drought conditions do not occur overnight, and the Territory Plan must establish proactive measures to ensure water is available throughout the WHT; the plan must consider implementing protocols for low precipitation years *prior* to drought conditions to ensure the horses have year-round access to adequate water.
- Evaluation of vegetation and soil stability -- use must be distinguished between livestock and horse usage and the three "measurement periods" must be defined in terms of years.
- Resource damage – resource damage should first trigger the reduction or elimination of livestock; the proposed language that "horses are identified as a *contributing* factor" suggests that livestock could be the primary factor and wild horses will once again be scapegoated for livestock damage to our public lands; horses should not be removed unless all livestock have been removed from the areas for a minimum of three years

VI. THE WHT PLAN AND EA FAIL TO CONSIDER ALTERNATIVES TO ENSURE HUMANE MANAGEMENT PRACTICES

Despite our scoping comments, the EA fails to even consider humane management standards we recommended. The agency must take a "hard look" at the alternative standards below which clearly outline modern-day standards for humane treatment of wild horses.

The EA must consider, analyze and implement humane standards as outlined in the below recommendations. These recommendations are necessary to reduce stress and potential harm to wild horses during a helicopter-drive roundup. Merely citing the BLM "Comprehensive Animal Welfare Protocol" fails to meet the National Environmental Policy Act (NEPA) requirements that the agency must consider meaningful alternatives presented by the public. The WHT Plan and EA must consider information to minimize stress and injury to wild horses 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.

The EA must consider and adopt the following with regards to CAWP:

- Improved public observation of all agency actions. There is significant public interest in the agency's management of our protected wild horses and burros. The NAS specifically recommended to the BLM to improve the transparency of its management of the Wild Horse and Burro Program (Attachment 2). The treatment of the wild horses and agency transparency are paramount.
- 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.
- Real-time cameras with GPS should be installed on all aircraft and/or helicopters used in operations and video should be live streamed on the Internet. This will improve the transparency and accountability of roundup operations and enable the USFS and public to monitor the direct impact motorized vehicle usage has on wild horses and the environment.
- Real-time cameras should be installed on any traps, corrals and temporary holding pens, again, so that USFS personnel, public and media can monitor the entire roundup operation and treatment of the horses.

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 BLM 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 15)

Video cameras will improve the transparency of the operations and enable the BLM and public to monitor the direct impact motorized vehicle usage has on wild horses and the environment. TCF would be happy to provide technical assistance and financial assistance to establish these real-time cameras as described above.

Additionally, the WHT Plan and EA failed to consider the humane standards outlined in the Addendum to our scoping comments (see below).

VII. THE WHT PLAN AND EA FAIL TO CONDUCT CURRENT CENSUS

While the EA outlines future plans to conduct a population census, the lack of current data prevents the agency from identifying an appropriate number of horses to be removed in Year 1. Prior to finalizing the Territory Plan and EA, USFS must conduct a current census to confirm the population number. Using outdated information for management actions fails to adhere to the

Wild Free-Roaming Horses and Burros Act which requires the agency to keep a current inventory of horses on the range.

VIII. APPLICABLE LAWS

The King Phillip, Sharp Hollow and Sumer pastures in the Black Canyon allotment and the Gentry, HP, Bunger and Phoenix Park pastures in the Heber allotment must be dedicated to the Heber Wild Horses – and livestock grazing in these pastures must either be reduced or eliminated to devote these public lands to the welfare of the Heber wild horses. The Territory Plan and EA fail to consider applicable laws, regulations and statues that authorize the agency to reduce or eliminate "grazing permits on lands that are to be devoted to another public purpose." FSM 2231.62d

The Federal Land Policy and Management Act of 1976 (FLPMA) supports the elimination or reduction of livestock grazing in the above-mentioned pastures, 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]

FLPMA addresses the importance of the non-market value within its definition of the term "multiple-use." 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.

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).

The Taylor Grazing Act also provides the agency 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 (BLM, 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).

IX. NATIONAL ACADEMY OF SCIENCES AND NATIONAL RESEARCH COUNCIL

The National Academy of Sciences (NAS) was founded in 1863 in the midst of the American Civil War. The National Research Council (NRC) was founded in 1916 against the backdrop of the First World War. These two independent research bodies have played significant roles to ensure the U.S. government is provided balanced, fact-based information and data which should be incorporated in governmental decision-making processes.

The Draft EA should consider recommendations and reviews from the NAS and NRC – while directed to the BLM Wild Horse program, these positions are applicable to the USFS management of Congressionally-protected wild burros.

The NAS) Report on the BLM Wild Horse and Burro (WHB) Program dated June 2013 also supports the above requirements of FLPMA:

> *"It is unlikely that all the values involved can be monetized in a way that is satisfactory to all parties, so use of economic policy tools such as benefit-cost analysis and contingent valuation, although potentially informative, is not able to resolve value differences fully and is not adequate to support decisions*." p. 273
>
> *"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%."***

The 1982 National Research Council report on the BLM's wild horse and burro program stated:

> *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*...

The WHT Plan must consider the interests of those who cherish the opportunity to observe, photograph, and otherwise enjoy wild horses and/or burros which Congress declared to be "national esthetic treasure[s]" when it enacted the Wild Free-Roaming Horses and Burros Act of 1971.

X. CONCLUSION

We request that the important issues raised in this letter are disclosed, analyzed and adopted in the final WHT Plan and EA. The vast majority of Americans greatly cherish our iconic wild horses. The BLM and USFS wild horse programs are highly controversial due to the very issues facing the Heber 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 the Heber wild horses, one that manages the Territory primarily for wild horses not privately-owned livestock.

Thank you for your consideration,

Dana Zarrello
Dana Zarrello
Executive Director
The Cloud Foundation

Attachments:
1. TCF scoping comments (without attachments)
2. Using Science to Improve the BLM Wild Horse and Burro Program: A Way Forward," National Academy of Sciences (2013)
3. BLM Beatys Butte HMA EA and
4. BLM South Steens HMA EA
5. BLM Black Mountain and Hardtrigger HMA
6. Nelson, R.J., Hormones and Behavior: Basic Concepts, Ohio State University, 2010.
7. 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.
8. Blakeney, OSC-Holyoak IUD research (2020)
9. Gonacon articles (9a-b)
10. Baker (2018)

11. Hall (2017)
12. Killian, et al
13. Daels, O-ring IUD article
14. New IUDs for suppressing estrus in mares
15. Grandin-Deesing roundup report to Cattoors, 2012

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 would 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 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.

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