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Comments: Return to Freedom is dedicated to preserving the freedom, diversity, and habitat of America's wild horses and burros through sanctuary, education, advocacy, and conservation while enriching the human spirit through direct experience with the natural world. Part of our mission is to engage members, donors, visitors, and youth in working for and on behalf of their public lands. We provide support for cooperative projects between non-profits and government agencies, and we involve the public in discourse about management of resources.

The Forest Service is soliciting comments for an Ochoco Wild Horse Herd Management Plan and Forest Plan Amendment. The 1989 Ochoco National Forest Land and Resource Management Plan (LRMP) directed that "wild horses within the original territory will be managed at a maximum number of 60 head." The 2018 census counted 135 horses. Low genetic variability has been indicated for the Big Summit Territory horses. Forage is in unsatisfactory condition and wintertime forage is a limiting factor. The Forest Service Preferred Alternative 2 calls for a reduction of AML to 12-47; implementation of population growth control methods; and attention to increasing genetic variability through sex ratio adjustments and/or the introduction of young mares from similar habitats, in consultation with wild horse genetics experts. Return to Freedom is appreciative of the past studies into utilizing immune-contraceptive fertility control on this territory, and has guidance about increasing fertility control use and implementation of various management methodologies for consideration in this plan:

* "Alternatives will vary on the AML level; but once the AML is determined, the size of the herd may need to be adjusted (if the existing herd size is above AML) to within the selected range through gathering, placement, or sale. Once AML has been reached, contraception could be one method of fertility control used for maintaining that herd size. However, managing to an AML level with [while] the use of contraceptives alone is very uncommon and may not be feasible for the Big Summit Territory." (EA, p. 8) The use of immune-contraceptive vaccines is more efficient if utilized immediately, as opposed to delaying use until AML is achieved. There are two reasons for this: (1) with every application of vaccine, there is a potential drop in reproductive growth rate of the herd (not necessarily immediate if the mare is pregnant at inoculation) and (2) the savings on capture, processing, transport, and lifetime care necessary when an animal is removed permanently from the range is also potentially reduced. There is a propensity among the wild horse managing agencies to describe fertility control as effective only when AML is reached, and we understand the logistics and political reasons for this (emphasis on gathering to AML so that animals are not put back out onto the range above AML; desire to limit hands-on types of management). However, modeling gathers alongside fertility control (assuming a 15-20% population growth rate, a 50:50 ratio of male to female animals, and 70% of mares being of a treatable age) shows that reproductive growth rate reduction begins to reduce both the number of gathers necessary over time, as well as the number of animals needing removal. This translates to savings for the program down the line as a result of transporting or separating/preparing for holding fewer animals and providing for their care in short- or long-term facilities.

* "Fertility control methods will be used to slow the population growth. Fertility control methods include contraception, sterilization and manipulation of sex ratios." (EA, p. 17) The EA further clarifies that the preferred method of population growth control would be contraceptives, in particular PZP. At this time, we encourage immuno-contraceptive vaccine use only for population control for wild horses. We do not advise sex-ratio skewing for wild horses for these reasons: (1) management of populations via sex skewing is temporary (populations return to their normal ratios), and (2) healthy populations rely on whatever the norms are in terms of that population's demographics - adjusting a population of wild horses to skew for more or less of anything does not attain a natural state for that population, with behavior ramifications that are not yet understood (potential heightened aggression in stallions, for example). We do not advise gelding as a population management tool since there are not sufficient studies to understand the behavioral effects of gelding some proportion of a

population, and modeling for population effects is a guess, at best. Surgical sterilization of mares for management purposes is unacceptable. Here is why:

-Feasibility: a spay procedure on a fractious mare in a chute needs to be conducted by board-certified equine veterinarians with adequate experience managing unhandleable horses in chutes. There are few veterinarians who can do this procedure relative to the high number of mares that would need to be treated to have any substantive impact on population growth rates. This is then an untenable method for managing wild horses on public lands, even in very limited instances, as it relies on a high degree of technical expertise.

-There are no substantive studies to evaluate long-term health of ovariectomized mares. Anecdotal evidence from equine veterinarian researchers at the UC Davis Center for Equine Health, where a herd of 20 older ovariectomized mares were housed, showed advanced musculoskeletal deterioration in 18 of the mares. This led veterinarians on-site to speculate that the deterioration may have been the result of removing estrogen from the system, as an ovariectomy does.

-Every time that the Bureau of Land Management has proposed to research surgical spays the projects have been delayed due to litigation. One can assume that the same would happen if the FS pursued surgical spays in this context and thus, it would not be a feasible management tool for years. The FS has an opportunity here to set this management strategy aside because other forms of proven, safe, humane fertility control vaccines exist.

* "Animals that meet the sale-eligibility criteria would be offered for sale…While the Act as amended only addresses sale without limitation, subsequent enactment of riders prohibiting the BLM's and Forest Service use of appropriated funds for the sale or slaughter of wild free roaming horses and burros resulted in BLM's construction of a sale with limitation whereby purchasers declare in their purchase application to, "… not sell or transfer ownership of any such animals that I purchase to any person or organization that intends to resell, trade, or give away such animals for processing into commercial products." While current Forest Service policy is to follow the mandates of the Act as amended, the agency will comply with appropriations language limitations." (EA, p. 18) We understand this to mean that current riders only allow for the FS to sell with limitation, but that if such riders were lifted, then the FS would pursue sale without limitation. In an unprecedented step, the FS set out in 2018 to sell captured older horses from the Devil's Garden Wild Horse Territory without restriction. As a result, RTF and other advocacy organizations filed suit to stop the sale; the public and federal lawmakers strongly opposed the plan, resulting appropriations language specifically barring FS from conducting unrestricted sales of wild horses and burros; and California state lawmakers subsequently passed a law to tighten sales. These consequences were a direct result of what the public and lawmakers felt to be a violation of the spirit of the 1971 Act. We strongly urge FS to adopt a clear-cut sales policy consistent with BLM's prohibiting a single buyer from purchasing no more than four sale-eligible wild horses or burros during a period of six months. We would also encourage FS to collaborate with BLM on a database of known or suspected kill buyers in keeping with the states wishes of Congress and the public that formerly free-roaming wild horses and burros are not to be slaughtered. An investment into clarity and transparency regarding sales and an effort to place wild horses and burros into good homes will pay dividends of increased trust from the public and lawmakers in FS wild horses and burro management.

* "Other management activities such as fertility control treatments, can be employed once horses have been gathered to AML." (EA, p. 46) Again, waiting for AML to be achieved is not the ideal way to implement fertility control. A slower, multi-faceted approach to wild horse management would include some removals, some on-range fertility control (via remote darting), and some gather-administer-release fertility control. This is more effective at creating and maintaining sustainable wild horse management, with less dependence on transportation and short-term holding, where a majority of program budgets are spent. To reduce stress on holding facilities, contractor availability, and budget, the application of immuno-contraceptive vaccine alongside gather-removals allows for stabilization and then reduction, where necessary, of wild horse numbers, and is more economically and logistically viable: population growth rates on the range are reduced, and time between gathers

can be extended. At the time of another gather, fertility control vaccines can be reapplied to mares who had received initial doses, new mares can receive treatment, and some animals can be gathered and removed, in effect scaling up fertility control at each opportunity. Though AML may not be achieved immediately, progress towards AML is made, population growth rates will decline at each gather, and the burden on holding facilities will be reduced. Recently published data (Rutberg 2017) shows that treating horses with PZP-22 then boosted with a single ZonaStat-H (or native PZP) injection (hand or remote delivery) 2-4 years later extends contraception for at least three years, with fertility in treated animals reduced by an average of 70% so long as 80% of the mares were treated. Applying this formula to gather-treat-release strategies can further increase time between gathers and reduce population growth rates.

* "The AML for Alternative 2 would be 12-57. This AML was based on the process described in the BLM Handbook 4700-1 for wild horses (see AML Analysis), and was calculated based on the most limiting factor of winter range forage availability during winters of above average snowfall inside the Big Summit Territory." (EA, p. 56) AML is set at a range so that the low end can be achieved and then there is sufficient time between gathers (as the population creeps up from the low to the high AML). The AML for the territory was determined based on gather-and-removal-only management scenarios. The Ochoco FS should bring AML into context with this management plan, which includes fertility control, and, thus, a decreased population growth rate. This could allow for a higher low AML, a reduction in friction with local wild horse advocacy groups, and less horses removed and placed into either a saturated adoption market or a holding facility.