April 15, 2015

Jim Sparks, Field Manager  
BLM – Billings Field Office  
5001 Southgate Drive  
Billings, MT 59101  
Email: [BLM\_MT\_Billings\_FO@blm.gov](mailto:BLM_MT_Billings_FO@blm.gov); [jsparks@blm.gov](mailto:jsparks@blm.gov); [jbybee@blm.gov](mailto:jbybee@blm.gov)

Re: 4720 (MT010.JB) Proposal gather of 170 wild horses and removal of 30 (aged 1-3 yrs) Pryor MWHR

Dear Sirs:

This is in reply to your request for scoping input for preparation of the NEPA-required Environmental Assessment (EA). Of the 170 wild horses currently living in PMWHR, your office proposes to remove 30 between 1 & 3 years of age through bait or water trapping, herding, or a combination of these. Your rationale is that the current herd level exceeds the upper range of the Appropriate Management Level (AML) of 90 to 120 individuals excluding newborn foals. You mention possible means of preventing so-called “excess” population including “removal or destruction of excess animals” and “sterilization or natural controls,” and indicate that mares in the herd have been PZP vaccinated since 2001, that the population suffered a major die out in 1978, and that an average of 6 to 12 wild horses die each year. Also you indicate that 25 wild horses from outside the Pryors were introduced to the herd before 1990.

Since there are an estimated 49 wild horses between the ages of 1 & 3 years, assuming 2014 foal survival, removing 30 of these would remove 61% in this age category (source Rachel Reeves, wild horse photographer). In my opinion this would create a generational hiatus that would have serious detrimental repercussions to the Pryor Mountain wild horse population as a whole. In the 38,000-acre PMWHR on mainly BLM but also on adjoining Custer Nat. Forest and Nat. Parks Service lands near Bighorn Canyon, the average current AML of 105 mustangs works out to 362 acres per individual. For this particular habitat with its forage productivity, I consider this to be an underpopulated range, one where the horses have not filled their ecological niche. The Pryor Mountain area presents an excellent opportunity for Reserve Design given the natural barriers of the steep canyon bordering much of the range and the large area that is not grazed by livestock and allows for a substantial buffer zone. I would welcome the opportunity to work out the details of how Reserve Design could work here and have researched this out in some considerable detail.

Since there are an estimated 49 wild horses between the ages of 1 & 3 years, assuming total 2014 foal survival, removing 30 of them would remove 61% of this age category. According to your earlier EA (MT-010-08-24) and Decision Record (May 2009), every mare from the Pryors will be allowed one offspring who survives past one year of age before being vaccinated with PZP to prevent further births. However, it appears that in order to remove 30 wild horses in this age category you will have to remove 3 mares who have not yet had an offspring that survived to one year of age. This will break one of your own rules concerning maintaining genetic diversity. Every single wild horse in the 1-3 age category would have to be removed.

Another area of serious concern is that male genetic diversity is not being taken into account. For example, the stallion know as Navigator, who is Custer’s only still wild descendant, would be removed. I think that this would be a dire mistake jeopardizing wild horse fitness and the long-term survival of the Pryor Mountain herd, since it has been proven that male genetic diversity has been seriously diminished among all horses due to the artificial selection of horses by people. And the genetic evaluation by Dr. Cothran shows that the Pryor Mtn. wild horses stem in large part from earlier domestic breeds that had escaped, and even the Spanish mustang heritage that is strong in the Pryors has also been subject to this artificial selection in earlier times, and also to a degree under BLM. Dr. Cothran’s report warns of incipient inbreeding among the Pryor Mountain wild horse population. (Dr. E. Gus Cothran Genetic Analysis of the Pryor Mountain Wild Horse Range, MT. Aug. 22, 2013. <http://www.blm.gov/pgdata/etc/medialib/blm/mt/Field_Offices/billings/wild_horses/Par.90380.File.dat/Pryor_MNTS%202012%20Genetic%20Report.pdf>

Male genetic diversity should be increased in order to assure the long-term survival of the Pryor Mountain wild horse population, and others throughout the U.S. that find themselves in the same fix. Substantiation of this is contained in the very investigation and report that was requested of the National Academy of Sciences by the BLM. This June 2013 report: “Using Science to Improve the BLM Wild Horse and Burro Program” and the germane references are to be found at [www.nap.edu/openbook.php?record\_id=13511&page=143](http://www.nap.edu/openbook.php?record_id=13511&page=143)

The detailed factual substantiation of this serious loss of male genetic diversity is in: Lippold, S., et al, “Discovery of lost diversity of paternal horse lineage using ancient DNA. Nature Communications 2. Article # 450, published 23 Aug 2011. Link is: <http://www.nature.com/ncomms/journal/V2/n8/full/ncomms1447.html?UJ.ec-Id-NCCWas-201108>

So in upshot, many wild horse supporters feel that you are overly restricting the reproduction of the Pryor Mountain wild horses, both females and males, and that this will result in an inbreeding vortex causing a rapid decline in the Pryor Mountain wild horse population, and that this involves both excessive roundups and the wholesale vaccination of mares by PZP, that has many damaging effects both on individuals and upon populations as a whole.

If you proceed with your proposed gather, most of the famous stallion Cloud’s offspring would be removed from the herd when the full 30 wild horses between 1 & 3 years of age are taken away. And the same applies to many of the other stallions here. Remember that male genetic diversity is at even more of a critically low level than female genetic diversity, and that this has serious implications for the long-term survival of the Pryor Mountain wild horses.

According to IUCN SSC Equid Specialist Group’s Action Plan (1992), the Pryor Mtn. mustangs are far from a viable 2,500-individual level. Instead of targeting this small population for further reduction, we should work on improving these horses’ habitat through range expansion, cooperative agreements with the Custer National Forest and National Parks Service on adjoining lands, dismantling of fences such as that erected by Custer N. F. and that prevents the Pryor mustangs from realizing their historical migrations to summer meadows where they were present in 1971 and before, and, so, have legal right. Also predators should be protected, such as Mountain Lions, as these are a natural control that tones the population. Prior to the re-permitting of mountain lion hunting by Montana Fish, Wildlife, and Parks Department several years ago, evidence indicated that the healthy mountain lion population was an important factor in stabilizing the Pryor mustang population.

I recommend that an updated census of the Pryor mustang herd be conducted and also a reassessment of mortality factors. This should be accomplished by a careful scrutinizing of wild horse deaths at all ages, including abortions, and the deaths of foals and young colts and fillies. As a wildlife biologist, I am suspect of your claim that only 6 to 12 wild horses pass on each year.

Thank you for giving careful consideration to the above and related points. Please remember that the Pryor Mtn. herd is probably the most famous of all the wild horse herds in our nation. It would be a shame to let this beautiful herd be over-managed at thoughtlessly low population levels that would cause it to become socially dysfunctional, go into decline and even extinct. Those of us who care about these wonderful and unique wild horses will certainly fight for all we’re worth to prevent this from happening!

The best way of achieving population stability and at the same time assuring the long-term viability of the wild horses is by conscientiously employing the principles of Reserve Design to these ends. As before, I offer my cooperation in order to achieve this very important goal.

Sincerely,

Craig C. Downer, Wildlife Ecologist  
P.O. Box 456  
Minden, NV 89423  
[ccdowner@aol.com](mailto:ccdowner@aol.com)  
T. 775-901-2094

P.S. Germane quote from Dr. E. Gus Cothran, equine geneticist, Pryor mustang report cited in letter: “Recommendations[:] Current variability levels are high enough that no immediate action is needed. However, there has been a general trend for decline in variations levels of the herd. If the trend continues the variability levels could drop below the feral average within the next five to ten years. The best way to maintain current levels would be to increase population size if range conditions allow.”