The primary objective of this proposal is to develop an economically viable, humane, and feasible long-term management plan for wild horses and burros in the American West. This program has been mismanaged and it needs a reboot. While some of these aspects will continue to be controversial in equine and animal protection communities, we are committed to solutions to this significant crisis. We propose the following solutions for the short and long-term health of our wild horses and our western rangeland: (1) Bring horses into more cost-effective pasture facilities, (2) Contract with private parties to secure lower-cost leasing of land for long-term horse care, (3) Apply fertility control strategies to every herd that can be reached utilizing trained volunteers and Agency staff, and (4) Promote adoptions in order to reduce captive populations and costs. If the BLM can work with private partners to bring each of these goals to life, the agency will be back on a financially sustainable and more humane management track.
Executive Summary

Wild horses and burros are “living symbols of the historic and pioneer spirit of the west,”1 and an integral part of American cultural heritage. Management of these federally protected herds is no easy task, but one that Americans overwhelmingly support and that the Bureau of Land Management (BLM) is required by law to perform. The BLM’s attempts to curb population growth, mainly through roundups and removals have not sufficiently slowed the growth of wild horse and burro populations on the range. Concerns about the cost of the Wild Horse and Burro Program have prompted some to recommend the use of inhumane and ultimately futile lethal population control methods. These methods are not only ineffective — on-range horses will continue to reproduce, locking the BLM into a cycle of annual mass killings— they are also expensive, unnecessary, and extremely unpopular.

We propose a solution that will release the BLM from the costly cycle of roundups and holdings, while reducing the number of horses on the range to a level closer to the agency determined appropriate management level (AML):

- Conduct targeted gathers and removals at densely populated Herd Management Areas (HMAs) to reduce herd size in the short term.
- Treat gathered horses with fertility control prior to being returned to the range. This program should continue until 90 percent of mares on the range have been treated and the implementation of continued consistent fertility control.
- Relocate horses in holding facilities, and those taken off the range, to large cost-effective pasture facilities funded through public-private partnerships.
- Promote adoptions in order to reduce captive populations and costs.

The four tiers of this approach — gathers and removals, fertility treatment, public-private partnerships, and adoptions — are crucial to the ultimate success of the program. Failure to effectively implement any part of this program jeopardizes the success of a holistic and sustainable wild horse and burro program. If employed correctly, this plan will result in a natural population decline over the next two decades. We collectively support this humane, effective, and financially sustainable approach.

Nearly all stakeholders share common goals for rangelands: ecosystem health, the humane treatment of animals, and fiscal responsibility. With this plan, horses will be managed humanely, the government’s costs will decrease over time, and public lands shared with other users will be managed closer to AML goals. We have an opportunity, and an obligation, to solve this challenge collectively through a rational, judicious plan that embodies each of these shared goals. Now is the time to act.

---

THE PROBLEM

The Bureau of Land Management (BLM) has been unable to create an effective, financially sustainable framework to manage wild horses and burros, now some 40 years after the enactment of the Wild and Free-Roaming Horses and Burros Act. The agency has not taken advantage of the range of tools it’s had at its disposal, and relied too narrowly on the unsustainable process of gathers and removals. That has created a circumstance where horses are reproducing on the range at maximum rates; this has saddled the agency with enormous animal care responsibilities at short-term and long-term holding facilities.

- Until recently, when budget constraints prevented nearly all management of wild horses on the range, the BLM controlled populations by rounding up specific herds every 2–4 years and removing large numbers of animals to attain AMLs. These removals resulted in a large population of horses under the BLM’s direct care. The BLM developed two types of holding facilities to maintain these horses — contracted pastures that cost $1.82–$2.42 per horse per day, and short-term corral facilities (i.e. feedlots) that cost $4–$7 per horse per day. This excludes costs for round-ups. The BLM currently maintains 32,146 wild horses in large pasture facilities, and 11,902 horses in corral facilities. Corral facilities are a less humane, more expensive form of holding.

- According to the National Academy of Sciences, removal of excess horses can actually facilitate a higher growth rate in wild herds due to decreased competition for forage. This means that the BLM’s current management techniques are likely increasing population growth rates. Equine herds typically grow approximately 15%–20% per year, but studies have shown that growth rates are higher in herds where removals have been conducted.2

- Had the BLM coupled these removals with a sufficient on-range fertility control program, recruitment rates would be far lower. Between 2012 and 2016, the BLM treated fewer than 3,000 horses with fertility control, and released many gathered horses back onto the range without fertility control treatment. (See addendum).

---

• The BLM currently estimates the population of wild horses and burros on federal lands at over 72,674 — almost three times greater than the agency’s nationwide AML goal of 26,715.³

• The failure of this management strategy has prompted some to suggest using lethal techniques, such as killing healthy wild horses and burros or selling them for the purpose of commercial slaughter. However, this will not solve the problem because removals for any purpose, whether for placement into holding facilities or to be killed, will simply perpetuate a longstanding problem as lethal management will not fix the population growth rates on the range. Additionally, there are substantial ongoing costs and regulatory issues associated with removing, killing, and disposing of horses, which means this method locks the government into an ongoing financial commitment to continue removing and killing horses.

• Mismanagement has led to negative impacts to the long-term health of rangeland ecosystems, ⁴ raising serious concerns with maintaining the status quo management practices for both private livestock grazing and wild horses and burros. Controversy over the allocation of water and forage has polarized stakeholders, compromising our ability to find common ground solutions.

THE SOLUTION

While there is continuing debate about what constitutes sustainable wild horse and burro populations on the range, the BLM is under pressure to maintain populations at currently established national AML. Those levels can only be reached by large-scale live removals and fertility control. Removals should only be conducted under the following conditions: (1) Removals must focus on those areas of most immediate concern due to potential conflicts with native wildlife, rangeland degradation, and human-horse conflict; (2) fertility control must be implemented wherever feasible; (3) horses removed from the range must be relocated into less expensive holding facilities, and where possible, public-private partnerships with landowners and non-profits must be pursued; and (4) better marketing can increase adoptions and reduce captive populations and costs.

I. REMOVALS

Assuming an 18% population growth rate absent removals, rangeland populations will exceed 84,000 by 2019. While removals to achieve AML are a financial burden, the BLM has determined that they should be conducted to alleviate existing concerns with the condition of BLM’s rangelands. To reach the BLM’s assigned nationwide AML, the BLM should implement a plan to round-up and remove 50,000 horses — a number that would significantly reduce the population burden on rangelands while fertility control tools are simultaneously implemented to stabilize populations on the range. Below are two removal scenarios that the BLM may pursue, depending on resources and pasture facility availability.

³ Two key findings of the NAS Report should be noted here: (1) “…the statistics on the national population size cannot be considered scientifically rigorous,” and (2) “How AML’s are established, monitored, and adjusted is not transparent to stakeholders, supported by scientific information, or amendable to adaptation with new information and environmental and social change. Ibid, pg 3 and pg 12.

⁴ The recent GAO report noted that no studies have been conducted separating out the impacts to rangelands from wild horses and cattle, US Government Accountability Office Report, Animal Welfare: 2017 “Information on the US Horse.” Page 32.
Some areas cause heightened concerns due to rangeland degradation, and direct political conflict with the BLM’s multiple-use mandate. With that in mind, we suggest that the agency prioritize those areas for immediate attention.

The BLM could begin removals in 2019 focused on those areas, gradually shifting focus in subsequent years to removals in all HMAs where equid populations exceed the AML. At the end of 2021 or 2023, the combination of large-scale removals and the implementation of fertility control (as discussed below) would eliminate the necessity of future large-scale gathers for removal purposes. If necessary, smaller targeted gathers could be conducted to maintain population levels in strategic locations. Removed horses would be relocated to pasture facilities or contracted sanctuaries (as discussed below).

II. **FERTILITY CONTROL**

All future removals must be coordinated with ongoing, on-range fertility control programs to prevent subsequent population growth within the remaining equid population.

We recommend a large-scale fertility control program which ensures that over 90% of the horses remaining on public lands are treated with fertility control, and are sufficiently retreated in later years in order to prevent the need for future large scale removals.

- To achieve this goal, the agency must regularly treat a significant portion (>90%) of the remaining mares in every HMA. For HMAs using helicopter gathers, the agency must commit to coupling the removal of the previously noted 50,000 horses with detailed gather plans that target a high percentage of the area’s population. The agency must then treat all mares
returned to the range with PZP, and continue to treat mares in the HMA in successive years to ensure that a sufficient number of mares (>90%) remain treated.\textsuperscript{5}

- In areas where baiting is possible, BLM staff must administer treatment through opportunistic darting. If that is not possible in all locations, gathers without removals in subsequent years must take place to ensure repeated treatments.

- Trained and approved volunteers and university programs can be utilized to aid with darting programs, herd identification, behavioral observation, and data collection as the BLM needs.

- Students and volunteer organizations can also be used to support water and habitat restoration on the range.

- The BLM should pursue further research into on-range fertility control, and incorporate results into long term management plans.

**FERTILITY TREATMENT POPULATION PROJECTIONS:**\textsuperscript{6}

\footnotesize

Figure 1. Population growth models demonstrate the differential effect of management strategies that incorporate both traditional round up practices and the application of PZP. In the Removal scenario, no application of PZP is administered. The 3-year treatment uses the same removal plan, but includes the application of PZP to horses through round-up and range application. The 5-year treatment has less aggressive removals over a longer period of time (10,000 a year for five years) combined with the application of PZP to horses through round-up and range application. A growth rate of 18\% is assumed for wild populations. We computed a growth rate of -6\% for PZP treated populations assuming 50\% mare fraction, 56\% foaling rate, 91\% efficacy, and 8.5\% mortality.

\textsuperscript{5} The 2013 NAS report examines the efficacy of PZP through a variety of studies, concluding that the mean efficacy rate is 91.5\%. Page 102.

\textsuperscript{6} These scenarios are dependent on the BLM’s capacity and resources to remove, treat, and house wild horses and burros. These figures are estimates subject to change based on a variety of factors.
From this point, it will take approximately 10 years to get the population close to the BLM’s current desired AML of 26,715 based solely on the use of Zonastat-H or another yearly contraceptive.

Longer-lasting vaccines like PZP-22 will lower costs and reduce the need for yearly treatment, and the addition of safe and viable sterilization programs will increase the rate at which populations decline. As such, additional fertility control tools should be implemented as soon as they become feasible.

III. LESS EXPENSIVE HOLDING OPTIONS

Every day, the BLM spends $1.82 per horse in long term holding pastures and an average of $4.99 per horse in corral facilities. A shortage of pasture facilities has forced the agency to use corral facilities for long term purposes—at more than twice the expense. The BLM currently holds 11,902 horses in corral facilities. The agency estimates that each of those horses costs approximately $46,000 over the course of their lifetime. We propose that the BLM relocate corralled horses, along with any additional removed horses, to more cost-effective private pastures. Private pastures help reduce population levels in individual HMAs to enable proper management, reduce the agency’s management costs, and provide humane living situations. It also ensures that lethal methods do not become the default public policy.

While this proposal requires an additional funding investment to achieve this shift in focus, it will result in long-term cost savings. We must identify adequately large pasture options that can accommodate not only the horses currently housed in corral facilities but also the approximately 50,000 more horses that may be removed from the range. The overarching goal is to ensure that future gathers will be conducted solely to administer a comprehensive, mandatory fertility-control program. The implementation of ongoing on-range fertility control will mean fewer horses removed, which will ultimately enable a phase-out of holding facilities. As holding facilities are phased out, BLM funds will become available to pay for continued fertility control treatment. Below are models that offer practical options for achieving this ultimate goal.

**Large-Scale Private Pasture or Sanctuary Facilities**

- The American Mustang Foundation (AMF) proposes a tangible solution to the wild horse population problem by providing humane, long-term, off-range pasture for up to 50,000 wild horses.

---

7 Department of Interior, September 26th, 2017.
horses or burros. The BLM would retain ownership of these animals to ensure their federally protected status.

- This service will save tax money by decreasing the average per-horse cost of off-range management and contracting, compared to the current cost-prohibitive corral facilities. AMF will follow BLM intake protocol regarding sterilization and will maintain non-reproducing herds. AMF’s proposal decreases the costs of transportation, gathering, and contracting, and allows the animals to live out their lives in natural pasture settings.

- Return to Freedom, a non-profit wild horse conservation organization, proposes that non-profit organizations, private landowners, or a combination of the two, provide placement options to relocate wild horses to sanctuary settings for the remainder of their lives. Non-Profit 501(c)(3) Organizations and partnering land owners may also enter into long term off range pasture with the BLM with the agency maintaining title of the animals to ensure their federally protected status.

- Qualified sanctuaries are an additional alternative, reducing the BLM’s holding costs while providing removed horses a life-long safe refuge. Landowners may work in partnership with qualified sanctuaries.

- Private pasture and sanctuary facilities would be encouraged to provide programs to educate the public about the connection between managed wild horse populations and rangeland health.

- All facilities involved in the program will contractually agree that horses in their care will not be sent to slaughter, nor will healthy horses and burros be killed.

iv. ADOPTIONS

Over the course of the past 5 years, the BLM has only been able to adopt between 2,000-3,000 wild horses and burros a year. Recognizing that this number is insufficient to lower populations in holding facilities in any meaningful way, if this plan is adopted our organizations will work together to create an adoption program to supplement the BLM’s current adoption program that will aid in increasing the adoption of horses relocated into the above mentioned private facilities.

- The Wild Horse and Burro Program plays a key role in reducing the number of animals on the range. However, adoption demand has declined in recent years.

- If the agency adopts our proposal, our organizations are committed to helping increase wild horse and burro adoptions in partnership with the BLM. We will develop and implement a program to encourage the public to adopt a wild horse or burro through the implementation of educational training/mentoring programs with adoptable horses and a marketing plan, funded solely by our organizations, which will supplement the agency’s current program.

- We have determined that the largest possible target audience that is not being tapped by the BLM are potential horse owners on the East Coast. Our team will work to increase publicity across the country with a specific focus on the East Coast to aid in increasing adoption numbers.
- We will use our volunteer network and extensive outreach capabilities to promote adoptable horses to potential adopters through the use of our social media and email channels.

**APPROPRIATIONS REQUEST**

We understand that this program will require significant funding in its initial stage. However, without additional funding to the Wild Horse and Burro Program, the BLM will be unable to pursue any management plan that will alleviate the current crisis. If no action is taken, the cycle of removals and ever-increasing costs will continue unabated, or the agency will pursue mass killing programs that create an enormous and unsustainable public backlash. By granting this appropriations request, the agency will have a humane pathway forward. An up-front financial commitment will result in long-term economic and ecological gains as the BLM is able to balance rangeland populations, increase rangeland health, and cease costly holding facilities in the long term. This necessary and worthwhile investment will lead to extraordinary cost savings and a success story for the American public.

**RECOMMENDED LANGUAGE:**

The Bureau of Land Management (BLM) shall use any reapportioned, or new additional funding, to address population control and on-range management of wild horses and burros on public lands through combining contraception application with removal of excess horses and burros. If removals are necessary, BLM shall prioritize removal of horses within sensitive species habitat, on most heavily populated Herd Management Areas (HMA’s), and horses living outside of HMA’s. The BLM shall combine contraception methods with removals by ensuring a significant portion of remaining horses are treated and shall utilize cost savings contracts that enable management of a large volume of removed horses on private, contracted, pasture. The BLM is prohibited from utilizing this funding to kill healthy horses, sell without restriction, or otherwise enable wild horses or burros to be slaughtered for commercial or non-commercial purposes.

**RECOMMENDED REPORT LANGUAGE:**

The Committee is concerned that there continues to be conflict regarding management of the wild horse and burro populations managed under the Wild Free-Roaming Horses and Burros Act.

The Committee includes language and funding that requires the BLM to implement a strategic removal and on-the-range management strategy to bring individual HMA’s within 20% of the BLM’s determined AML. The Committee directs the BLM to bring individual HMAs within 20% of AML through removals. These removals will be coupled with mandatory on-range fertility control programs which ensure remaining horses are treated with fertility control to reduce populations to AML gradually. The agency should work with interested stakeholders to further develop and implement appropriate removal, fertility control, and relocation plans.
The language requires BLM to focus its efforts on excess horses in sensitive species habitat within the HMAs where herds exceed AML by the greatest percentage, and where herds have established outside of established HMA’s. The funding provided for FY 2017 anticipates that 8,000-10,000 horses per year can be removed from the range only if the BLM implements mandatory on-range fertility control projects on those ranges where removals were conducted. Removed horses should be managed in private pasture facilities at considerable cost savings.

The committee strongly encourages the BLM to contract with larger scale private pasture providers to provide humane, protective care of horses and burros. All private parties providing care for horses and burros will provide proof of their ability to offer humane conditions and protection against abuse, neglect, or slaughter. The language prohibits the BLM from utilizing these funds to kill healthy horses, or sell any horses or burros to slaughter for commercial or non-commercial purposes.

Acknowledgements

The authors thank Dr. Steven Sadro¹ for technical assistance and for constructing the population modeling projections file. We also thank the BLM’s wild horse and burro program officers and employees who have offered input and discussion in regards to wild horse populations and structuring collaborative projects with the Bureau.

1: Department of Environmental Science and Policy, University of California at Davis, 1023 Wickson Hall, One Shields Avenue, Davis, California, 95616 (email: ssadro@ucdavis.edu).
<table>
<thead>
<tr>
<th>Year</th>
<th>AML</th>
<th>Population of horses on range</th>
<th>Population of burros on range</th>
<th>Total population on range</th>
<th>Total population of horses and burros in short term holding</th>
<th>Population of horses in long term holding</th>
<th>Budget allocation</th>
<th># of horses on PIP-22 fertility control</th>
<th>PIP-22 total cost ($2750/animal)</th>
<th># horses on Zanotstat fertility control</th>
<th>Zanotstat total cost ($500/animal)</th>
<th>Percentage budget allocation spent on fertility control</th>
<th>Number of horses and burros removed from the range</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>21,482</td>
<td>25,688</td>
<td>2,374</td>
<td>28,563</td>
<td>3,954</td>
<td>19,722</td>
<td>36,354,000</td>
<td>113</td>
<td>3,108,750</td>
<td>20</td>
<td>10,000</td>
<td>0.88</td>
<td>7,759</td>
</tr>
<tr>
<td>2008</td>
<td>21,219</td>
<td>25,644</td>
<td>2,461</td>
<td>33,110</td>
<td>9,068</td>
<td>21,340</td>
<td>36,201,000</td>
<td>114</td>
<td>4,233,500</td>
<td>0</td>
<td>0</td>
<td>1.37</td>
<td>5,275</td>
</tr>
<tr>
<td>2009</td>
<td>26,576</td>
<td>33,102</td>
<td>2,830</td>
<td>36,510</td>
<td>9,402</td>
<td>22,317</td>
<td>40,013,000</td>
<td>972</td>
<td>1,001,500</td>
<td>0</td>
<td>0</td>
<td>3.34</td>
<td>5,017</td>
</tr>
<tr>
<td>2010</td>
<td>26,576</td>
<td>33,693</td>
<td>2,613</td>
<td>38,966</td>
<td>14,337</td>
<td>23,752</td>
<td>62,086,000</td>
<td>104</td>
<td>4,318,500</td>
<td>20</td>
<td>10,000</td>
<td>19,256</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>26,576</td>
<td>33,693</td>
<td>2,489</td>
<td>38,497</td>
<td>14,337</td>
<td>23,752</td>
<td>62,086,000</td>
<td>104</td>
<td>4,318,500</td>
<td>20</td>
<td>10,000</td>
<td>19,256</td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>26,545</td>
<td>31,453</td>
<td>2,841</td>
<td>37,794</td>
<td>13,972</td>
<td>22,457</td>
<td>74,688,000</td>
<td>978</td>
<td>2,414,500</td>
<td>167</td>
<td>10,100</td>
<td>3.34</td>
<td>6,577</td>
</tr>
<tr>
<td>2013</td>
<td>26,477</td>
<td>33,780</td>
<td>2,825</td>
<td>38,100</td>
<td>15,999</td>
<td>23,968</td>
<td>77,695,000</td>
<td>930</td>
<td>4,924,500</td>
<td>199</td>
<td>9,500</td>
<td>6.33</td>
<td>4,135</td>
</tr>
<tr>
<td>2014</td>
<td>26,684</td>
<td>40,915</td>
<td>3,184</td>
<td>49,849</td>
<td>15,207</td>
<td>22,882</td>
<td>77,202,000</td>
<td>855</td>
<td>178,750</td>
<td>329</td>
<td>159,500</td>
<td>0.44</td>
<td>1,817</td>
</tr>
<tr>
<td>2015</td>
<td>26,716</td>
<td>47,329</td>
<td>10,621</td>
<td>58,150</td>
<td>16,444</td>
<td>31,101</td>
<td>77,246,000</td>
<td>183</td>
<td>409,250</td>
<td>286</td>
<td>143,000</td>
<td>0.84</td>
<td>3,810</td>
</tr>
<tr>
<td>2016</td>
<td>26,715</td>
<td>55,111</td>
<td>11,716</td>
<td>67,027</td>
<td>13,511</td>
<td>33,150</td>
<td>80,555,000</td>
<td>118</td>
<td>324,500</td>
<td>334</td>
<td>167,000</td>
<td>0.61</td>
<td>3,320</td>
</tr>
<tr>
<td>2017</td>
<td>26,715</td>
<td>55,453</td>
<td>13,191</td>
<td>72,349</td>
<td>15,234</td>
<td>33,781</td>
<td>80,555,000</td>
<td>118</td>
<td>324,500</td>
<td>334</td>
<td>167,000</td>
<td>0.61</td>
<td>3,320</td>
</tr>
</tbody>
</table>

All data in this spreadsheet from the following sources:
- National Wildlife Refuge Advisor Board Meeting Minutes
- https://www.blm.gov/programs/wild-horse-and-burro/about-the-program/program-data
- Personal correspondence with Public Affairs officer for the WHBer Program

Compiled by www.returntofreedom.org