The Wild Horse Problem: An Opportunity to Amend the Wild Free-Roaming Horses and Burros Act

INTRODUCTION

Although wild horses are largely considered non-native species in the American West, their majestic beauty has long captivated the minds of the public. In 1971, rapidly diminishing horse populations led to the enactment of the Wild Free-Roaming Horses and Burros Act (WHBA), to protect wild horses from "capture, branding, harassment, or death."¹ WHBA proved to be so successful that Congress amended it in 1978 to grant the Bureau of Land Management (BLM) greater ability to manage horse populations.²

In 2019, the American Wild Horse Campaign (AWHC) sued BLM for violating the WHBA, the National Environmental Policy Act (NEPA), and the Administrative Procedure Act.³ AWHC is a non-profit organization founded in 2004 that "is dedicated to preserving American wild horses and burros in viable free-roaming herds."⁴ AWHC argued that BLM needed an Environmental Impact Statement (EIS) for their proposed geld and release policy ("geld and release plan") within the Antelope and Triple B Complexes Gather Plan ("gather plan").⁵ The purpose of this geld and release plan was to allow more male horses that would otherwise be in captivity to roam free.⁶

Currently, BLM manages wild horse populations by capturing wild horses and placing them in long-term storage facilities.⁷ This storage is expensive: in 2018, BLM had 44,000 horses in captivity, at an annual cost of \$50 million.⁸ Without prioritizing fertility control treatments, this excessive storage will

DOI: https://doi.org/10.15779/Z387659G55

Copyright © 2021 Regents of the University of California.

^{1.} Wild Free-Roaming Horses and Burros Act, Pub. L. No. 92-195, 85 Stat. 649 (1971) (codified as amended at 16 U.S.C. §§ 1331–1340).

^{2.} Public Rangelands Improvement Act of 1978, Pub. L. No. 95-514, § 14, 92 Stat. 1803, 1808–10 (amending 16 U.S.C. § 1333).

^{3.} Am. Wild Horse Campaign v. Bernhardt, 963 F.3d 1001, 1004 (9th Cir. 2020).

Our History, AM. WILD HORSE CAMPAIGN, https://americanwildhorsecampaign.org/ourhistory (last visited July 18, 2021).

^{5.} Am. Wild Horse Campaign, 963 F.3d at 1007.

^{6.} *Id.* at 1006.

^{7.} Id. at 1005.

^{8.} Robert A. Garrott, *Wild Horse Demography Implications for Sustainable Management Within Economic Constraints*, 12 HUM.–WILDLIFE INTERACTIONS 46, 46 (2018).

continue.⁹ WHBA should instead be amended to prioritize fertility control methods, as was advocated by BLM's geld and release plan, instead of policies such as long-term storage.

I. LEGAL BACKGROUND

Congress enacted WHBA in 1971 to protect wild horses as "living symbols of the historic and pioneer spirit of the West."¹⁰ WHBA was later modified in 1978 to grant BLM certain powers to regulate wild horse populations.¹¹ It directs BLM to "maintain a current inventory of wild free-roaming horses and burros on . . . public lands" so that excess horses and burros may be removed whenever they exceed Appropriate Management Levels (AMLs).¹² AMLs set maximum and minimum thresholds to allow for four to five years of population growth, and are determined for individual Herd Management Areas by analyzing several years of vegetation, soil, weather, and water quality data.¹³ WHBA also requires that BLM contact the National Academy of Sciences (NAS) to conduct research studies on possible management strategies for wild horses when needed.¹⁴ When BLM determines that the number of horses or burros exceed AMLs, they must remove them.¹⁵ BLM then gathers horses using helicopters or bait traps until they reach their target number of horses in the area.¹⁶

Within the WHBA, there are three required methods for removing excess animals, listed in order of priority.¹⁷ The first mandated management practice is for the secretary to "order old, sick, or lame animals to be destroyed in the most humane manner possible."¹⁸ The next management practice WHBA requires is to offer the horses for adoption, and the last management practice is to euthanize any animals not adoptable.¹⁹ Adoption and euthanasia of sick animals have been insufficient methods for controlling population size.²⁰ BLM encourages adoption demand with a low minimum adoption fee of \$25 for untrained wild

^{9.} See Am. Wild Horse Campaign, 963 F.3d at 1005.

^{10.} Wild Free-Roaming Horses and Burros Act, Pub. L. No. 92-195, § 1, 85 Stat. 649, 649 (1971) (codified as amended at 16 U.S.C. § 1331).

^{11.} Public Rangelands Improvement Act of 1978, Pub. L. No. 95-514, § 14, 92 Stat. 1803, 1808–10 (amending 16 U.S.C. § 1333).

^{12. 16} U.S.C. § 1333(b)(1).

^{13.} *Maintaining Range and Herd Health*, BUREAU OF LAND MGMT., https://www.blm.gov/ programs/wild-horse-and-burro/herd-management/maintaining-range-and-herd-health (last visited July 18, 2021).

^{14. 16} U.S.C. § 1333(b)(3).

^{15.} Id. at § 1333(b)(2).

^{16.} Maintaining Range and Herd Health, supra note 13.

^{17. 16} U.S.C. § 1333(b)(2).

^{18.} *Id*.

^{19.} *Id*.

^{20.} Am. Wild Horse Campaign v. Bernhardt, 963 F.3d 1001, 1005 (9th Cir. 2020).

horses, and \$125 for trained wild horses.²¹ BLM recently implemented an Adoption Incentive Program that would pay people up to \$1,000 to adopt a wild horse.²² Although adoption rates doubled in the first year, from approximately 3,000 to 6,000, this still could not match the over 40,000 horses in long-term storage.²³ Furthermore, horses may only be euthanized if they satisfy certain pre-existing conditions, which include "[d]isplay[ing] a hopeless prognosis for life," or "requir[ing] continuous treatment for the relief of pain and suffering," among other factors.²⁴ Euthanasia of healthy wild horses cannot be performed, because Congress has never allocated funds toward destroying healthy horses under WHBA.²⁵ This lack of funding is perhaps unsurprising, given the vehement disapproval BLM would face from both conservation groups and the public.²⁶

While sterilization is allowed as part of WHBA, it is not prioritized.²⁷ BLM considers two fertility control methods to be viable for limiting wild horse populations: Porcine zona pellucida (PZP), and recently, the GonaCon vaccine.²⁸ These vaccines are administered via hand injection or darting.²⁹ PZP prevents pregnancy by stimulating the "mare's immune system to make antibodies to . . . block fertilization of the egg."³⁰ PZP is only effective for a single year, which makes sterilization difficult.³¹ In contrast, the GonaCon vaccine interferes with the gonadotropin-releasing hormone, which is critical to fertility.³² GonaCon potentially has greater longevity than PZP.³³ If the GonaCon vaccine is administered with a subsequent booster shot, it is 100 percent effective the following year, and 85 percent effective for two years after that.³⁴ Longevity is especially important for these vaccines because wild horses rarely allow BLM employees to approach closely enough to administer a dart.³⁵ Similarly, a longer lasting vaccine would improve hand injection of vaccines because the horses

^{21.} Adoption and Purchase Frequently Asked Questions, BUREAU OF LAND MGMT., https://www.blm.gov/programs/wild-horse-and-burro/adoption-and-sales/adoption-faq (last visited July 18, 2021).

^{22.} Cash Incentives Help Agency Adopt More Wild Horses and Burros, BUREAU OF LAND MGMT., https://www.blm.gov/press-release/cash-incentives-help-agency-adopt-more-wild-horses-and-burros (last visited July 18, 2021).

^{23.} Id.

^{24.} BUREAU OF LAND MGMT., IM 2009-041, EUTHANASIA OF WILD HORSES AND BURROS FOR REASONS RELATED TO HEALTH, HANDLING AND ACTS OF MERCY (2009), https://www.blm.gov/policy/im-2009-041.

^{25.} Am. Wild Horse Campaign, 963 F.3d at 1005.

^{26.} Kenneth P. Pitt, *The Wild Free-Roaming Horses and Burros Act A Western Melodrama*, 15 ENV'T L. 503, 504 (1985).

^{27. 16} U.S.C. § 1333(b)(1).

^{28.} Albert J. Kane, A Review of Contemporary Contraceptives and Sterilization Techniques for Feral Horses, 12 HUM.–WILDLIFE INTERACTIONS 111, 111 (2018).

^{29.} *Id.* at 113.

^{30.} *Id.* at 111.

^{31.} Id. at 112.

^{32.} *Id*.

^{33.} *Id*.

^{34.} Id. at 112–13.

^{35.} *Id.* at 112.

would not have to be rounded up as frequently, which would avoid a difficult and challenging process.36

II. ANALYSIS

A. Procedural History and Case Analysis

The case American Wild Horse Campaign v. Bernhardt (2020) involved a dispute between AWHC and BLM over wild horse management in the Antelope and Triple B Complexes, an area of approximately 2.8 million acres of land in northeastern Nevada.³⁷ In 2017, BLM determined that this area had approximately 8,600 more horses than the recommended AML of 899 to 1,678.38 The dispute arose over BLM's proposal to geld some of the male horses, allowing them to roam free, rather than placing them in long-term storage facilities.³⁹ Gelding is a term used to describe castration in domestic horses.⁴⁰ Because gelding eliminates the sperm-producing organs, it is a 100 percent effective sterilization technique.⁴¹ However, gelding can reduce typical maletype behavior, and can cause complications in approximately 10 percent of procedures (such as hemorrhaging).42

BLM commissioned a report from NAS, which was completed in 2013, to determine the best wild horse population management techniques.⁴³ The report determined that the best sterilization technique for male horses was chemical vasectomy.44 It was favored over gelding, because, unlike gelding, it would not affect testosterone production of the horses, and therefore not alter horses' social structure.⁴⁵ However, NAS noted there would need to be more testing to prove the efficacy rate of chemical vasectomy.46

In BLM's 2017 environmental assessment for the gather plan, BLM adopted a policy of gelding.⁴⁷ Although gelding has not specifically been used on wild horses, BLM commissioned a gelding study in which they would monitor

38. Id.

39. Id.

45. See id. at 124.

^{36.} Id.

^{37.} Am. Wild Horse Campaign v. Bernhardt, 963 F.3d 1001, 1006 (9th Cir. 2020).

^{40.} COMM. TO REVIEW THE BUREAU OF LAND MGMT. WILD HORSE & BURRO MGMT. PROGRAM, NAT'L RSCH. COUNCIL, USING SCIENCE TO IMPROVE THE BLM WILD HORSE AND BURRO PROGRAM: A WAY FORWARD 123 (2013).

^{41.} Id.

^{42.} Id.

^{43.} Am. Wild Horse Campaign, 963 F.3d at 1005.

^{44.} COMM. TO REVIEW THE BUREAU OF LAND MGMT. WILD HORSE & BURRO MGMT. PROGRAM, supra note 40, at 134.

^{46.} Id. at 132.

^{47.} BUREAU OF LAND MGMT., ANTELOPE AND TRIPLE B COMPLEXES GATHER PLAN: ENVIRONMENTAL ASSESSMENT 12 (2017), https://eplanning.blm.gov/public projects/nepa/84367/ 113996/139223/Antelope_and_Triple_B_Complexes_Gather_Plan_EA_508.pdf.

the effects gelding would have on horse social interaction.⁴⁸ AWHC sued BLM for violating the WHBA, NEPA, and the Administrative Procedure Act.⁴⁹ AWHC argued that BLM's geld and release plan could have significant environmental impacts, and that it met several of the intensity factors that would warrant an EIS under NEPA.⁵⁰ These intensity factors included that: "(1) the Plan has highly uncertain effects; (2) the Plan has highly controversial effects; (3) the area has unique characteristics; (4) the decision establishes a precedent; and (5) the decision threatens a violation of the Wild Free-Roaming Horses and Burros Act."⁵¹

While the Ninth Circuit agreed there was some uncertainty about the effect that gelding would have on the social structure of wild horses, this effect did not rise to the level of being "highly uncertain," and therefore did not trigger the requirement for an EIS.⁵² The court agreed with BLM's argument that behavioral changes to gelded horses were unlikely to be significant, as horses "take on a number of different roles during their lives," including non-reproductive roles.⁵³ Horses begin in their natal band, and then disperse and live as bachelors with other young males.⁵⁴ At maturity, some stallions will have their own breeding harem, while others will become satellites to these harems.⁵⁵ Not all stallions have the same chance of reproductive success, and those without their own harem will likely be less successful.⁵⁶ Furthermore, male horses have naturally varying levels of testosterone, and gelding the horses does not eliminate all male-type behaviors.⁵⁷ Additionally, the court concluded that these effects will likely be less significant than the alternative—that of "permanently removing those horses from public lands."⁵⁸

The Ninth Circuit was less persuaded by the arguments that an EIS was warranted based on the other suggested intensity factors. Concerning the argument that the proposal was highly controversial, the court reasoned that the agency's decision was not sufficient to "cast[] serious doubt upon the reasonableness of [the] agency's conclusions."⁵⁹ Even if there was public controversy, the NAS report did not directly conflict with BLM's findings.⁶⁰ The court concluded that the third intensity factor, that of protecting important cultural resources under NEPA, did not apply because a "specific statute," such

^{48.} Id.

^{49.} Am. Wild Horse Campaign v. Bernhardt, 963 F.3d 1001, 1004 (9th Cir. 2020).

^{50.} *Id.* at 1007.

^{51.} Id. at 1008.

^{52.} Id.

^{53.} Id. at 1009.

^{54.} BUREAU OF LAND MGMT., *supra* note 47, at 138.

^{55.} *Id*.

^{56.} Id.

^{57.} Am. Wild Horse Campaign, 963 F.3d at 1010.

^{58.} Id. at 1009.

^{59.} Id. at 1011.

^{60.} Id.

as WHBA, governs over a more general one, such as NEPA.⁶¹ Additionally, under the fourth intensity factor, gelding horses does not establish a precedent, because BLM has released gelded horses before.⁶² Nor, under the fifth intensity factor, does it threaten a violation of WHBA, because BLM followed the WHBA's guidelines.63 Ultimately, the Ninth Circuit affirmed the District Court for the District of Nevada's decision and did not require BLM to write an EIS.64 Because none of the intensity factors were satisfied, the court held that BLM's geld and release plan was unlikely to have a significant impact on the environment.65

В. Sterilization is a Preferable Population Management Technique

The case American Wild Horse Campaign v. Bernhardt presents a possible solution to wild horse overpopulation-that of prioritizing sterilization. The WHBA prioritizes euthanasia and adoption as the primary management techniques, whereas BLM primarily practices sterilization and gathering.⁶⁶ By ruling in BLM's favor, and not requiring BLM to write an EIS for their geld and release plan, the Ninth Circuit lent further credence to the importance of sterilization as a management practice.⁶⁷ While this is an important step forward, there are still far too many horses on public lands or in expensive long-term holding facilities.⁶⁸ Debates over the best sterilization techniques only hinder their application.⁶⁹ WHBA should be modified to prioritize sterilization because it can help solve the wild horse overpopulation problem.⁷⁰

Unmanaged wild horse populations can double within four to five years, and triple within six to eight years.⁷¹ If left unchecked, wild horse populations can quickly exceed the carrying capacity of the land, and suffer dehydration and starvation.⁷² Overuse of the land can then lead to degradation, which runs contrary to BLM's multiple-use objective.73 To prevent these results, BLM primarily uses removal, which is expensive.⁷⁴ In 2018, 44,000 horses were in long-term storage, at a cost of \$50 million.75 Additionally, these horses

^{61.} Id.

^{62.} Id.

^{63.} Id. at 1012.

^{64.} Id. at 1014. 65 Id. at 1012.

Id. at 1005. 66.

^{67.}

See id. at 1004.

^{68.} Garrott, supra note 8, at 46.

^{69.} Id. at 54.

Calie Hendrickson, Managing Healthy Wild Horses and Burros on Healthy Rangelands Tools 70. and the Toolbox, 12 HUM.-WILDLIFE INTERACTIONS 143, 145 (2018).

^{71.} Garrott, supra note 8, at 48.

^{72.} Id.

^{73.} Hendrickson, supra note 70, at 143.

^{74.} Garrott, supra note 8, at 50.

^{75.} Id. at 46.

experienced unnecessary stress as a result of being removed and living in confinement, as opposed to roaming free on public rangelands.⁷⁶

Alternatives to removal include adoption, natural predators, euthanasia, and fertility controls.⁷⁷ Adoption is not feasible because of the sheer number of excess wild horses on rangelands.78 Approximately 2,700 horses are adopted annually, whereas there are approximately 45,000 excess horses in storage.79 Natural predators also cannot control population sizes.⁸⁰ Although groups such as AWHC support natural predators as population control methods, only mountain lions live on rangelands.⁸¹ Mountain lions are only effective at killing young horses, and their predation is not enough to control population size.82 Euthanasia is not a good solution because of the substantial public outcry against BLM that would result.83 When members of BLM's Wild Horse and Burro Advisory Board voted to suggest euthanizing wild horses, they received threats and hate emails.⁸⁴ Although the Trump administration suggested allowing BLM to euthanize wild horses, this proposal was never adopted.85 In 2019, Casey Hammond, then acting director of BLM, stated that euthanasia was "not an option that's being discussed," and that it was not something "the president would be supportive of."86

In contrast, fertility controls have broad support by conservation groups.⁸⁷ Contrary to what *American Wild Horse Campaign* would suggest, advocacy groups such as AWHC do not object to fertility controls.⁸⁸ In fact, AWHC specifically advocates the use of PZP.⁸⁹ Rather, AWHC objected specifically to the geld and release portion of the gather plan because they believed gelding caused highly uncertain effects.⁹⁰ Likewise, even supporters of euthanasia support fertility controls.⁹¹ Ben Masters of the Wild Horse and Burro Advisory

85. Scott Streater, *BLM Chief Euthanasia a No-Go for Herd Problems*, E&E NEWS (July 11, 2019, 1:27 PM), https://www.eenews.net/greenwire/stories/1060725907.

86. Id.

88. *Fertility Control*, AM. WILD HORSE CAMPAIGN, https://americanwildhorsecampaign.org/ fertility-control (last visited July 18, 2021).

89. Id.

^{76.} Id.

^{77.} Id. at 48-54.

^{78.} Hendrickson, *supra* note 70, at 144.

^{79.} Id. at 143-44.

^{80.} Garrott, supra note 8, at 49.

^{81.} Id.

^{82.} Id.

^{83.} Hendrickson, *supra* note 70, at 146.

^{84.} Ryan Bell, *Is the West's Wild Horse Crisis So Bad Only Euthanasia Can Fix It?*, NAT'L GEOGRAPHIC (Sept. 12, 2016), https://www.nationalgeographic.com/adventure/article/wild-horses-euthanasia.

^{87.} Garrott, supra note 8, at 46.

^{90.} Am. Wild Horse Campaign v. Bernhardt, 963 F.3d 1001, 1008 (9th Cir. 2020).

^{91.} Bell, supra note 84.

Board supports PZP because it "works in many places and I want to see this usage of fertility control greatly expanded."⁹²

Fertility control treatments will reduce the number of horses in captivity.⁹³ The geld and release plan allows more male horses to roam free.⁹⁴ When herds are at AMLs, PZP can substantially reduce or eliminate the need for gathers and removals.⁹⁵ Additionally, fertility control treatments, such as the GonaCon vaccine, may be more effective than past treatments such as PZP. The GonaCon vaccine is just now being used in proposals like the gather plan, and unlike PZP, it has the potential to last for several years.⁹⁶

CONCLUSION

American Wild Horse Campaign v. Bernhardt is an example of BLM's opportunity to improve management of wild horse populations through fertility controls. Instead of merely allowing sterilization as a population control method, WHBA should list it as one of the foremost methods of population control, along with euthanasia and adoption. *American Wild Horse Campaign* is an example of the endless discussion that occurs over proper sterilization methods, rather than taking decisive action.⁹⁷ Modifying WHBA to prioritize sterilization could allow sterilization technologies like the GonaCon vaccine to move forward more quickly, with the enhanced legal clarity spurring more research. Although fertility control methods are not the only solution, they should be prioritized. These modifications would allow WHBA to be more effective at reducing wild horse populations.

Andrea White

97. See Garrott, supra note 8, at 54.

We welcome responses to this In Brief. If you are interested in submitting a response for our online journal, *Ecology Law Currents*, please contact cse.elq@law.berkeley.edu. Responses to articles may be viewed at our website, http://www.ecologylawquarterly.org.

^{92.} Id.

^{93.} See Kane, supra note 28, at 112.

^{94.} Am. Wild Horse Campaign, 963 F.3d at 1006.

^{95.} Kane, *supra* note 28, at 112.

^{96.} Id.