

**UNITED STATES DEPARTMENT OF THE  
INTERIOR  
Bureau of Land Management  
Burns District Office**

**Finding of No Significant Impact**

**Mare Sterilization Research  
Environmental Assessment  
DOI-BLM-OR-B000-2015-0055-EA**

**INTRODUCTION**

The Burns District Bureau of Land Management (BLM) has prepared an environmental assessment (EA) to analyze the effects of conducting three research studies investigating the safety and effectiveness of three separate methods of surgical sterilization of wild horse mares.

The purpose of the action is to conduct research on three methods of permanent mare sterilization on wild horses at the BLM's Wild Horse Corral Facility in Hines, Oregon in order to assess which method(s) are effective in wild horses and could be applied safely and efficiently to wild horse mares on lands administered by the BLM. The BLM would like to conduct research on these three methods to ensure they are effective and safe for application in wild horses. The proposed sterilization studies represent feasibility or proof of concept approaches and the results are not policy setting for BLM. Any future proposal by BLM to utilize any of the procedures analyzed in this EA would require additional analysis and would be subject to NEPA.

The Department of the Interior (DOI) has identified the need for the BLM to research and test wild horse population control methods that have been reviewed and highly rated by the National Research Council (NRC) as potentially useful surgical sterilization methods. These three methods are: ovariectomy via colpotomy, minimally invasive tubal ligation, and minimally invasive hysteroscopically-guided laser ablation.

**SUMMARY OF THE PROPOSED ACTION**

The proposed action is to conduct research on the safety and practicality of sterilizing mares as a tool for wild horse population control, using the three methods specified below. The proposed action includes the functional assessment of three methods of mare sterilization.

1. *Ovariectomy via colpotomy* (further referenced as "ovariectomy") – to remove both ovaries,
2. *Minimally invasive tubal ligation* (further referenced as "tubal ligation") – to cauterize and then cut the oviduct, and

3. *Minimally invasive hysteroscopically-guided oviduct papilla laser ablation* (further referenced as “hysteroscopically-guided laser ablation”) - to use a laser to scar and seal the opening of each oviduct.

All procedures would take place at Oregon’s Wild Horse Corral Facility in Hines, Oregon. The three studies combined would involve approximately 225 wild horse mares previously gathered and removed from BLM herd management areas (HMA). In coordination with BLM, a team of experienced veterinarians has been assembled by Oregon State University (OSU) to conduct and support the objectives of this study. Three veterinarians licensed in the State of Oregon would conduct the procedures. This team has extensive experiences in equine reproduction, equine urogenital surgery, veterinary endoscopy, and minimally invasive surgery.

### **FINDING OF NO SIGNIFICANT IMPACT**

The Council on Environmental Quality’s (CEQ) regulations provide that the significance of impacts must be determined in terms of both context and intensity (40 CFR § 508.27). An analysis of the context and intensity of the selected alternative follows.

**Context:** In accordance with CEQ regulations found at 40 CFR § 1508.27(a), the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short- and long-term effects are relevant.

Based upon widespread interest in the topic of sterilizing wild mares and the urgent need for new methods and techniques for wild horse population control, the BLM has determined that the context of the selected alternative is the ten western states with HMAs.

**Intensity:** The following analyzes the intensity of the selected alternative utilizing the ten significance criteria described in CEQ regulations found at 40 CFR § 1508.27(b):

The CEQ's ten considerations for evaluating intensity (severity of effect):

1. *Impacts that may be both beneficial and adverse.* The EA considered potential beneficial and adverse effects.

Wild Horse Mares (EA, p. 31) - The proposed surgical procedures have potential to create discomfort for each mare within the first week following surgery. There is always a risk of mortality associated with surgical procedures and the handling of wild animals. The anticipated risk of mortality associated with these procedures is less than two percent. Because ovariectomies and tubal ligations would be conducted on pregnant mares the possibilities of and rates of abortions due to conducting the procedures are unknown. Project design features are incorporated into each proposal to reduce the risks to the mare, the pregnancy, and the veterinarian performing the

procedure. These design features are described in the proposed action beginning on page 13 of the EA. Permanently sterilizing a mare is expected to provide long-term beneficial effects, such as maintaining or improving overall body condition, since the physical burden of pregnancy and raising a foal would not occur. The results of the research would provide a better understanding of the beneficial and adverse effects of each procedure and allow for more informed decision making in the future regarding wild horse population management.

Social and Economic Values (EA, p. 45) - Permanent mare sterilization is both opposed and supported by the public. Some would like to see BLM only use the available and approved fertility control treatment porcine zona pellucida (PZP) or not apply fertility control methods at all. These groups feel that surgical procedures for sterilization are inhumane. Others support research to better understand potential new methods and techniques for population control. These supporters feel that overpopulations of wild horses on the range are inhumane and neglect BLM's responsibility to manage populations in a thriving natural ecological balance (TNEB). There is a lack of long-term and widely effective population control methods available to BLM resulting in the seemingly endless cycle of gathering excess horses and sending them to off-range holding facilities. In 2015, the total appropriations for the entire wild horse and burro (WH&B) program were \$75.2 million; 65.7 percent (\$49.3 million) went to off-range holding costs (WH&B Quick Facts 2015).

The BLM has the challenging task of choosing appropriate, safe, and humane methods of wild horse population growth control that are ecologically and financially viable as well as socially acceptable. Results from the studies under the proposed action would aid in determining the social acceptability of each procedure because the studies would quantify complication rates, effectiveness, and success rates of each technique.

2. *Degree to which the proposed action affects public health and safety.* No aspect of the proposed action alternative would have an effect on public health and safety. The entirety of the three proposed procedures would be conducted within Oregon's Wild Horse Corral Facility and members of the public would not be involved in implementation of the proposed action.
3. *Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers (WSR), or ecologically critical areas.* No aspect of the proposed action alternative would have an effect on unique characteristics of the geographic area as the entirety of the proposed action would take place in Oregon's Wild Horse Corral Facility.
4. *The degree to which effects on the quality of the human environment are likely to be highly controversial.* Controversy in this context means disagreement about the nature of the effects, not expressions of opposition to the proposed action or preference among the alternatives. The expressions of opposition to conducting sterilization research on wild mares are not supported by peer-reviewed science. The effects of the three sterilization proposals are fully analyzed in Chapter III of the EA. This analysis

is supported by peer- reviewed science coupled with experience handling wild horse mares.

5. *Degree to which possible effects on the human environment are highly uncertain or involve unique or unknown risks.* The analysis has not shown there would be any unique or unknown risks to the human environment as the entirety of the proposed action would take place within Oregon's Wild Horse Corral Facility. The analysis beginning on page 35 of the EA shows that the proposed action does involve unique or unknown risks to the mare since ovariectomy via colpotomy has not been adequately studied on pregnant mares and tubal ligation and hysteroscopically-guided laser ablation are new techniques of mare sterilization. However, based on the unpublished Sheldon National Wildlife Refuge study on ovariectomizing feral mares, the risk of mortality they observed was less than 2 percent (EA Appendix D - Bowen 2015). The tubal ligation and hysteroscopically-guided laser ablation studies are considered minimally invasive and therefore are accompanied by an even lower risk to the mare. The 2015 NRC Review of Oregon Proposals (EA Appendix B) explains how the committee believes tubal ligation and hysteroscopically-guided laser ablation would be safer—with less risk of hemorrhage and evisceration—and probably less painful. This evidence indicates the risks to the mare are not *highly* uncertain.
6. *Degree to which the action may establish a precedent for future actions with significant impacts or represents a decision in principle about a future consideration.* The outcome of the ovariectomy study may have potential to influence the project design features incorporated into BLM's Rock Springs, Wyoming study "Evaluating behavior, demography, and ecology of spayed [sterilized] free-roaming mares." The proposed Rock Springs study is discussed on pages 9 and 31 of the EA. However this proposed project neither establishes a precedent nor represents a decision in principle about future actions. The results of the proposed action should provide BLM additional information on the safety and effectiveness of potential new methods of mare sterilization. These studies represent feasibility or proof of concept approaches and the results are not policy setting for BLM (EA, p. 6). Any future proposal by BLM to utilize any of the procedures analyzed in this EA would require additional analysis and would be subject to NEPA compliance (EA, p. 6).
7. *Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.* The EA did not reveal that the action is related to other actions with individually insignificant but cumulatively significant impacts.
8. *Degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places.* The entirety of the proposed action would take place in Oregon's Wild Horse Corral Facility and there are no features within this facility listed or eligible for listing in the National Register of Historic Places.
9. *The degree to which the action may adversely affect an endangered or threatened species or its habitat.* There are no known threatened or endangered (T&E) species or

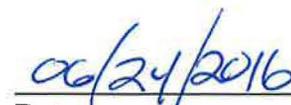
their habitat affected by the proposed action as the studies would take place at Oregon's Wild Horse Corral Facility.

10. *Whether an action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.* The proposed action does not threaten to violate any law. The proposed action is in compliance with the Wild Free-Roaming Horses and Burros Act of 1971 (Public Law (PL) 92-195).

§1333. Powers and duties of Secretary (b) Inventory and determinations; consultations; overpopulations; research study; submittal to Congress (1) The Secretary shall maintain a current inventory of wild free-roaming horses and burros on given areas of the public lands. The purpose of such inventory shall be to: make determinations as to whether and where an overpopulation exists and whether action should be taken to remove excess animals; determine appropriate management levels of wild free-roaming horses and burros on these areas of the public lands; and determine whether appropriate management levels should be achieved by the removal or destruction of excess animals, or other options (such as sterilization, or natural controls on population levels). In making such determinations the Secretary shall consult with the United States Fish and Wildlife Service, wildlife agencies of the State or States wherein wild free-roaming horses and burros are located, such individuals independent of Federal and State government as have been recommended by the National Academy of Sciences, and such other individuals whom he determines have scientific expertise and special knowledge of wild horse and burro protection, wild-life management and animal husbandry as related to rangeland management.

On the basis of the information contained in the EA and all other information available to me, it is my determination that the implementation of the proposed action alternative will not have significant environmental impact. The environmental effects, together with the incorporated project design features, do not constitute a major Federal action having a significant effect on the human environment. Therefore, an environmental impact statement (EIS) is not necessary and will not be prepared.

  
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Jeff Rose, Burns District Manager

  
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Date