

APPENDIX 10: Draft Criteria for Immunocontraceptive Use in Wild Horse Herds

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Issue Summary: The Wild Horse and Burro (WH&B) adoption program has been the BLM's only acceptable outlet for removing excess animals from public lands. This program has not been able to find acceptable homes for all the animals that have been removed from the range to reach Appropriate Management Levels.

Agency Position: The BLM's WH&B program has been faced with the task of achieving AML in wild horse herds in a specified time frame. With an average recruitment rate of 18-24% in healthy horse herds, the time frame has become a moving target which is difficult to achieve with the adoption program as the only outlet for excess horses. The immunocontraceptive vaccine (PZP) has been used strictly as a research tool on wild mares. The vaccine now should be tried as a management tool.

Background: The BLM's WH&B program has been investigating contraceptive methods since 1985. The National Research Council funded research using Nevada and Oregon wild horse herds. The first research dealt with steroid implants in the necks of mares mainly between the ages of 3 and 12 years with some implants done in older mares. All of the treated horses were radio collared along with a control group. The implants were successful in controlling fertility for a 28 month period in most of the mares. Dominant stallions were also gelded in an attempt to limit reproduction. Both studies were completed in 1989. However, there were serious problems with the radio collars, the invasiveness of the implant procedure, and long-term effects of the steroid implants, so additional research was not pursued.

BLM-sponsored research on the PZP immunocontraceptive vaccine has been carried out since 1992. At the present time the vaccine is only effective for 1 year. The current window of application is October through February for maximum effectiveness. A 2-year vaccine may be ready for field use in the fall of 1999. However, the BLM believes the PZP vaccine is ready to try now as a management tool.

Immunocontraception needs to be dealt with in HMA's on a case-by-case basis to address specific problems and should not be used wholesale on all herds. HMA's proposed for fertility control application should meet the following criteria:

1. The need to apply the vaccine to control wild horse population size in a given HMA or complex of HMA's must be identified and documented. Documentation should include habitat monitoring data and reliable information on wild horse population size and reproductive rates.

2. Fertility control should be applied to biologically discrete populations, covering more than one HMA if there is significant exchange of horses between HMA's.

3. A site-specific population model should be developed to determine the number of animals to be targeted for contraception to achieve specified objectives, and to forecast the population effects of contraception.

4. Contraception must not be used in a manner that threatens the health of individual animals or the long-term viability of any herd.

5. Site-specific minimum viable population size should be identified based on:

- a. Number of animals
- b. Reproduction rates
- c. Age/sex ratios
- d. Environmental and range conditions and stability

6. Fertility control should only be applied on HMA's where AML's have been set.

7. The BLM must complete necessary NEPA documentation prior to utilizing fertility control. Preparation of this documentation must be timely enough to provide adequate opportunities for public review.

8. A protocol for administering the vaccine must be developed, including rules for selecting specific animals for treatment. These rules should follow the "minimum feasible level of management" language of the Act. Ongoing discussions among BLM staff, researchers, and the public should be conducted to allow these protocols to evolve with growing understanding of horse behavior, genetics, and the impacts of fertility control.

9. Gatherings at which fertility control would be used must be coordinated through the National Program Office.

Public Interest: The public is very interested in all aspects of the WH&B Program. Many feel we should not interfere with the animals on the range; there are also concerns' with long-term effects of fertility control on horse behavior and herd viability. With adequate monitoring and guidelines, however, this could be a broadly acceptable way of controlling horse herd growth rates.