

**United States Department of the Interior  
Bureau of Land Management**

---

**Decision Record**

**Environmental Assessment**

**DOI-BLM-UT-W010-2014-0021-EA**

---

**May 2015**

**Onaqui Mountain Herd Management Area Fertility Control**

***Location:*** Townships 5 to 10 South, Range 5 to 9 West, various sections, Tooele County, Utah

***Applicant/Address:*** Not Applicable

Salt Lake Field Office  
2370 South Decker Lake Boulevard  
West Valley City, Utah 84119  
Phone: (801) 977-4300  
Fax: (801) 977-4397



**Decision Record**  
**Environmental Assessment**  
**DOI-BLM-UT-W010-2014-0021-EA**  
**Onaqui Mountain Herd Management Area Fertility Control**

It is my decision to select the Proposed Action alternative from the Onaqui Mountain Herd Management Area Fertility Control Environmental Assessment (DOI-BLM-UT-W010-2014-0021-EA).

My decision will implement a long term fertility control program for the Onaqui Mountain Herd Management Area (HMA). This action will apply fertility control measures on select mares through 2020 (or as long as it can be reasonably concluded that no new information and no new circumstances have substantially changed in the area of analysis) in order to maintain a population of 160-175 adult wild horses which is within the Appropriate Management Level (AML) range of 121–210 adult wild horses. The fertility control process will involve the use of ZonaStat-H which is the liquid native Porcine Zona Pellucida (PZP), single dose inoculations and the delivery system will be through the use of dart guns. If it is determined that a mare or mares cannot be approached within the darting range on foot, then baiting (not trapping) will be used to treat the mares. Baiting will be with salt, mineral, or weed free hay in areas that horses utilize in their normal movements throughout the HMA.

The Proposed Action incorporates the following actions and management requirements:

- The fertility control treatment will be conducted in accordance with the approved standard operating and post-treatment monitoring procedures (SOPs) as presented in Appendix A.
- PZP mixing procedures will follow those listed in Appendix B. The PZP protocol will be examined annually, in line with any new instructions provided by Science and Conservation Center (SCC).
- Horse Immunocontraception Data Sheets will be prepared and updated as presented in Appendix C. An individual mare's previous records will be reviewed prior to any darting activity.
- Mares will be individually marked and/or be individually recognizable without error. No mare will be treated unless she has been identified for treatment.
- PZP will be administered in the one year liquid doses and will start in 2015 and go through 2020. If monitoring shows successful applications, no negative reactions and reduction in foaling rates, the fertility control treatments would continue beyond 2020 as long as it can be reasonably concluded that no new information and no new circumstances arise that need to be considered and those that are analyzed within EA DOI-BLM-UT-W010-2014-0021-EA have not substantially changed within the HMA. Fertility control applications will also depend on annual funding and the presence of qualified applicators.
- Ideal time to booster previously treated mares will be between February through April of each year. However, if a previously treated mare is missed, a booster shot could be administered at any time of the year. Each mare will have an identification sheet with

pictures, describing any markings, brands, scars or other distinguishing marks. At the beginning of each year, a list of the mares identified for treatment will be created. That information will be loaded into a format that is easy to use in the field (book or electronic device).

- New mares (over the age of 18 months) coming into treatment will be given the primer dose between November through January of each year. New mares will receive their booster between February and April. Age will be based on when the horses are observed being new herd foals. For older previously treated horses, it will come from the treatments data sheets. Aging older untreated horses will be based off of photographs or similar documentation provided by volunteers knowledgeable of the herd/bands. For an age of a mare that cannot be established, that mare will be allowed to raise a foal to one year of age then begin treatment.
- Primer inoculations will be administered to mares that are at least 18 months old. Mares that are 2-4 years old will be treated. The 5 year old mares will be taken off the treatment schedule until they have produced at least one foal that lives to be one year old. After a mare produces one foal that survives for one year, she will be put back on PZP treatments.
- Flexibility in determining which mares are selected for treatment is vital to the success of the fertility control program. Adjustments will be made if it is found that there is a severe reaction by an individual mare, that a mare can contribute more to genetic diversity or a mare that might have a negative effect to the genetic diversity of the herd. This information will be documented on the Data Sheet.
- If timing or funding constraints arise, a treatment priority will consider the band or herd composition and priority will be given based on age class. Priorities will be as established as follows:
  - 1) 2-4 year old mares,
  - 2) mares just coming back onto treatment, and
  - 3) older mares that have received several treatments since producing a live foal.
- The annual treatment schedule, database and Data Sheets will be reviewed/approved by the authorized officer with the SLFO wild horse specialist and/or darting specialist. An annual monitoring report will be prepared for the authorized officer and filed with the HMA records. This monitoring report will show PZP orders placed/costs, planned treatment schedule/actual treatments (number/dates of mares treated), lost darts, negative reactions/BLM action taken for that mare, number of new/current year foals counted/observed, unique circumstances, off road vehicular use required, general rangeland condition/water availability, volunteer efforts, correspondence between/among SLFO and the Science and Conservation Center (SCC) and National Wild Horse and Burro Program (WH&B) Office and other pertinent information.

The PZP field darting treatment protocol will take approximately two to three years after initiation to fully implement. Field darting will be conducted in an opportunistic manner while the specialist is conducting routine monitoring activities as part of normal duties in the field. Ordinarily, field darting activities will be conducted on foot. Access throughout the HMA will be achieved by the use of 4X4 vehicles and other off-highway vehicles (OHVs). Vehicles will be using existing roads and trails in the HMA. On a case-by-case basis, the use of OHVs off existing roads and trails may be allowed for administrative purposes; however, such use shall be made only with the approval of the authorized officer.

Personnel authorized for field darting of the Onaqui horses must be trained for this task and certified by the SCC at ZooMontana in Billings, Montana. Additionally, all work will be conducted in accordance with the SOPs and mixing procedures.

The SLFO will work with the National WH&B Office in Reno, Nevada, and the SCC at ZooMontana to order the PZP vaccine. Each dose will consist of 100 micrograms of PZP in 0.5 cc buffer (a phosphate buffered saline solution). Mixing the vaccine will be accomplished as described in the Wild Horse Contraceptive Training Manual. Remote application will be by means of 1.0 cc Pneu-dart darts, with either 1.25 or 1.5 inch barbless needles, delivered by either Dan-inject or Pneu-dart CO<sub>2</sub> powered or cartridge fired guns. An attempt will be made to recover all darts (normally about a 98% recovery is expected).

SLFO will be applying adaptive management principles. If policies change or the vaccine effects or effectiveness prove undesirable, then the application of the PZP fertility control measures will be stopped or reconsidered based on new scientific information. If PZP is dropped from BLM use and is replaced by another drug or immunization for fertility control purposes, that method will be applied by the SLFO in future treatments.

During past treatments mares have been branded on the hip and the neck. These brands will help in the identification of the horses. During any future gathers new brands will be put on mares released back to the HMA. Any mares without brand will be identified by color, leg and face markings, and any other unique markings or scars. Once each horse is positively identified, their information will be compiled into a database along with photographs. Individual identification information (photographs and unique characteristics) will be compiled into books or put onto an electronic device that can be taken to the field. Individual numbers are assigned to each herd/band member based on these unique characteristics. Unique numbers will be assigned to all mares and documented on the Data Sheets. A filly under 18 months will be tracked on her mother's Data Sheet. A filly over 18 months of age will receive her own number and Data Sheet. Maternal kinship will be tracked or followed through Data Sheet notes.

All darting, foaling, and health data will be recorded as per the Data Sheet. Data Sheets will be prepared and maintained in the SLFO. Initially, copies of the data sheets will be sent to the National WH&B Program Office and to the SCC. Thereafter, only treatment updates or new mare Data Sheets will be sent annually.

**Authorities:** My authority for implementing a long term fertility control program is provided under the Section 1333 (b) (1) of the Wild Free-Roaming Horses and Burros Act of 1971, (P. L. 92–195) and Title V of the Federal Land Policy and Management Act (FLPMA) of 1976 (90 Stat. 2776 43 U.S.C. 1761) and the regulations thereunder at 43 CFR Part 2800 and Part 4700.

**Compliance:** Compliance for the program will be conducted by the Salt Lake Field Office Wild Horse staff Plan Conformance and Consistency: The Proposed Action was reviewed and found to be in conformance with the land use plan goals and objectives as required by 43 CFR 1610.5. The January 1990, Record of Decision for the Pony Express Resource Management Plan (RMP) specifies the following: the Wild Horse Program, Decision 1 (Manage Herd Size).

**Alternatives Considered:** The No Action Alternative was the only alternative to the proposed action evaluated in EA. SLFO also considered but eliminated the following three (3) alternatives from detailed analysis: Helicopter Capture, Treat and Release Wild Horses; Bait Trapping with Selective Removal; and Change AML Numbers and Decrease Livestock Grazing.

Other action alternatives were not identified by the interdisciplinary team or the public. The alternatives carried forward represent those necessary for a reasoned choice (40 CFR 1502.14) and are based on the issues that were identified by the interdisciplinary team and the public.

**Rationale for Decision:** The proposed action best met the purpose and need for agency action. The expectations for the fertility control program include: the short-term goal is to bring growth rates to less than seven percent and the long-term goal is to reduce the need for gathers and removals, without jeopardizing the genetic health of the herd. The No Action Alternative was not selected because the stated goals and benefits of the Proposed Action are consistent with the provisions of the FLPMA and WFRHBA analysis of the program provided no viable justification as required by 43 CFR 4700 for not proactively managing the wild horses.

The expectations for the proposed action include: the short-term goal is to bring growth rates to less than seven percent and the long-term goal is to reduce the need for gathers and removals, without jeopardizing the genetic health of the herd.

Notice of this pending project was posted on the Electronic Notification Bulletin Board (ENBB) 6/2/2014. As part of the scoping process, SLFO offered a 30 day scoping period from 6/2/14–7/2/14. Two comments were submitted during the scoping period. The SLFO ran a 17 day public comment period on the EA and unsigned FONSI from 2/17/2015 through 3/6/2015. On 3/9/2015, SLFO extended the Comment Period through 3/13/15. This 23-day public review and comment period for the EA and unsigned FONSI generated approximately 7,299 comments from organizations and individuals. Native American Tribes were also notified and consulted on the program.

**Appeal Language:** This decision shall take effect immediately upon the date it is signed by the Authorized Officer and shall remain in effect while any appeal is pending unless the Interior Board of Land Appeals issues a stay. Any appeal of this decision must be filed in the office of the Authorized Officer at 2370 South Decker Lake Blvd, West Valley City, UT 84119. If a statement of reasons for the appeal is not included with the notice, it must be filed with the Interior Board of Land Appeals, Office of Hearings and Appeals, U.S. Department of the Interior, 801 North Quincy St., Suite 300, Arlington, VA 22203 within 30 days after the notice of appeal is filed with the Authorized Officer. Instructions for filing an appeal are contained on the attached Form 1842-1 (Appendix D).

If you wish to file a petition for stay pursuant to 43 CFR Part 4.21(b), the petition for stay should accompany your notice of appeal and shall show sufficient justification based on the following standards:

1. The relative harm to the parties if the stay is granted or denied,
2. The likelihood of the appellant's success on the merits,
3. The likelihood of irreparable harm to the appellant or resources if the stay is not granted, and
4. Whether the public interest favors granting the stay.

If a petition for stay is submitted with the notice of appeal, a copy of the notice of appeal and petition for stay must be served on each party named in the decision from which the appeal is taken, and with the IBLA at the same time it is filed with the Authorized Officer.



## **Appendix A. Standard Operating and Post-Treatment Monitoring Procedures**

## **Standard Operating Procedures for Population-Level Fertility Control Treatments One-Year Liquid Vaccine**

The following implementation and monitoring requirements are part of the Proposed Action:

1. PZP vaccine would be administered through darting by trained BLM personnel or collaborating partners only. For any darting operation, the designated personnel must have successfully completed a nationally recognized wildlife darting course and who have documented and successful experience darting wildlife under field conditions.
2. All mares targeted for treatment will be clearly identifiable through photographs to enable darters and HMA managers to positively identify the animals during the project and at the time of removal during subsequent gathers.
3. Mares that have never been treated would receive 0.5 cc of PZP vaccine emulsified with 0.5 cc of Freund's Modified Adjuvant (FMA) and loaded into darts at the time a decision has been made to dart a specific mare. Mares identified for re-treatment receive 0.5 cc of the PZP vaccine emulsified with 0.5 cc of Freund's Incomplete Adjuvant (FIA).
4. The liquid dose of PZP vaccine is administered using 1.0 cc Pneu-Darts with 1.5" barbless needles fired from either Dan Inject® or Pneu-Dart® capture gun.
5. Only designated darters would mix the vaccine/adjuvant and prepare the emulsion. Vaccine-adjuvant emulsion would be loaded into darts at the darting site and delivered by means of a capture gun.
6. Delivery of the vaccine would be by intramuscular injection into the left or right hip/gluteal muscles while the mare is standing still.
7. Safety for both humans and the horse is the foremost consideration in deciding to dart a mare. The Dan Inject® gun would not be used at ranges in excess of 30 m while the Pneu-Dart® capture gun would not be used over 50 m, and no attempt would be taken when other persons are within a 30-m radius of the target animal.
8. No attempts would be taken in high wind (greater than 15 mph) or when the horse is standing at an angle where the dart could miss the hip/gluteal region and hit the rib cage. The ideal is when the dart would strike the skin of the horse at a perfect 90° angle.
9. If a loaded dart is not used within two hours of the time of loading, the contents would be transferred to a new dart before attempting another horse. If the dart is not used before the end of the day, it would be stored under refrigeration and the contents transferred to another dart the next day. Refrigerated darts would not be used in the field.
10. No more than two people should be present at the time of a darting. The second person is responsible for locating fired darts. The second person should also be responsible for identifying the horse and keeping onlookers at a safe distance.
11. To the extent possible, all darting would be carried out in a discrete manner. However, if darting is to be done within view of non-participants or members of the public, an explanation of the nature of the project would be carried out either immediately before or after the darting.

12. Attempts will be made to recover all darts. To the extent possible, all darts which are discharged and drop from the horse at the darting site would be recovered before another darting occurs. In exceptional situations, the site of a lost dart may be noted and marked, and recovery efforts made at a later time. All discharged darts would be examined after recovery in order to determine if the charge fired and the plunger fully expelled the vaccine. Personnel conducting darting operations should be equipped with a two-way radio or cell phone to provide a communications link with the Project Veterinarian for advice and/or assistance. In the event of a veterinary emergency, darting personnel would immediately contact the Project Veterinarian, providing all available information concerning the nature and location of the incident.
13. In the event that a dart strikes a bone or imbeds in soft tissue and does not dislodge, the darter would follow the affected horse until the dart falls out or the horse can no longer be found. The darter would be responsible for daily observation of the horse until the situation is resolved.

### **Monitoring and Tracking of Treatments**

1. At a minimum, estimation of population growth rates using helicopter or fixed-wing surveys will be conducted before any subsequent gather. During these surveys it is not necessary to identify which foals were born to which mares; only an estimate of population growth is needed (i.e. # of foals to # of adults).
2. Population growth rates of herds selected for intensive monitoring will be estimated every year post-treatment using helicopter or fixed-wing surveys. During these surveys it is not necessary to identify which foals were born to which mares, only an estimate of population growth is needed (i.e. # of foals to # of adults). If, during routine HMA field monitoring (on-the-ground), data describing mare to foal ratios can be collected, these data should also be shared with the NPO for possible analysis by the USGS.
3. A PZP Application Data sheet will be used by field applicators to record all pertinent data relating to identification of the mare (including photographs if mares are not freeze-marked) and date of treatment. Each applicator will submit a PZP Application Report and accompanying narrative and data sheets will be forwarded to the NPO (Reno, Nevada). A copy of the form and data sheets and any photos taken will be maintained at the field office.
4. A tracking system will be maintained by NPO detailing the quantity of PZP issued, the quantity used, disposition of any unused PZP, the number of treated mares by HMA, field office, and State along with the freeze-mark(s) applied by HMA and date.

## **Appendix B. PZP Mixing Procedures**

## Mixing Vaccine and Adjuvant

### Equipment Needed

2 5.0 cc glass syringes

1.5 inch needle

vial of adjuvant

vial of PZP

Luer-Lok connector

1.0 cc C-type or P-type Pneu-Dart dart with 1.5 inch barbless needle

### Procedures

1. Place the 1.5 inch needle on a glass syringe
2. Draw out 0.5 cc of adjuvant
3. Using the same syringe, draw up the 0.5 cc of PZP
4. Holding the syringe very carefully (because the plunger can slip out), take off the needle and attach the syringe to the second syringe using the Luer-Lok connector (have the Luer-lok connector already attached to the second syringe).
5. Push the PZP-adjuvant mixture back and forth through the two syringes 100 times. The resulting emulsion will become thick and look white. **THIS PROCEDURE IS VERY IMPORTANT AND IS RELATED TO THE PRESENTATION OF THE ANTIGEN AND THE SUBSEQUENT EFFICACY OF THE VACCINE.**
6. Make sure all the emulsion is in one syringe.
7. Holding the first syringe very carefully (the one with the emulsion), remove the second syringe, leaving the Luer-Lock on the first syringe.
8. If you are loading a 2.0 or 3.0 mL plastic syringe for hand-delivery, attach the glass syringe to the plastic syringe and inject the PZP emulsion in to the plastic syringe. It is helpful if you move the plunger of the plastic syringe just a bit before pumping the PZP emulsion into it. After loading the plastic syringe, disconnect the glass syringe and connect an 18g. 1.5 inch needle on the plastic syringe.

## **Appendix C. Horse Immunocontraception Data Sheet**

HORSE IMMUNOCONTRACEPTION DATA SHEET

HORSE MANAGEMENT AREA: Onaqui Mountain HMA

HORSE IDENTIFICATION NUMBER/NAME: \_\_\_\_\_

HORSE COLOR: \_\_\_\_\_

OTHER MARKINGS/BRANDS: \_\_\_\_\_

Inoculation Dates	PZP Dose ( $\mu\text{g}$ ) <sup>1</sup>	Adjuvant	Delivery System <sup>2</sup>	Injection Site <sup>3</sup>	Vaccine Lot Number
----------------------	--	----------	---------------------------------	--------------------------------	-----------------------

POST-INOCULATION REPRODUCTIVE HISTORY (Diagnosed pregnancies and/or births)  
DESCRIBE ANY:

---

<sup>1</sup> Standard dose is 100  $\mu\text{g}$  with raw vaccine

<sup>2</sup> Pneu-Dart unless otherwise noted

<sup>3</sup> Left or right hip

1. Drugs administered to this horse concurrent with study (name of drug, dose, date):

2. Post-treatment health problems (with particular reference to injection-site abscesses):

3. Additional remarks:

**Appendix D. Appeal Process Form 1842-1**