

National Wild Horse and Burro Advisory Board Meeting  
Reno, NV

June 30, 2008

Board Members Present: Robin Lohnes; Gary Zakotnik; Larry Johnson; Dr. Vernon Dooley; Richard Sewing; Dr. Wayne Burkhardt; and Dr. Boyd Spratling. Board Members Absent: Melissa Scott and Renee Taylor. Washington Office Bureau of Land Management (BLM) Staff: Deputy Director, Henri Bisson; Deputy Director, Renewable Resources and Planning, Ed Roberson; Don Glenn; Sally Spencer; Jenny Lesieutre; Dean Bolstad; Lili Thomas; Alan Shepherd; Ramona DeLorme; and EK James. BLM Nevada Associate Director, Amy Leuders and Nevada State Wild Horse and Burro Lead, Susie Stokke.

Robin Lohnes opened the meeting at 8:00 a.m. She introduced the Advisory Board Members to the public.

**Welcoming Remarks**

Henry Bisson welcomed the audience to the meeting. He said there are serious issues with the program and options will be discussed. He attended an adoption in Somersworth, New Hampshire and it was a very positive and successful event. When he heard other reports about this same adoption event, he felt that they were talking about a different event. Henri noted that there is a lot of solid information and a lot of misinformation about the program. The goal of the program remains to have healthy horses on healthy lands.

Ed Roberson introduced himself and said that he transferred from Las Cruces, New Mexico and has worked with the BLM for many years at the field level. He is dedicated to the Wild Horse and Burro Program. He has seen the program from all sides, including the ups and downs and the consistent attempt to find a balance of healthy horses and healthy rangeland.

Amy Leuders noted that Nevada faces a number of issues. Nevada is going through its 10<sup>th</sup> consecutive year of drought. Nevada BLM is getting a handle on the population numbers by working with the U.S. Geological Survey (USGS) on census research. Recent census in Nevada has shown that there are over 16,000 horses on the range. Nevada continues to work on achieving and maintaining Appropriate Management Levels (AML). Amy reported that the State of Nevada is still considering litigation associated with the removal of wild horses. Also, the Fallon Facility will be managed under the Washington Office to help the Nevada State Office focus on land management.

**Nevada Report**

Susie Stokke spoke about issues in Nevada. Based on the Advisory Board meeting in Tucson, Arizona, Nevada has redone their website. She reported that Nevada has a 15-25% undercount

estimate and State Office is working with Alan Shepherd to solve this undercount by using the census methodology on three Herd Management Areas (HMAs) this summer.

During the discussion, Bureau census policy was clarified. Research teams have been working on new methodology for several years. In all States, the actual count of horses and rangeland monitoring are combined to ascertain the health of the land and the horses.

Susie mentioned there will need to be emergency gathers this year because of drought conditions. The gathers will include North Stillwater HMA, Fox and Lake Range HMA, and Nevada Wild Horse Range. The Nevada Wild Horse Range gather is currently under way and Dr. Al Kane, APHIS veterinarian, is in attendance. The National Wild Horse Association, one of the BLM Nevada's partners, will care for orphan foals, if necessary. The final report on the nitrate poisoning will be complete in a few weeks. The pond is still fenced. Once the gather is complete, there is an interagency agreement between the BLM and the Department of the Air Force to haul water to horses remaining on the range. Also, there will be water development reconstruction on the range.

There was a general discussion about the need for the Bureau to review their census techniques. Henri Bisson stated that census is a Bureau wide issue and that we will work toward adjusting our methodology through a new census policy. The Board recommended that the BLM review its census data to ensure that adjustments are taken into account to reflect a more accurate number of horses on the range. The Advisory Board would like an update at the next meeting.

Susie said that due to continued drought conditions, Nevada priority gathers for this fall and winter will include Callaghan HMA, Bald Mountain HMA, and Rocky Hills HMA.

Nevada will adopt 130-150 animals this year and through the Mustang Heritage Foundation programs approximately 700 Nevada mustangs will be adopted.

### **February 25, 2008 Minutes**

The Board asked that a paragraph pertaining to recommendation number three to reduce holding cost alternatives be inserted. The following was added on page seven under the heading **Board Recommendations**: "Robin Lohnes, on two separate occasions, pointed out that the third recommendation was simply to request a cost analysis for each of the three alternatives listed and should not be misconstrued as an endorsement of any or all of the Advisory Board." The Board then approved the February 25, 2008 minutes.

### **By-Law Review and Nominations**

Sally Spencer reported that the Charter has been signed by both the Secretary of the Interior and the Secretary of Agriculture. The Charter will be filed on July 22, 2008 and will become effective on July 23, 2008. Sally also noted that there was a copy of the By-Laws in each book and asked the Board to review them and let the BLM know if any changes are needed. Sally

reported that the Nominations for Wild Horse and Burro Advocacy, Veterinary Medicine, and Public Interest are still being reviewed. Once a decision is made, the appointees will be notified.

### **Update on Sheldon Wildlife Refuge**

Paul Steblein, U.S. Fish and Wildlife Service (USFWS), provided the Board with a history of the Sheldon Wildlife Refuge, which is located within the northern border of Nevada and Oregon. His presentation focused on horses that live on the Refuge and that are not under the jurisdiction of the Wild Horses and Burros Act (1971). He highlighted that the horses were the greatest threat to the refuge. The BLM and USFWS are working together on census and a study – Sheldon Refuge is surrounded by four BLM districts. Presently there is one research project that is being reviewed by the BLM. The project will involve tracking the movement of the horses between BLM, Forest Service land, and the refuge. The Board asked that Dr. Boyd Spratling look at the humane aspect of the project and Dr. Vernon Dooley look at the project's research proposals. USFWS is also coordinating with USGS and the BLM on horse surveys.

### **New Business**

Henri Bisson discussed issues facing the Program. He said that with current funding of about \$37 million, the BLM cannot continue both the gather operations necessary to maintain an ecological balance on the public rangeland and feed and care for the approximately 30,000 horses currently in holding.

The BLM is faced with three alternatives to address the situation. They are: 1) sale and euthanasia of excess horses for which no adoption demand exists; 2) fully fund gathering and lifetime holding or 3) stop gathering all wild horses and burros.

Henri noted that if gathers are stopped an environmental disaster will occur as the horse population, which can double in four years, outstrips its habitat resulting in destruction of vegetation, wildlife habitat, soil erosion, and the spread of invasive species, not to mention the suffering of the horses themselves when they begin to die from starvation.

Therefore, the BLM must consider the legal options available to it as stated in the 1971 Wild Free Roaming Horses and Burros Act to either destroy in the most humane manner possible those horses for which no adoption demand exists, or to sell them without limitation. The BLM has not exercised these options in the past because of public sentiment.

Henri stated that no decision has been made, however, he asked the Board for their suggestions on solving this difficult issue.

### **Mustang Heritage Foundation**

Paula Carr, President of the Mustang Heritage Foundation gave an overview of the history of the Foundation and its current status. She mentioned the success of the 2007 Extreme Mustang

Makeover and that the 2008 Extreme Mustang Makeover will be held in September 2008 in Fort Worth, TX. Paula reported that due to the success of the Makeovers, three smaller Challenges have been held in Madison, WI; Sacramento, CA; and an upcoming event in Douglas, WY. She also discussed the Trainer Incentive Program and a new program involving yearlings called Mission: 007. These events have had an impact on the BLM's adoptions by opening up a new market for mustangs. Paula noted that the Foundation will continue to protect the brands of the BLM and the Mustang Heritage Foundation.

### **BLM Response to Recommendations**

1. The National Wild Horse and Burro Advisory Board recommends that Dr. Spratling serve as a liaison to assist the BLM in the development of the Nevada Wild Horse Range Herd Management Area Plan, specifically to develop a protocol for gelding.

Dean Bolstad reported that the Nevada BLM contacted Dr. Spratling. The BLM Recommendation Response is attached.

2. The National Wild horse and Burro Advisory Board recommends that all states evaluate Herd Management Areas to assess horse and range conditions to identify and prioritize potential emergencies.

Dean Bolstad reported that five states responded about potential emergencies. The BLM will be following up with those states. The BLM Recommendation Response is attached.

3. The National Wild Horse and Burro Advisory Board recommends that the BLM conduct a critical analysis, including cost comparison, of the following alternatives to reduce long-term holding costs:

- a. A national stewardship incentive adoption program.
- b. Converting herd management areas to non-reproducing gelding herds as well as introducing geldings as a component to the herds;
- c. Evaluate regulatory and legislative changes needed to implement instant titling.

Don Glenn reported on 3a. He noted that a solicitation for a national stewardship incentive adoption program has been prepared, but is being held due to inadequate funding. It will be re-examined for next fiscal year. The BLM Recommendation Response is attached.

Don Glenn reported on 3c. The Board agreed with his presentation that the legislative changes needed to implement instant titling were not a feasible recommendation at this time. The BLM Recommendation Response is attached.

### **Public Comments**

Each Speaker was asked to provide a written copy of their presentation so that their comments could be included in the meeting's record. Public comments started at 3:15 p.m.

## **BLM Response to Recommendations Continued**

Dean Bolstad reported on 3b. He presented an analysis of the effects, including implementation cost and out year cost savings, of creating non-reproductive herds and changes to sex ratios to favor males by introducing geldings as a component of herds. The BLM Recommendation Response is attached. The Board recommended that the BLM identify three HMAs for sex ratio modifications and non-reproducing gelding herds.

## **Budget Update**

Jenny Lesieutre discussed the FY08 target units of accomplishment and the mid-year review adjustments. During the mid-year review, the adoption targets were lowered. Also, Jenny noted that there is a budget shortfall in the Program.

## **Gather Update**

Lili Thomas presented the 2008 gather schedule. She noted that the schedule had changed as of this afternoon. Since there are not a lot of scheduled gathers planned, if an emergency occurs, the BLM should be able to handle the emergency gathers.

## **Adoption Update**

Sally Spencer reported on adoptions and sales. As of June 19, 2008, there were 2,343 animals adopted: 1,996 wild horses and 347 burros. After the Mid Year Review, the adoption target was lowered from 5,235 to 4,737. There have been 179 animals sold FY2008.

Sally noted that there are 48 adoptions remaining in FY2008. In comparison with FY2007, there have been 600 fewer animals adopted to date.

At the last meeting the Board asked if there had been an increase in the number of animals returned to the BLM before they were titled. Sally reported that the percentage of returns is up a bit this year, but this percentage increase could be attributed to the adoption numbers being down. Also if you look at the each States returns since 2000, there haven't been any really drastic changes.

At present, the Save the Mustangs Fund has \$76,758.02. There has been a total of \$218,652.02 donated with total payouts of \$141,900.00.

## **Facility and Pipeline Reports**

Bea Wade provided an update on short-and long-term holding facilities. On June 22, 2008 there were 7,780 horses and 207 burros in short-term holding facilities that have a total capacity of 15,195 animals. There were 22,101 animals in long-term holding facilities that have a total capacity of 22,300. The facilities are almost full. There is a long-term holding solicitation for a minimum of 500 animals and a maximum of 2,500 animals that closes July 30, 2008.

### **Forest Service Update**

No Forest Service representatives attended the meeting.

### **Pending Litigation**

Don Glenn reported that the Pryor Mountain litigation, in Montana, the plaintiff filed for summary judgment on the case concerning the use of PZP.

In Colorado, the plaintiffs filed for summary judgment against the proposal to remove all the horses from the West Douglas HMA. The BLM will issue a gather plan in July and an injunction is expected.

The State of Nevada, through the Wild Horse Commission, intends to file a suit that would require the BLM to achieve and maintain AML in Nevada.

### **Futuring Team Update**

Don Glenn gave an update on the Futuring Team. The report is based on achieving AML and therefore, the Futuring Team report is on hold. The Board requested a Futuring Team update at the next meeting.

### **Instruction Memorandum Update**

Dean Bolstad discussed the re-issuance of the Euthanasia Instructional Memorandum. The Board clarified that this memo does not relate to the euthanasia of healthy animals.

The Herd Management Manual was discussed. The BLM expects to have the final draft completed by September 30, 2008. The Board recommends that BLM act timely to complete the final manual and requested a status report at the next meeting.

Alan Shepherd discussed the draft Fertility Control Instruction Memorandum. Currently all Instructional Memorandums in relation to Fertility Control are expired. The Board then discussed fertility control and the decision process of the local manager concerning when fertility control is used.

### **Research Update**

Alan discussed the Humane Society of the United States (HSUS) fertility control project. Field work began in May and early June on the Sand Wash HMA in Colorado and the Cedar Mountain HMA in Utah. Alan reported on a trial to compare three methods (2 year PZP pellets only, pellets plus liquid PZP and PZP pellets plus liquid PZP with incomplete Freund's adjuvant) of boosting mares previously treated with PZP. All three methods were found to be effective.

**New Business**

In response to Henri's request that the Board provide suggestions to the BLM on the program's difficult issues, the Board created a subcommittee consisting of Robin Lohnes, Dr. Boyd Spratling, and Dr. Vern Dooley. The subcommittee will work with Ed Roberson to prepare comments and recommendations. The subcommittee will submit a report at the next meeting.

**Next Meeting**

The next meeting is scheduled for Monday, September 22, 2008 after the Extreme Mustang Makeover in Fort Worth, TX. The BLM budget is very tight, but Ed Roberson will look for funding for the meeting.

The meeting adjourned at 5:55 p.m.

**BLM Response to National Wild Horse and Burro Advisory Board  
Recommendations of February 25, 2008**

1. The National Wild Horse and Burro Advisory Board recommends that Dr. Spratling serve as a liaison to assist in the development of the Nevada Wild Horse Range Herd Management Area Plan to specifically to develop a protocol for gelding.

**BLM Response:** Nevada BLM contacted Dr. Spratling by letter (February 2008) and requested his assistance to develop a protocol for the gelding proposal for the Nevada Wild Horse Range (NWHR). Nevada also consulted with Dr. Kirk, Nevada Wild Horse Commission; Dr. Al Kane, USDA APHIS, Dr. Richard Sanford, contract veterinarian for the Palomino Valley Wild Horse Center, and John Neill, Palomino Valley Center Facility Manager. Input from these individuals was considered in preparing the preliminary and final Herd Area Management Plan (HMAP) Environmental Assessment for the NWHR.

Based on input from the public in response to review of the preliminary HMAP environmental assessment, the Las Vegas Field Office Manager has elected to implement a gelding component on a gradual basis during future scheduled gathers, i.e. 30-35 stallions would be gelded initially (year 2012), with an additional 65-70 stallions considered for gelding during subsequent gathers if monitoring indicates the initial pilot study is successful. Through consultation with the above veterinarians and experts, BLM established the following management and monitoring requirements to guide a pilot study for geldings as a component of the herd on the NWHR:

- Manage a breeding population of 240-400 animals and a non-breeding population of 60-100 geldings within any given 6-7 year period. Within the population, achieve a 60%/40% ratio of males to females immediately following future gathers. The following management requirements apply to the non-breeding population:
- Limit the selection of stallions for gelding to animals that are 5 and 15 years of age
- Limit the selection of stallions for gelding to animals that have a body condition score of 4 or above.
- Surgery would be performed at a temporary holding facility in the field or at a BLM managed holding center by a Nevada licensed veterinarian in good standing, using appropriate anesthetic agents and surgical techniques.
- When gelding is done in the field, geldings would be released near a water source approximately 24-48 hours following surgery. Gelded animals would be monitored for approximately 7-10 days post-surgery (recovery is indicated by animals moving freely to/from forage and water).
- When the gelding is performed at a BLM-managed facility, selected stallions would be shipped to the facility, gelded, held in a separate pen to minimize risk for disease, and returned to the range near water within 30-60 days.
- Gelded animals would be branded with a "G" high on their hip to minimize the potential for future recapture and to facilitate post-treatment monitoring.
- Individual behavior of geldings would be observed during the first breeding season following treatment (i.e. June-October). Monitoring would be designed to determine if they interfere with breeding harems (i.e. demonstrate stallion-like behavior).

Observations would be made as needed to determine the behavior of the geldings at key water locations within the core area. Observations would also be made when completing other scheduled field work.

- The herd behavior of geldings post-treatment would also be observed. Anecdotal evidence suggests geldings will form bachelor bands. Monitoring will be completed to determine whether or not bachelor bands form as expected, or if geldings intermix with the breeding population.
- Periodic population census, together with gather data from future gathers, will be used to determine whether or not managing a portion of the NWHR herd as geldings is effective in slowing the average annual population growth.

2. The National Wild Horse and Burro Advisory Board recommends that all states evaluate Herd Management Areas to assess horse and range conditions to identify and prioritize potential emergencies.

**BLM Response:** Each state with wild horse and burro management responsibility was asked to evaluate their Herd Management Areas (HMAs) to assess animal and range conditions to identify emergency gather and escalating problem HMAs. Responses from Nevada, Utah, Montana, California, and Oregon are included in Attachment 1.

Three HMAs in Nevada were identified for emergency gathers due to lack of forage and water for horse numbers that far exceed AML. These HMAs include the Nevada Wild Horse Range, North Stillwater and Fox & Lake HMAs. Gathers will begin in the Nevada Wild Horse Range and North Stillwater on about July 1<sup>st</sup> and in Fox & Lake on about August 1<sup>st</sup>.

Utah identified an area for gathering where about 50 wild horses have located on a fire rehabilitation seeding that was done for soil stabilization and wildlife habitat restoration. The horses are aggressively grazing the new seeding and irreversible damage to this expensive restoration project will occur if the animals are not removed. A gather targeting these animals is scheduled to begin on July 21<sup>st</sup>.

Montana identified horse condition and heavy range utilization issues in the Pryor Mountain Wild Horse Range. Since March 2008 wild horse body condition began to decline. Currently most stallions are in Henneke body condition score 4 while mares and yearlings are in condition class 2 and 3. Montana proposes to start bait trapping on about August 1<sup>st</sup> until 30 to 40 horses are removed. An environmental assessment has been released for a 30 day public comment period.

Other HMAs with escalating problems are being monitored closely for conditions that would trigger the need to conduct emergency gathers.

3. The Board recommends that BLM conduct a critical analysis, including cost comparison, of the following alternatives to reduce long-term holding costs:
- a. A national stewardship incentive adoption program;

**BLM Response:** A solicitation for proposals has been drafted but is on hold due to a lack of funds for the proposal. Interest in this type of proposal and its potential to increase adoptions is unknown. No estimates of cost savings due to increased adoptions have been made.

3. The Board recommends that BLM conduct a critical analysis, including cost comparison, of the following alternatives to reduce long-term holding costs:
- b. Converting herd management areas to non-reproductive gelding herds as well as introducing geldings as a component of herds;

**BLM Response:**

**Part 1: Converting Herd Management Areas to Non-Reproductive Gelding Herds**

For the purposes of analysis and comparison, a HMA with an appropriate management level range of 400 to 700 was assumed. The management activities and estimated costs to manage a 50% male/50% female breeding herd are compared to the implementation and management of a non-reproductive herd of 700 geldings.

The WinEquus model was used to predict annual herd growth rates, removal numbers and the population size at the end of an 11 year time period for the breeding herd. Herd management and cost estimates are based on the following assumptions for the two alternatives being compared.

- Breeding Herd Management Assumptions
  - ◆ The HMA's AML range is 400 to 700 horses..
  - ◆ Gate cut removals are initiated when the herd size grows to 700 in approximately every 3 years. Removal down to the low end of AML (400) is achieved after each gather.
- Non-Breeding Herd Assumptions
  - ◆ The herd number upon initiation of the conversion to a non-breeding herd of geldings is 700.
  - ◆ During the first gather an 85% gather efficiency is achieved.
  - ◆ Fifty females will not be captured in the first gather and would be captured in a follow up gather several years later.
- Cost Calculation Assumptions
  - ◆ \$500 per head capture and removal cost.
  - ◆ 70% of animals removed will not be adopted and held in lifetime long term holding facilities.

- ◆ \$1,100 expense for preparation costs and holding in short term holding for 200 days.
- ◆ \$1,000 cost per animal adopted.
- ◆ \$11,625 cost per unadopted animal for lifetime maintenance at long term holding (\$465 per year for 25 years = \$11,625).
- ◆ Gelding costs for animals returned to the range is \$200/head.

For the breeding herd, the WinEquus predictions of population size the end of 11 years, average annual growth rate, and removal numbers to maintain AML are listed in Table 1. Table 2 lists the management costs associated with each alternative.

Table 1: Breeding Herd – AML of 400 to 700: Population Size at the End of 11 Years, Average Annual Growth Rate and Removal Numbers to Maintain AML (Based on 100 WinEquus trials)

Male to Female Sex Ratio	Average Population Size at the end of 11 yrs.	Average Annual Growth Rate over 10 years	Median Number of Animals Removed to Maintain AML during 11 years
50%:50%	607	18.2%	982

Table 2: Estimated Management Costs (\$1000s) for a Breeding Herd (50%/50% Sex Ratio) and to Implement and Manage a Non-Breeding Herd of Geldings in a Herd Management Area with an AML of 400 to 700 Animals. (Costs are related only to excess animals removed during an 11 year period)

Sex Ratio Alternatives: Male to Female	Number of Animals Removed in 11 yrs.	Gelding Costs for Return to the Range Horses	Capture Costs	STH & Preparation Cost Savings	Adoption Costs for 30% That Are Adopted	LTH Costs over 25 years for 70% Not Adopted	Total Cost
50%:50%	982	\$0	\$491	\$1,080	\$295	\$7,986	\$9,852
Non-Breeding	370*	\$65	\$370**	\$ 407	\$111	\$3,011	\$3,964

\* Removal of 370 mares during two gathers in 4 years to implement an all gelding herd.

\*\*Removal costs for capture of 740 animals in two gathers to achieve all gelding herd.

#### Discussion:

Two alternative management approaches were compared for a herd with an AML of 400 to 700. The alternatives included, 1) normal BLM management approach to a breeding herd with a sex ratio of 50% males to 50% females, and 2) Conversion of the breeding herd to a non-reproductive herd of 700 animals.

The non-reproductive herd (all geldings) could be implemented after two gathers occurring in year 1 and year 4 if the herd's population was at high end of AML of 700. A few mares and a few stallions would not be captured in the first gather, and a second follow up gather would be required. About 740 horses would need to be captured to remove most mares and to be able to geld most stallions in the herd management area.

For the breeding herd, the estimated management cost and life time care (25 years) cost for long term holding for unadopted animals removed during an 11 year management period is

\$9.9 million. The estimated costs to implement a non-reproductive herd during a four year period, and provide life time (25 years) long term holding care for removed animals is \$4 million.

After the herd is converted to a non-breeding herd, there would be few costs except for monitoring the herd and their habitat. Total management and care costs for the breeding herd that are related to each 11 year management period will continue to repeat at about \$10 million.

**Part 2: Introducing Geldings as a Component of Herds**

For the purposes of analysis and comparison, a HMA with an appropriate management level range of 400 to 700 was assumed. Three different sex ratio alternatives that could involve geldings as a component of a herd were compared to the normal expected sex ratio of 50% males to 50% females. These alternative herd sex ratios were 1) 60% male to 40% female sex ratio, 2) 65% male to 35% female and 3) 70% male to 30% female.

The WinEquus model was used to predict annual herd growth rates, removal numbers and the population size at the end of an 11 year time period. Herd management and decreased management costs resulting from fewer excess horses removed are based on the following assumptions:

- Herd Management Assumptions
  - ◆ The herd is at AML (400 to 700 horses) before gelding introduction is initiated.
  - ◆ Removals are initiated when the herd size grows to 700. Removal down to the low end of AML (400) is achieved after each gather.
  - ◆ For purposes of estimating herd growth rates in WinEquus, it was assumed that a change in sex ratio to increase stallions and reduce the number of mares would have the same effect as increasing the male component by introducing geldings to replace some mares in the herd.
- Cost Calculation Assumptions
  - ◆ \$500 per head capture and removal cost.
  - ◆ 70% of animals removed will not be adopted and held in lifetime long term holding facilities.
  - ◆ \$1,100 expense for preparation costs and holding in short term holding for 200 days.
  - ◆ \$1,000 cost per animal adopted.
  - ◆ \$11,625 cost per unadopted animal for lifetime maintenance at long term holding (\$465 per year for 25 years = \$11,625).
  - ◆ Gelding costs for animals returned to the range is \$200/head.

The WinEquus predictions for the end population size in 11 years, average annual growth rate and removal numbers over the course of 11 years are shown in Table 3.

Table 3: Four Different Herd Sex Ratios: Population Size at the End of 11 Years, Average Annual Growth Rate and Removal Numbers (Based on 100 WinEquus trials)

<b>Male to Female Sex Ratio</b>	<b>Average Population Size at the end of 11 yrs.</b>	<b>Average Annual Growth Rate over 10 years</b>	<b>Median Number of Animals Removed to Maintain AML during 11 years</b>
50%:50%	607	18.2%	982
60%:40%	606	17.9%	947
65%:35%	600	15.9%	908
70%:30%	583	13.8%	870

As the female component in the herd decreases, the average annual growth rate and removal numbers decrease. The potential decreased costs over the course of 11 years are shown in Table 4. The 50% male to 50% female sex ratio is considered to be the normal herd management standard and is shown in Table 4 as a baseline with zero cost. The estimated decreased costs for the three alternatives resulting from fewer excess animals removed are listed in Table 4.

Table 4: Estimated Decreased Management Costs (\$1000s) Resulting From Fewer Excess Horses Removed in an Eleven Year Period Due to a Decreased Female Herd Component in a Herd with an AML of 400 to 700 Horses

<b>Sex Ratio Alternatives: Male to Female</b>	<b>Fewer Number of Animals Removed in 11 yrs.</b>	<b>Implementation Costs (Capture of additional animals &amp; gelding costs)</b>	<b>Capture Cost Savings</b>	<b>STH &amp; Preparation Cost Savings</b>	<b>Adoption Cost Savings for 30% Adopted</b>	<b>LTH Cost Savings Over 25 years for 70% Not Adopted</b>	<b>Total Cost Savings</b>
50%:50%	0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
60%:40%	35	-\$ 76	\$18	\$ 39	\$11	\$291	\$283
65%:35%	74	-\$102	\$37	\$ 81	\$22	\$605	\$643
70%:30%	112	-\$127	\$56	\$123	\$34	\$907	\$993

#### Discussion:

The increased sex ratio to favor males could be accomplished by adding geldings to replace some mares, by increasing the ratio of stallions to mares or by a combination of both of these options.

It is not possible to accomplish the modification of sex ratio alternatives if the herd number is very much above AML. In this example when the herd number is at the high end AML of 700 animals, a 60% gather efficiency is necessary to achieve the 60% male/40% female sex ratio, 65% gather efficiency to achieve the 65%/35% ratio, and 70% gather efficiency to achieve a 70%/30% ratio.

The WinEquus model predicts that herd growth rates would be decreased when there is a smaller female component in the herd. For the range of sex ratios considered, the potential total cost savings resulting from fewer excess horses produced in an 11 year period, ranges from \$283,000

to \$993,000. These potential savings are due to reduced costs for fewer horses removed, fewer prepared for adoption and fewer held in short term (200 days) and long term holding (25 years).

If these sex ratio adjustments were considered for one half of our herds (16,000 animals), the total cost savings over a 25 year period resulting from the fewer excess horses removed during an 11 year period could range from about \$7 million to \$23 million.

The effects of geldings as a component of a herd and of an increased stallion component on herd behavior and social structure are not documented. BLM proposes to initiate several pilots involving both alternatives: geldings as a component of a herd and an increased sex ratio that favors stallions. Pilot herds would be monitored to determine the effects.

3. The Board recommends that BLM conduct a critical analysis, including cost comparison, of the following alternatives to reduce long-term holding costs:
  - c. Evaluate regulatory and legislative changes needed to implement instant titling.

**BLM Response:** Immediate transfer of ownership or “instant title” when an animal is adopted would require an amendment to the Wild Free-Roaming Horses and Burros Act of 1971. Section 3 (c) of the Act states, “Where excess animals have been transferred to a qualified individual for adoption and private maintenance pursuant to this Act and the Secretary determines that such individual has provided humane conditions, treatment and care for such animal or animals for a period of one year, the Secretary is authorized upon application by the transferee to grant title to not more than four animals to the transferee at the end of the one-year period.”

It is probable that adoptions would increase with an “instant title” provision. Increased adoptions would result in cost savings for feeding and care. The cost to maintain an animal at short term holding for one year is about \$1,650 and at long term holding is about \$465 per year.

## **Attachment 1: Reports of Emergency Gather and Escalating Problem Herd Management Areas from California, Montana, Nevada, Oregon, and Utah**

### **BLM-Nevada Wild Horse and Burro (WH&B) Program 2008 Drought Emergency Gathers and Escalating Problems**

- ★ BLM Nevada is proposing to remove about 1,700 excess wild horses from three Nevada herd management areas (HMAs) during the next 60-90 days. The 10th consecutive year of drought in much of northern and central Nevada, coupled with an overpopulation of wild horses within the HMAs, is placing the animals at risk of dehydration, starvation and death. The estimated cost to gather and hold these animals is \$1 million.
- ★ HMA visits by the Nevada WH&B program lead and a veterinarian, as well as field office monitoring, has verified the need to gather and remove wild horses from, in priority, the Nevada Wild Horse Range, and the North Stillwater, and Fox & Lake Range HMAs.
  - **Nevada Wild Horse Range:** Limited water is available at four of six primary water sources within the range. The 1,400 horses present are relying mainly on two key water sources; little to no forage remains within a 3-5 mile radius of the available water. Horses in these locations are traveling 5-10 miles to and from forage and water daily. About 20 horses are already lame from traveling long distances to graze. The incidence of severely lame horses is expected to increase as summer progresses; many of these may need to be humanely euthanized.

In the interim, BLM is working with the Air Force to closely monitor the situation and to provide supplemental water to the horses both now and throughout the hot, dry summer and fall months. BLM is also aggressively working to reconstruct five of the existing water developments in order to provide adequate water to the 300 wild horses which will remain following the gather. The pond which was the point source for high levels of nitrates which led to the death of 71 wild horses in July 2007 remains fenced and will continue to remain fenced until the Desert Research Institute completes its environmental testing. Final results are expected in early July. At that time, BLM and the Air Force will decide whether or not to remove the pond or permanently fence it.

- **Highland Peak:** The Nevada field office has been monitoring this herd for several months. In the last month the horses have gone from a condition class of 4 to a condition call of 3. There is limited forage on this HMA which has caused a large portion of the horses to come into the town of Caliente Nevada becoming a nuisance. The field office will start bait trapping these horses on Jun 25, 2008. They are hoping to capture and remove 35 to 50 head of horses. The estimated population for this HMA is 80 to 100 head. The number of wild horses removed would allow the remaining horses to have enough forage to maintain an overall good condition class.

- ❑ **North Stillwater:** There is limited forage and very little water for the 465 horses in the HMA. Conditions have continued to deteriorate in the one and one-half months since a field site visit was conducted. Following the gather, forage and water is expected to be adequate to support the remaining 200 wild horses.
- ❑ **Fox & Lake:** There is limited forage and water to support the 400 horses in the HMA. The Field Office is closely monitoring on-the-ground conditions. An estimated 120 wild horses will remain following the gather.
- ★ Emergency gathers for the Nevada Wild Horse Range and the North Stillwater HMA would begin about July 1, 2008. The gather for the Fox and Lake Range HMA is tentatively scheduled to begin about August 1, 2008.
- ★ Water trapping will be the primary capture method used for the Nevada Wild Horse Range. A USDA Animal Plant Health and Inspection Service veterinarian would be on site to consult with BLM in the event any animals need to be humanely euthanized.
- ★ BLM Nevada is also continuing to closely monitor several additional HMAs with escalating problems due to overpopulation, coupled with continued drought conditions. Included are several HMAs in/near Caliente, Nevada where shortages of food and water are causing animals to travel into town and up and down the highway (nuisance animals). A nuisance removal of about 35 animals has already been approved, but additional animals may need to be moved in this location or in other locations in Nevada as the summer progresses.

**BLM-Utah**  
**Wild Horse and Burro (WH&B) Program**  
 2008 Escalating Problems

- ★ The Paradise wildfire burned approximately 6,000 acres of BLM, State and private acres. The burned area is located a mile south of the Chokecherry wild horse HMA and approximately 2 miles within the northern boundary of the Mt. Elinor HMA -- both located in Utah. Wild horses that occupy the region are primarily from the state of Nevada, from the Wilson Creek and Deer Lodge Canyon HMA's. Animals winter in Nevada, and summer in Utah.

**BLM-Montana  
Wild Horse and Burro (WH&B) Program  
2008 Escalating Problems**

- ★ The health of wild horses and rangeland resources is being compromised across the PMWHR. An escalating problem is occurring and continues to be monitored for range conditions and wild horse health. The AML is currently established at 95 wild horses plus or minus 10%. The current population is estimated at 170 wild horses excluding newborn foals on and off the PMWHR. The area is nearly two times above carrying capacity for wild horses, and AML has not been achieved since 1994. Wild horse advocates disagree with BLM's assessment of wild horse body condition and overall range conditions. Conversely advocates claim body condition is fine for wild animals and if range conditions were poor then wild horses wouldn't reproduce.
  
- ★ The PMWHR has large areas in poor ecological condition, especially the low elevation "desert" rangelands. These desert areas are very important to the wild horses as winter use areas. The area had extensive drought throughout the last ten years. A recent evaluation documented through a measured trend in the desert areas that significant decline in ecological condition and a loss of forage species has occurred.
  
- ★ The past winter had above average snowfall in the PMWHR with average low temperatures. The spring has been late with a cooler and dryer than average weather pattern that has not been conducive to forage production. Monitoring of the PMWHR has been regularly occurring at a minimum of a monthly basis throughout the winter and spring of 2007/2008.
  
- ★ Monitoring for forage utilization and wild horse body condition continues to occur. Utilization levels of over 90% were documented in areas of the winter range. Since March of 2008 wild horse body condition began to decline. Currently most stallions are in Henneke body score condition 4 while mares and yearlings are in body score's 2 and 3. Body condition is worse now than at the end of winter.
  
- ★ The PMWHR will begin bait trapping in around August 1st and continue until 30 horses have been trapped to relieve the pressure on the resources.

**BLM-California  
Wild Horse and Burro (WH&B) Program  
2008 Escalating Problems**

- ★ The California office could have an emergency situation on New Ravendale and Massacre Lakes HMAs. New Ravendale is 320% over AML and the rancher may shut off access to the

waters that the horses use in that HMA. Massacre Lakes is 520% over AML and the rangeland conditions are showing over utilization and lack of water.

- ★ Livestock use on the Massacre Lakes HMA has been in non use for two seasons (2006-2007). This is due to the lack of water and over utilization.
- ★ The state recommends that 160 head of horses be gathered this year to relieve the pressure on both of these HMA's

**BLM-Oregon  
Wild Horse and Burro (WH&B) Program  
2008 Escalating Problems**

- ★ The Oregon office did a census flight on the Coyote Lake-Alvord Tule HMA and the Sheepshead-Heath Creek HMA. The number of animals found was 250 above the estimated population.
- ★ Monitoring of the areas show these HMA's have enough water and forage for the summer but will be lacking in both by September. If it gets hot and dry and reservoirs dry up on the west end of Sheepshead we are likely to be looking at some tough looking horses in both HMAs by fall.
- ★ Oregon will continue to monitor these HMA's during the summer. If the range conditions and horse condition drop off substantially during this time, gathering 600 head will need to be discussed.
- ★ These HMA's were scheduled to be gathered in Fiscal Year 2009, ( January) the condition of the areas will determine what time of year they need to be gathered.
- ★ The area was not gathered last winter with other fire gathers due to the fact that horses were not in or on the wildfire burn area. Horses have now moved into the region and are now aggressively grazing the newly seeded forage species planted to stabilize the wildfire burn. If animals are not removed soon, the area may see some serious and potentially irreversible impacts to the vegetation and soil resources. Without this vegetative cover, potential serious soil erosion impacts are eminent. Estimated 40-50 horses occupy the area at any one given time and would need to be removed.
- ★ Because of the importance of the area to wildlife, Utah Partners for Conservation and Development, and sportsmen's' groups contributed funds to purchase seed for rehabilitation, and to restore wildlife habitat.
- ★ The horses will need to be gathered sometime in early August to decrease the impacts to the vegetation and soil resources.

National Wild Horse and Burro Advisory Board Recommendations  
Reno, Nevada

June 30, 3008

1. The National Wild Horse and Burro Advisory Board recommended that the BLM review its census data to ensure that adjustments are taken into account to reflect a more accurate number of horses on the range. The Advisory Board would like an update at the next meeting.
2. The National Wild Horse and Burro Advisory Board recommended that the BLM identify three HMAs for sex ratio modifications and non-reproducing gelding herds.
3. The National Wild Horse and Burro Advisory Board recommended that the BLM act timely to complete the final Herd Management Area manual and requested a status report at the next meeting.