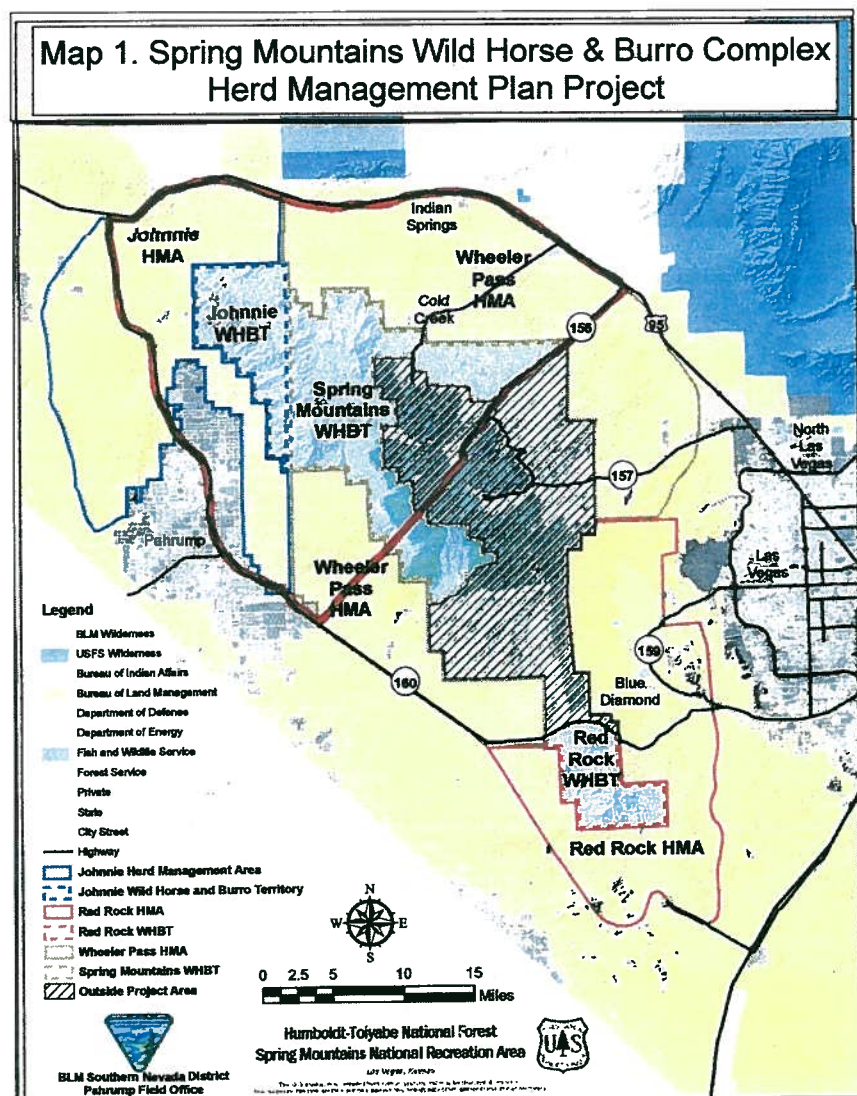


Spring Mountain Alliance: Experimental Management Project For Wild Horses & Burros Within the Spring Mountain Complex Las Vegas, NV

July 15, 2013



Humboldt – Toiyabe National Forest , Spring Mountains National
Recreation Area and Bureau of Land Management, Southern Nevada District

**Spring Mountain Alliance:
An Experimental Management Plan
For Wild Horses & Burros
In the Spring Mountain Complex
Las Vegas, NV**

July 15, 2013

OUTLINE

1. Goals Of An Experimental Management Plan for Wild Horses/Burros In The Spring Mountains
2. Geographic Area of an Experimental Wild Horse/Burro Management Plan
3. Population Control with PZP Application by Remote Darting and/or Bait-Capture
4. Selective Removal Of Adoptable Animals by Bait-capture at Staggered Intervals
5. Ongoing Population Data Base & Range Analysis Projects
6. Range Improvement Projects

APPENDICES

- Appendix 1: Spring Mountain Alliance Membership Request 2011
- Appendix 2: Examples of Successful co-operative Projects with BLM
- Appendix 3: PZP Population Control Details
- Appendix 4: HSUS Platero Project on Burro Contraception
- Appendix 5: SMA Data Base Identification System

1. Goals of an Experimental Management Plan for Wild Horses/Burros in the Spring Mountains

The Spring Mountain Alliance (SMA) is a project of America's Wild Horse Advocates (AWHA), which is a volunteer non-profit 501(c)3 organization of over 1400 concerned citizens, professionals and businesses, 90% from Southern Nevada (Appendix 1).

SMA supports scientifically-sound management of a healthy range for recreation, wildlife and the last free-roaming bands of wild horses and burros in the in the Spring Mountains, west of Las Vegas. The Alliance's ultimate goal is to increase wild horse and burro viewing opportunities for future generations of horse and wildlife enthusiasts, photographers, American and foreign visitors.

In a limited portion of the Spring Mountain Complex – an Experimental Management Area - SMA volunteers propose to annually dart *all mares* (except those allowed to have one foal for genetic diversity) with the proven contraceptive vaccine PZP, (ZonaSat-H), to maintain a detailed wild horse/burro data base, and to conduct range improvement projects *in partnership with* the Bureau of Land Management (BLM) & U.S. Forest Service (USFS) to assist in their land management mission in a period of dwindling public agency resources. Successful examples of volunteer/agency partnerships are detailed in Appendix 2.

To reduce the detrimental high cost of helicopter roundups, long-distance transportation of, and long-term storage of wild horses and burros in holding facilities, the Alliance proposes to assist in selective removal of the most adoptable, easily trainable 2 to 4-year-old horses and burros. Removal would be by bait-capture of family bands at staggered intervals so local adoption demand will not be overwhelmed. The Alliance would aggressively promote local adoption.

After treating *all bait-captured mares* and Jennies with PZP, intact family bands would be released back onto the range to retain social stability. Scientific observation has shown that stable family bands can prevent early pregnancy of young mares, 3-years of age and under. Older horses and burros would be returned to the range so their knowledge of local water and food sources is not lost in times of drought, fire or inhospitable conditions.

The relatively compact Experimental Management Area close to Las Vegas is an ideal area to conduct trials of innovative, scientific methods for improving population estimates and assessing range management practices in order to maintain genetically diverse, healthy populations and accurately estimate the productivity of the range as recommended in the National Academy of Sciences, National Research Council's 2013 report, Using Science to Improve the BLM Wild Horse and Burro Program: a Way Forward (ISBN 978-0-309-26494-5).

Regular PZP application, staggered selective removals for optimum adoption opportunities, and co-operative range monitoring and improvement projects could save government agencies and the public millions of dollars over a 5-7 year period while limiting wild horse & burro population growth to acceptable levels.

2. Geographic Area of an Experimental Wild Horse Management Plan

SMA proposes to limit wild horse population growth and improve range conditions in that portion of the Spring Mountain Complex where volunteers have maintained a detailed data base on wild horses for over 3 years (see map on the title page of this document). This Experimental Management Area will encompass a portion of the Spring Mountains/ Wheeler Pass JMA (Joint Management Area) and the Johnnie JMA:

- west and south of Highway 95,
- east of Highway 160 and the town of Pahrump,
- north of Lee Canyon (Highway 156) on the east side of the Spring Mountains,
- north of Wallace Canyon on the west side of the Spring Mountains.

The Experimental Management Area will *exclude* Lee and Kyle Canyons; Wallace Canyon and the area south of Wallace Canyon; Mt. Charleston and Mt. Stirling Wilderness Areas, and the Red Rock JMA.

3. Population Control with PZP Application by Remote Darting and/or Bait-Capture

The Spring Mountain Alliance proposes to control wild horse populations by annual darting of *all mares* (except those allowed to have one foal for genetic diversity) with the proven 1-year PZP, (ZonaSat-H) that has 95% efficacy. Since the population and movement of wild horses within the Experimental Management Area has been well documented by the Alliance and since 3 volunteer teams are already certified for remote darting, *we expect to be able to treat 80% to 100% of mares within the first two years*. Thus herd growth may be reduced to *near zero within 5-6 years* (Appendix 3).

The darting program would be modeled after the Assateague Island, Pryor Mountain Wild Horse Range, and Little Book Cliffs programs and follow standardized protocol. After the initial application of primer and booster doses in the first year, the annual booster darting could be staggered so that each mare would have one opportunity to add a foal to the gene pool.

In May 2013, three SMA volunteers with hunting backgrounds were trained and certified for PZP darting at the Science & Conservation Center, Billings Montana. Additional volunteers are ready for certification if needed. Each certified darter will have a volunteer assistant to photo-ID the darted mares and collect the spent dart according to strict protocol. Remote darting from ATV's (all-terrain vehicles), horseback and foot primarily near water sources has proven successful particularly with pneumatic guns that can shoot up to 50 yards with little recoil or sound. Bait-capture may be utilized in certain areas where mares cannot be accessed for remote darting.

Optimally, the primer doses would be administered *in fall/winter 2013* and booster doses administered *in spring 2014* before the breeding/foaling season. Because the long EA process may not be completed until spring 2014, SMA asks that USFS/BLM give early approval for a fall/winter 2013 application of the primer dose to all mares rather than have another wave of foals to be born in 2015.

Darting all mares with PZP primer in fall/winter 2013 will not hurt the mares in any way even if the final EA does not approve the Experimental Management Area Plan by 2014. In that case, the 2013 darting cost in time and PZP materials will be borne solely by SMA.

PZP application costs are estimated to be \$17,000 in the first year (including initial training, certification and equipment) and declining to 25% of that cost by the third year. The Alliance asks USFS/BLM to pay the PZP training, dart guns & contraceptive materials which is a tiny fraction of BLM's current removal and long-term storage system. If USFS/BLM declines to absorb all or part of this application cost, private donors are prepared to fund the remote darting program.

The Alliance has not yet documented wild burros in the Experimental Management Area and PZP contraception of Jennies is a more complicated process. However, the Humane Society of the United States' Platero Project is considering local partnerships to research contraception and increase local adoption of burros now that their funding is in place (Appendix 4). The Spring Mountains may be an ideal area for such a research partnership because of the excellent habitat for burros and the already established volunteer base in Las Vegas/Pahrump.

4. Selective Removal of Adoptable Animals by Bait Capture at Staggered Intervals

Some wild horses/burros may need to be removed in 2014 and 2015 before repeated PZP contraception depresses the birth rate to very low or near zero within 5-7 years (the typical time period between helicopter roundups/mass removals). In the Experimental Management Area, the Alliance recommends that USFS/BLM selectively remove only highly adoptable young animals at staggered intervals instead of a single, large scale helicopter roundup and removal advanced in the June 2013 scoping report. SMA proposes that bait-capture methods be used to:

- Remove only the most adoptable young wild horses and burros between 2 to 4-years of age because they are easier to train and develop bonds with their human adopters. The SMA data base will be examined to determine how many wild horses fall in that age category, but possibly 30-35% of the estimated 150-200 horses in the Experimental Management Area are in this age group.
- Stagger the bait-capture of a smaller numbers of horses and burros over a 1 to 2-year period to limit the number of animals released for adoption. Excess supply at one time vastly overwhelms the adoption demand, especially locally.
- A limited number of the 2 to 4-year-old age group should be returned to the Experimental Management Area, in particular, horses that have shown noteworthy leadership traits.

It is not necessary to roundup Spring Mountain wild horses and burros by helicopter. Wild horses in the Experimental Management Area are largely human-habituated due to the high usage of the range by off-road recreational vehicles, hikers and visitors. Their watering spots

Spring Mountain Alliance Experimental Management Plan

and movement patterns are well-known to SMA volunteers who have observed them intensively for 3-8 years. Given this local knowledge of their concentration points, it will be easy to lure them into temporary pens by placing mineral blocks and/or hay inside, particularly in winter and spring. In 2013, burros were easily rounded up by bait-capture in the Red Rock JMA.

There are multiple disadvantages to a large-scale helicopter roundup/removal namely:

- Extremely costly to taxpayers in a time of serious budget shortfalls;
- Excess breeding of remaining mares follows immediately when mature, dominant stallions and lead mares are removed after a large scale roundup. It can take up to 3 years to restore stable leadership of family bands;
- The National Academy of Sciences 2013 investigation, Using Science to Improve the BLM Wild Horse & Burro Program: a Way Forward, found that "Decreased competition for forage through removals may instead allow population growth, which then drives the need to remove more animals. "
- Running animals over long distances up to 10 miles in winter cold is physically stressful to the animals and is extremely disturbing to the public;
- A 2014 helicopter roundup may result in an estimated 400-700 Spring Mountain horses and burros of all ages being 'dumped' on the adoption 'market' all at once, guaranteeing that most animals will not be adopted. When supply outweighs demand, most horses and burros go to costly long-term holding, an unnecessary burden to taxpayers.

The Alliance would aggressively promote local adoption of the removed Spring Mountain horses and burros through their excellent contact base in local radio, television, and newspapers, website at <http://springmountainalliance.org/>, social networking of all kinds, equestrian newsletters and promotional materials at local riding events, libraries, schools, etc.

The Alliance can advise prospective owners and check back on their progress in conjunction with local USFS/BLM staff. Already the Alliance has documented over 20 local area adoptions mostly from Red Rock Canyon 2002-2004 removals.

5. Ongoing Population Data Base and Range Monitoring Projects

SMA volunteers have been systematically identifying stallions, mares and foals in the Experimental Management Area for over 3 years. The data base is on Excel spread sheets and will be transferred to an approved card/computer tablet system before PZP darting begins (Appendix 5).

Approximately 145 individual wild horses have been identified and a maximum of 200 wild horses are expected to be found in the Experimental Management Area. These horses have been recorded moving across the Wheeler Pass to forage on both the west and east sides of the Spring Mountains. A small number, usually less than 25, move in winter into the eastern

side of the Johnnie JMA to utilize springs and forage at lower elevations below the snow line. Elsewhere in the Johnnie JMA, the habitat is suited only to burros.

The majority of the SMA-estimated 145-200 wild horses are concentrated on the east side of the Spring Mountains, particularly around the Cold Creek area, west of Highway 95, about 30 minutes from Las Vegas. In the winter they congregate at low elevations below the mountain slopes and the village of Cold Creek. In late spring and early summer, after their new foals strengthen, the family bands move into cooler, higher elevations to forage.

The Experimental Management Area an ideal place to test innovative population and range monitoring techniques due to its relatively small land mass, abundance of experienced volunteers, and its proximity to the University of Southern Nevada (UNLV).

Innovative monitoring techniques could include placing an identification microchip in each wild horse and burro at time of bait-capture, and experiment with state-of-the-art infrared cameras on mini-drones to track horse/burro movements across the range in conjunction with the U.S. Geological Survey (USGS), etc. BLM/USFS and SMA volunteers could work with UNLV and the Nevada Department of Wildlife (NDOW) to scientifically study inter-relationships between all wildlife including wild horses, burros, elk, deer and smaller mammals as they impact range health.

Scholarships could be created for doctoral students from the University of Nevada and other universities to conduct detailed behavioral analysis of free-roaming wild horses and burros and detailed range analysis of critical forage areas by methods such as tripling the current 10 paired-plot benchmark sites in the Experimental Management Area.

6. Range Improvement Projects

To maintain a healthy range as required by USFS/BLM, the Spring Mountain Alliance can organize volunteers to help with suitable range improvements within the Experimental Management Area such as:

- Building water guzzlers and seasonal water retention basins across the range to disperse the grazing impact of elk and wild horses away from perennial springs. This should be the first priority for range improvement. It can be done in conjunction with local elk and big horn sheep protection groups and the Springs Stewardship Institute, Museum of Northern Arizona, <http://springstewardship.org/springmountains.html>.
- Within the Experimental Management Area, volunteers can help construct fences to prevent wild horses and burros from entering ecologically sensitive areas like riparian habitat or the zone of the proposed endangered species, the Mt. Charleston butterfly;
- At low elevations in winter, spot-burn several small areas of 5 to 10 acres within 500-1000 acre areas of black brush community. Spot-burns should be conducted in different

Spring Mountain Alliance Experimental Management Plan

areas each year thereafter to encourage a mosaic of different plant communities appealing to different wildlife species;

- At higher elevations, selectively cut large ponderosa pines in small areas to open the canopy for vegetative growth that supports all wildlife. Selective cutting can create vital firebreaks as well;
- Clear small areas of pinion/juniper community on a rotation basis to attract wild horses and other wildlife into different areas;
- Seeding of swales in low elevation areas in late winter to provide temporary feed;
- Building hides or road pull-outs for safe viewing access to wild horses/burros;
- Patrolling roads to prevent illegal or undesirable human interaction with wild horses and burros such as feeding them at paved roads just to get close-up pictures. Alliance members have had success educating the public along Cold Creek roads with photographic handouts of horses injured or killed by cars;
- Building viewing hides similar to bird hides that will allow the public to photograph and observe the horses and burros without touching them.

USFS, BLM and NDOW can review potential range improvement projects, set priorities and develop a plan of implementation for public/private partnerships. Public agencies may contribute some materials while labor and materials will be supplied by Alliance volunteers and experienced volunteers from hunter, hiker, birding and equine groups in the Las Vegas Valley. For example, local hunters are prepared to donate water tanks and help put them in place. The National Mustang Association and other private stakeholders may also contribute funds to certain projects.

IN SUMMARY

This proposed plan for the Experimental Management Area is preliminary; development and implementation of individual projects through public/private partnerships will evolve over time.

However, PZP contraception of all mares and Jennies with selective removal of adoptable young animals are the most urgently needed projects to improve range condition and population control.

The ultimate goal of the Spring Mountain Alliance is to preserve free-roaming bands of wild horses and burros on a healthy range that benefits all wildlife and recreation users in the Spring Mountains.

Contact Person for the Spring Mountain Alliance: Arlene Gawne, President
Email: arleneg@springmountainalliance.org Phone: (702) 277-1313

I hereby request that the Bureau of Land Management:

1. Put a three-year hold on removals of wild horses and burros from the Spring Mountain Complex west of Las Vegas;
2. Allow the Spring Mountain Alliance (the Alliance) to develop a state-of-the-art census of wild horses and burros;
3. Allow the Alliance volunteers to dart old and young mares and jennies on the ranges with contraceptive PZP and allow mature females to breed because natural family behavior and young animals are most popular with the public;
4. Allow the Alliance to protect environmentally sensitive areas with fencing, viewing hides, etc.;
5. Fast-track the BLM tour approval process that currently works against eco-tour development;
6. Allow the Alliance to improve public viewing opportunities to free-roaming wild horses and burros for wildlife enthusiasts, photographers and tourists.

NV Companies & Organizations

Pixel Pusher Media
 Angel Trails Dog Grooming
 Exclamations' Salon
 Jones Fred/Leslie Hickey
 Storage Solutions
 Outlaw Horse Training
 Dickinson-Desjardins CPA
 Pure Medical Equipment
 Auntie Moe's Trading Post
 Van Briesen Auction Service
 Concerned Citizens for a Safe Community
 JP Smokeshop
 Annalisa's Beauty Salon
 Integrated Veterinary Services
 Beverlee McGrath: NV Legislative Specialist & Special Projects for PawPac, Action for Animals, NV Political Action for Animals, Animal Switchboard, NV Humane Society

Treasure Tours of Nevada
 RX Realty/Jeanne McNulty
 L.V. Pet Scene Magazine
 Spirit Therapies
 Jones Feed/Kathryn Lenhart
 Happy Horse Rescue Ranch
 Dream Chaser Ranch
 Tam Group Realty
 Sirickland Construction
 Equine Welfare Alliance
 Las Vegas Ballet Company
 Majestic Company
 Blue Bird Cleaning Company
 Signature Galleries
 Wyiland Gallery
 Home Tech's
 Air For Less
 Room to Ride Boarding Stable
 Chicago Land Fireplace & Chimney

Signatures of Nevada Residents

The following residents represent communities throughout Nevada including, but not limited to, Boulder City, Caliente, Henderson, Minden, Las Vegas, Overton, Reno, Panaca, Prhrump, and Verdi. Original signatures are available by request to the Alliance.

Dina Titus
 Terri Farley
 Bruce Woodbury
 Rhoda Living Trust
 Charles W. Nihan
 Kathy McCarthy, Esq.

The SPRING MOUNTAIN ALLIANCE is a branch of America's Wild Horse Advocates (AWHA), a Nevada nonprofit 501(c)(3) organization (Federal ID # 30-0399114) established in 2006 to preserve wild horses & burros within a balanced ecosystem by encouraging proactive management on public lands, raising public awareness.

Joe Camp	Joseph Holman	Las Vegas Paiute Indian Tribe
Darcy Grizzle	Priscilla Lane	Yvonne Brice
Shelley Smith	Carla Bowers	Jonette Slaby
Denise Daniel	Jane Little	Garnet Pasquale
Mary Sue Kunz	George Kunz	Bryan Morrow Way
Kathy Morrow Way	Everett Butler	Nada Owens
Anthony Aricno	Christine Arieno	Gary Arieno
Laurie Howard-Malm	Judy Holman	G. Thompson
Helene Purkitt	Oliver J Stotes	Joanna Baluff
Jose Humberto Perez Jr	Jeanne M. Gaum	Brian Black
Shawn Jipp	William A Pearce	Linda Roche
Kathy Cheney	Linda Jean Shelton	Rae Paravia
Linda Sapp	Sharon Wimsatt	Marcela Mascareno
Dorian Siemen	Marin L. Rovies	Kimberly Smith
Ann Cabiles	Charlynn Vidanes	Cynthia Ramos
Bryan Shelles	Tanya Jackson Renier	Brett Welch
Aaron Rosales	Axl Tatoy	Joycelyn Finbres
Kenneth Gronz	Taylor Payne	Daniel Barahona Jr
Mollie Lazo	Katherine Burford	Vanessa Guido-Verduzco
Martha Martinez	Wendy Bartolo	Christina Douglas
Anush Alakhuerdyan	George Anderson	Andrew Helton
Angel Enerente	David DeLong	Agueda Morales
Saba Bajwa	Robert Franco	Kevin Luno
Charmaine Plank	Austin R King	Areely Chavez
Kimberly Bass	Brianna Timmons	Nellie Marie Clabaugh
Demetre Farris	Gaby Soto	Cynthia Cabral
Ana Woodruff	Adrian F Leos	Aaron Hyman
Nathaniel Hill	Justin Cook	Paulette Brown
Adriana Moreno	Brett McPherson	Clarissa Garnica
Kevin Brown	Carter Troughton	Sue Lee
Lauren M Riggs	Kimberly Maheshni	Jazmin Garcia
Nylasia Packer	Deandre Jordan	Ameen Davis
Jenifer Kimchak	Leticia Siqueiros	Kathryn Reid
Lauren Norman	Shaniece McEachern	Chance Wylie
Bryan Galindo	Carlos Chavez	Travis Smaka
Christian Medina	Yanet Avila	Ellis Rios
Jose Ochoa	Gail Lopez	Stephanie James
Mike Helt	Shannon Brooks	Kadi Dorelis
Diane Mills	Pamela Lee	Lorena Rosso
Marvin Wheeler	Lisa Wheeler	William Bellowin
Clair Merante	Lisa Bozek	

The SPRING MOUNTAIN ALLIANCE is a branch of America's Wild Horse Advocates (AWHA), a Nevada nonprofit 501(c)(3) organization (Federal ID # 30-0399114) established in 2006 to preserve wild horses & burros within a balanced ecosystem by encouraging proactive management on public lands, raising public awareness.

SPRING MOUNTAIN ALLIANCE

PO Box 30152
Las Vegas, NV 89173
702-216-2920

PO Box 30152
Las Vegas, NV 89173
702-216-2920

SPRING MOUNTAIN ALLIANCE

www.SpringMountainAlliance.org
Saving the Wild Horses & Burros of Southern Nevada for Future Generations

Roberta Robins
Bill Crossley
Jovana Bozic
Angie Gonzalez
Michael Marrett
Eben Arias
Tamara Money
Robin Ruliffson
Joseph D Holman
John Deeb Jr
Autumn C. Berg
Michael Webb
Peter Thaler
Karen Mortimer
Annoula Wyderich
Adam Pilarz
Kim M. Webb
Janc Matthews
Matthew Graham
Rex Graham
Jake Elliott
Ann Ross
Jack Armstrong
Shirley Goodman
Shawna Nay
Tim Nay
Clinton Cooper
Gloria Wishengrad
Lynn Ruderman
Vivian Hepp
Lonnie G. Hawkins
Kira Greener
Ignacio Mendoza
Liz Villalobos
Jasmine Salazar
Beatriz Lopez
Vivencia Russi
William Nunez
Orealia Johnson
Philip M. LeDoux
Randal Morelock

Jenny Silva
Lynda Crossley
Joseph Fraser
Monique Warner
Rebecca Haskins
Thomas Domschot
Luis Montiel
Brandi Brown
Laurie A. Howard-Malm
Kim Leitzell
Kimberly Conley
Vanessa Hollein
Dara Thaler
Manuel Heller
Mary Aldava
Tom Liscianidsa
Jody Grizzle
Larry V. Carroll
Brian Graham
Nam-Phuong Graham
Sally Magnusa
Michael Laurena
Samantha Armstrong
Katie Graham
Julie Martinez
David Johnson
Mariela Castellanos
Joy L. Egan
Joseph Ruderman
Joshua D. Sanders
Ann VanWinkle
Marjorie Karp
Aylin Ponce
Robert Gillingham
Austin Chase
Monica Mendiola
Bob Varallo
Adrian Bueno
James Keith
Mike Faupel
Sergio Fredrich

Linda Simione
Karen Stuits
Sachelle Lewis
Christiana Uschold
Aldo Quintero
George Kunz
Serena Hedden
Richard Dewitte
Vickie Job
Suacy Thaler
Leslie Vimassa
Crystal Rarick
Ian Thaler
Jacob Grizzle
Rae Paravia
Jennifer Mack
Christine Pettigrew
Diana Standridge
Amanda Graham
Linda Rindick
Randi Ross
Max Offrend
Robert Goodman
Kurt Graham
Cathy Wicker
Connie Graham
Kristen Kittendorf
Adam Ruderman
Sierra Hayden
William F. Kinnel
Joseph Rosso
Cindy Silva
Alexis Aguilera
Charlotte Cabacungan
Diane Diraifaele
Rebecca Craig
Mario Hernandez
Bertha Angel
Barry Sandroff
Felix DeRosana
Federico Bragre

The SPRING MOUNTAIN ALLIANCE is a branch of America's Wild Horse Advocates (AWHA), a Nevada nonprofit 501(c)(3) organization (Federal ID # 30-0389114) established in 2006 to preserve wild horses & burros within a balanced ecosystem by encouraging protective management on public lands, raising public awareness.

Heriberto Meza
Jackie Oleksy
Herbie Frank
Thomas J Drietschel
Janice Koerth
John LaManna
Christine Cumming
Jordan Pietrafeso
Hurley Sandoval
Nicole Klinc
Lydia Hilerio
Annie Evans
Norman Karp
Ellie Bohlin
Maria Wright
Ann Hochstein
Stephanie Jones
Diane Davis
Anthony L. Cox
Tony Plann
Alex Runco
Daniela Jaualea
Branden Young
DeLaney Innes
Da Wei Liu
Jasmine Brown
Jeshley Medina
Jennifer Cruz
Victor Duque, Jr
Shannon Maclean
Matt Davis
Kathy Mommer
Robin Penrod
Karen Joy McCormick
Becky Campau
James Leonhardt
Bill Hudson
Santa Gagliardo
Ed Vincent
Leslee Pierce
Peggy L. Morasche

Rebecca Elliott
Rebecca Miller
Kimberly Olsen
Dana Owens
Kathryn Cavaleante
Lorrie Deniro
Robert Cumming
Alejandro Uribe
Randy Busle
Jennifer Gollaway
Jery Park
Sharon Mills
James Silva
Laureta Coleman
Gail Sargent
Dee-Ann Lubinski
Ronda Sue Freeman
Forest Turner
Genie Zoroque
Luis Untalan
Cynthia Gonzlazz
Kahesiani Mortensen
Christina Hewitt
Brandi Hardin
Deshawn Henry
Cynthia Chavez
Pauline Blovsky
Jason Perkins
Michelle Drolet
Jacob San Nefolias
Stephanie Dessaints
Emmanuel Buzanda
Martin J. Gavin
Kathleen Momot
Barry Campau
Briago Guerra
Rho Hudson
Cindy Weber
Arthur Masterson
Ken Knudson
Jaqueline Noss

Tina Morrison
Norene Glushko
Kirt A. Roper
Kaitlynn Kirby
Shellie Kerr
Megan Pietrafeso
Kristine Waller
Jery Park
Jamie Krokzyk
Arlene Bautista
Jill Brown
Jasmine Barner
Sally Hersch
Diane Penman
Shirley Knowles
Linda DeMasters
Donna Hoyaler
Mike McDonald
Alex Lewis
Kelsey Johannes
Jaclyn Montoya
Fatima Quintanilla
Stephanie Hardy
Dureann Grijalva
Diana Mendez
Andrea Casey
Andrea Stone
Brandon Johnson
Devin Ballard
Heidi Waltermire
Clifford Lujaw
J Hutchinson
Sam Penrod
Chanden Reed
C. Barbara Leonhardt
Annunziata Ruocco
Carlo Gagliardo Jr.
Connie Webb
Sue Ellen Rubin
Phyllis Knudson
Darlene Nelson

The SPRING MOUNTAIN ALLIANCE is a branch of America's Wild Horse Advocates (AWHA), a Nevada nonprofit 501(c)(3) organization (Federal ID # 30-0389114) established in 2006 to preserve wild horses & burros within a balanced ecosystem by encouraging protective management on public lands, raising public awareness.

SPRING MOUNTAIN ALLIANCE

PO Box 30152
Las Vegas, NV 89173
702-216-2920

PO Box 30152
Las Vegas, NV 89173
702-216-2920

Barbara Randall
Bernie Noordam
Tami Graziano
Will Mills
Debra Husted
Marjorie Andersen
Faith Stockwell
Rzekek Mohammed III
Karoni Kristine Woods
Alexis Lindo
Katherine Gievara
DJ Byrne
Chase Christensen
Romina Espinoza
Lavitius Williams
Argelloo Pinz Bartolo
Loretta Boldon
Andrea Stone
Christopher Mellor
Bianca Seiene Espinoza
Jena Pineda
Aaron James
Sarah Tullis
Russell Loeb
Donna Liebig
Wayne L. Clendenen
Diane Hider
Harold Grimand
Shari McCulloch-Wheeler
Tom Rhodes
Ken Pyle
Evelyn Tooley
Robert Homer
Debbie Sanders
Robert Farr
Jayson Anderson
Rebecka Anderson
Charles E Bluder
Rudy Oriondo
Nichole Larson
Morgan Meyer

Jane Duffrey
Alicia Hemdon
Kim Godby
Kirk Stein
Cheryl Stinar
Kimberly Shelton
Salena Webb Vaden
Peter Smith
Joshua Perz
Marianne Mendez
Taylor Cerrillo
Nzinga Johnson
Cheyenne Haas
Janelle Murrillo
Jonathan Kalderon
Annie Shahjitanian
Violetia Gray
Lonnice Wiley
Travis Koas
Angela Colon
Tiffany Kath
Ann Mari Henning
Laura Bendez
Timothy J Jackson
Fred Sharpe
Brad Maxwell
Nancy Lord
Beverly Buckley
Star Buckley
Tony Larson
Dennis Knutson
Curtis M. Wiley
Sherry Miller
Don Yam
Janis Brown
Tom Rudzema
Debbie R. Manthe
Harvey Kaplan
Carrie Rachel
Kimberly Dilger
Barbara Thompson

Josette Hemdon
Candy Bennett
Lawrence G. Hahn
Sissy Stein
Bernadine Kallerson
William McKamma
Daniel Vaden
Kathleen Whitehill
Brendon Gutierrez
Janet Silva
Walter Amaya
Mike Hewitt
Morgan Kuehn
Jason Lin
Dominic Morris
Antonia Del Taro
Brandon James Pena
Isaac Dorado
Ammir Aziz
Erick Pineda
Anna Chen
John Chen
Henok Tekie
Jennifer Lynn Dickton
Ralph Clendenen
Phillip Hider
Bruce Palley
MaryAnn Morris
Darla Fernandes
Conrad Manning
Lynn A Bluder
Kristine Biodrowski
George Danser
Ken Godwin
Chris Messur
Vivian Rudzema
Dean Hendrix
Ray Harrelson
Alexandria Cappelto
William Liebig
J. Weber

50
50
50

The SPRING MOUNTAIN ALLIANCE is a branch of America's Wild Horse Advocates (AWHA), a Nevada nonprofit 501(c)(3) organization (Federal ID # 30-0399114) established in 2006 to preserve wild horses & burros within a balanced ecosystem by encouraging proactive management on public lands, raising public awareness.

SPRING MOUNTAIN ALLIANCE

PO Box 30152
Las Vegas, NV 89173
702-216-2920

Allan Yeager
Leslie Larson
Linette Koons
Georgie Agius
Joan Timmons
Nancy Matlock
Frank Muniz
Dana Danilka
Futrell Atkins
Terry Raymond
Larry Wimsatt
Megan Wiley
Helen D. Lundgren
Jesse Faulkenet
Tracey Weideman
Misty Faanes
Christine Hayes
Rose Sandoval
Christina Baum
Carrie Reed
Lisa Sullivan
Reed Bailey
Jennifer Halligan
Miami Hughes
Monica Guerrero
Michael Martin
Barbara Angelo
Gigi Aravz
Soon N Lee
Gus Moreno
Josh Carey
John Herrina
Denay Garcia
Teddy V Farson
Earl Deanne
Andrew Alberti Jr
Lois E Mead
Gordy Jones
Terry Svevda
Kathy Clendenen
Bonnie White

Pauline Yeager
Robert Rocco
Melinda Sanelivi
Catherine Peters
Rick Davis
Wilford Wilson
Nora Muniz
Gail Wells
Charissa Robbins
Betsy Brownfield
Linda Claiborne
Michelle Valenti
Delannie Lee Graff
Janice Empire
Joshua Molkay
Byron Vison
Sorina Teodor
Paula Lorenzo
Hayley Freeman
Angela Smith
Wayne Hallahan
Virginia Bailey
Naomi Gardner
Alice Teodor
Dennis Robinson
Mary Diehl
James Lee
Cynthia Abney
Heather Lee
Cassandra Maye
Richelle Scopito
Lorena Walter
Jennifer Cruz
Robert T Holmes
Walter Rubia
Joseph Thompson
Mary C Huggins
Joseph Heath
Joanna Liama
Roy Cornelius
Virginia Gervick

Stephanie Parker
Janet Stickler
Lisa Schrad
Elizabeth Lumello
Frank Lees
Rosemary Wilson
Mara Danilka
Vince Wells
Deborah Atkins
Craig Downer
Analisa Jackson
Denise Christensen
Trudy Faulkenet
Dawn Hobson
Angela Wiley
Steven Pritchett
Danela Acebal
Jada Lorenzo
Sarah Parker
Shauna Hallahan
Cathy Hallahan
Isiquel Smith Perry
Patrick Cottingham
Fernando Guerrero
Amy Robinson
Tim Schwarz
Rebekah Davis
Raymond Hatcher
Zach Robinson
Jessie Smith
Lynda Merrill
Flor de Maria Jeeves
Esther O Villanueva
Michael Miraglia
JoAnne T Butterweck
Gustavo Villada
Bob Ahrendt
Bruce Walls
Chad Clendenen
Charles Giles
George Demas

6
Page

The SPRING MOUNTAIN ALLIANCE is a branch of America's Wild Horse Advocates (AWHA), a Nevada nonprofit 501(c)(3) organization (Federal ID # 30-0399114) established in 2006 to preserve wild horses & burros within a balanced ecosystem by encouraging proactive management on public lands, raising public awareness.

Darryl Lackey
 Margo Publow
 Robert Wycoff
 Dorothy Reynard
 Miargo Pietrafesa
 Suzanne Arleno
 Alexia Dudoit
 Jeff Temple
 Krystine Velles
 Bob Mispaequel
 Eugene Lewis
 Geri Martintez
 Sid Brandt
 Paul Wilkins
 Aaron Jannen
 Michael Carbo
 Dante Ulanday
 Gina Meinwall
 Reggie Miller
 Steven Tenwick
 Steven Massaro
 Rhonda Dudoit
 Ned Oxbarrow
 Beth Rupp
 Anthony Greco
 Bill Cams
 Michael Reimler
 Kenneth Bent
 Janet Bennett
 Martin Gavin
 Martha Cardenas
 Magda Conover
 Tricia Metzler
 John Palfin
 Amy Ruiz
 Casey Clendenen
 Linda Roche
 Betty Owen
 Judy Barnes
 Joan Lence
 Kathy Banning

Cammy Brunold
 Bruce Calley
 Lori Jean Maye
 Terry Tindall Lass
 Lorenzo Rodriguez
 CM Oryan
 Rita Olsen
 Chad Fetting
 Ken Kaufman
 Lionel Wizer
 Gregory Vernett
 Cesar Robles
 Mary Brandt
 David Pritello
 MayLynn Jannen
 Carl Gagliotic
 Sean Van Horn
 Tim Phillis
 Ken Supasak
 Dylan Arnett
 Shari Heiberg
 Kim Clendenen
 Kenneth Oxbarrow
 Kenneth Searles
 Mark Morningstar
 Miles Eklund
 Carol Bushart
 Ruthann Magee
 Vanessa Sanchez
 George Rubifison
 Sharee Vierra Nungaray
 Blake Miles
 Jennifer Sawyers
 Sydney Knott
 Jason Ruiz
 Pete Helfrich
 Kyoko Wagner
 Stephen Owen
 Alice Rossington
 Karma Wimsatt
 Richard Foulton

Jennifer Slabey
 Susan Ann Harper
 Carol Burchfield
 Laura Jensen
 Roberta DeBuff
 Priscilla Gutierrez
 Yelena Kotneyeva
 Mary Sawyer
 Darcy Goodwin
 Mike Arnett
 Bill Hudson
 Cade Elkworth
 Randy Bachman
 Mirella Hernandez
 Taylor Beam
 Katelyn Guevara
 Dayvian Diaz
 Carmae Gumataotao
 Sidney Stockwell
 Paige Bushman
 Danielle Hutchinson
 Ray Willis
 Debra Stickland
 Diane Gibson
 Douglas Shaw
 Vince Hannah
 Susan Garcia
 Jim Humtington
 Sandford Leff
 William Hollander
 Jessica Florio
 Brenda Gallivan
 Shelley Lacy
 Eric Lacy
 John Graft
 Terry Lee Miller-Dougy
 Amanda Regis
 Mark Swift
 Linda Chapin
 David Gremse
 Larry Seversten

Taylor Greener
 Melissa Emery
 Carol Lee
 Sam Briban
 Pat Magallanes Briban
 Lea Kogoshi
 Michelle Cano
 Robert Papagno
 Gary Boyd
 Jean Arnett
 Ashlynn Baxter
 Nikolaus Collins
 Sara Blackstock
 Shaneka Vinson
 Trent Stirling
 Rochelle Mokiao
 Linda Parker
 Camryn Simper
 Kathleen Darragh
 Loren Gomez
 Karen Butterfield
 Norma Willis
 Debbie Saunders
 Ola Tucker
 Gordon Wiks
 Linda Cameron
 Fred Garcia
 George Dansen
 Brad Goans
 WV Balff
 Ray Vogel
 James Parsons
 Wendy Wear
 Amanda Hamblin
 Patricia Franklin
 Joshua Miller
 Judith Glover
 Jenni Bickers
 Steve Chapin
 Melissa Cooley
 Claudia Fetcho

Suen Peery
 Frank Toth
 James Dorsano
 Marie Mendoza
 Penigni Mateaki
 Gregg Fox
 Olivia Cano
 Kevin Gallautier
 Daniel Cary
 Linda Claiborne
 Katrina Hutchinson
 Melissa Sones
 Giovanna Whiakker
 Taylor Stuart
 Olivia Capuano
 Alley McKe
 Hannah Larson
 Kaitlyn Lucas
 Ashley Wood-Bergstrand
 Jacquelyn Marzan
 Apryle N. Brock
 D. L. Strickland
 Kitty Tomski
 Kim Kingsley
 Jim Hannah
 Donna Jokinen
 Mary Hannah
 Kenneth Stroup
 Margaret Johnston
 Amy Honebrink
 Esther Astolfi
 Thomas Stromberg
 Janice Ridondo
 Donna Hamblin
 William Cooley
 Brian Benjamin
 Jennifer Hallie
 Robert Kingsten
 Diane Gremse
 Diane Seversten
 Tara Schaupt

SPRING MOUNTAIN ALLIANCE

Saving the Wild Horses & Burros of Southern Nevada for Future Generations

www.SpringMountainAlliance.org

PO Box 30152
Las Vegas, NV 89173
702-216-2920

Nancy Renville
Charles Cornell
Lorilee Calvert
Karen Weiy
Karla Maraten
Marvin Jende
Paula Callahan
Linda McCollum
Betty Zinner
Diane Orgill
Robert Butters
Tom Struck
C J McInnes
Mary Cannestra
Samantha Kidwell
Kennen Cole
Karmyn Taylor
Nancy Seidel
Travis Huggins
Louis Behmoun
Louis Romero
Donald Cox
Linn Jones
Pat Kerby
Jeff Weist
Edmond Bourbran
Anna Searles
Tom Wright
Robert Little
Bob Irving
Andrew Albert
Kathy Banning
Jeanne Nash
Louis Arcumbula
Amy Tanner
Arnold Santos
Whitney McDonald
Jillian Gustin
Elaine Lane
Paris Casey
Ashley Ellis

Kathy Beall
Eugene Krogman
Tori Bobson
Caitl McCann
Catherine Dunia
Joan Jerde
Kathy Wilson
Irvin Crain
Bradley Zinner
Joshua Shumaker
Brittany Patrick
Michael Miano
Karen Jensen
Kyoko Wagner
Zac Sanchez
Kimomnie Jeffervor
Lisa R Coggins
Kelly Seidel
Walt Grudzinski
Virgil Muntean
Robin Bonay
Richard Goldstern
Bill Dawson
Brian Becker
Faith Bosket
Sally Tribble
Jacob Rios-Vargas
Brian Shoemaker
Bernard Cusimano
Patrick Rigger
Walter Rubin
Khystal Payton Scheels
Krista Morrison
Melissa Luszczyk
Sarah Crow
Joe Dye
Jacob Hansen
Charlene D Smith
Jessica McFarlin
Matt Ostrini
Carla Burgoin

Viviana Garcia
Sergio Macias
Michael A. Flynn
Julee Westlund
James Brill
Alex Pizek
Courtney Mellinger
Dianne Romano
Jon-Paul Ferrante
Casey Hammack
Dan Bighaus
Brooklyn Johnston
Vicky Parker
Jeff N. Swift
Jessica Coble
Donti Chapman
David J. Totino
Brian Carbone
Steve Brown
Rosie Durazo
Audrey Hayes
Carl T. Smith
Glenda Farrell
Jason Trenkle
Lestie M. Wilkerson
Melody Hendry
Debra Popejoy
Amber Poders
Diane Ruth
Linda Yost

Jorge Abrardales
Richard Santos
Bobbie Stark
D. Tracy
Nicola Wharry
Luke Michael McDonough
Kelly Flynn
Shanna Little
Jaime Ferrante
Jerry Dean Norman
Ronald Emond
Randall Lee Bridges
Marian Faxson
Cody Swift
Lorie Hartwell
Denise Sapareti
Joan Earl
Jane Carbone
Roberta "Granny" Bock
Tina Trenner
Frank Cracker
William E. Riches
Liisa Park
Rolf Koss
Virginia Ermond
Annette Smart
Naomi M. Vannucci
Loralee Casc
Ronald Jokinen
Deborah Nelson

Non-Nevada Residents
The following signatures are from interested non-Nevada residents. Original signatures are available by request to the Alliance.

Enlightened Horseman
Wild Horse Freedom Federation
Lori Fortine
Kendra Clarke
Joseph Forting
Sue Simon
Oceano, CA
Pinehurst, TX
San Leandro, CA
Livermore, CA
Castro Valley, CA
San Diego, CA

6 of 6

The SPRING MOUNTAIN ALLIANCE is a branch of America's Wild Horse Advocates (AWHA), a Nevada nonprofit 501(c)(3) organization (Federal ID # 30-0399114) established in 2006 to preserve wild horses & burros within a balanced ecosystem by encouraging proactive management on public lands, raising public awareness.

SPRING MOUNTAIN ALLIANCE

PO Box 30152
Las Vegas, NV 89173
702-216-2920

www.SpringMountainAlliance.org

Rico Santos
Leslie Riordan-Conery
Richard M. Gambill
Joshua Miller
Jackie Hisson
Kelly Mellinger
Jennifer Flynn
Erin Bong
Lawrence A. Kalinowski
Greg A. Morton
Judith Mayer Lynn
Carolyn Jenckes
Michael J. Griffin Jr.
Barbara Hart
Pamela Keaton-Carter
Anthony Greco
Jon Bruce Earl
Kenneth S. Bumper
Amy Riches
Kelly Dunyyn
Jane Schmidt
Pam Golden
Shayni Ross
Mac Major
Adrea E. Phipps
D.J. Jordan
Donna Jean Bell
Kim Sievlachick
Diane Fruth
Geri Hunt

Page 10

The SPRING MOUNTAIN ALLIANCE is a branch of America's Wild Horse Advocates (AWHA), a Nevada nonprofit 501(c)(3) organization (Federal ID # 30-0399114) established in 2006 to preserve wild horses & burros within a balanced ecosystem by encouraging proactive management on public lands, raising public awareness.

Bruce Simon
 Karli Lovesee
 Joe Lovesee
 Kathy Raymond
 Lara Park
 Chris Elliott
 Elyse Friendly
 Ben Martinez
 Mary Martinez
 Marilyn Wolf
 Rosemary Smith
 Leslie Wenke
 Mary Ann McGee
 Jasmine Hall
 Linda Lee
 Ginger Kathrens
 Mea Brittain
 Mariah Ruddell
 Mary Ann McGoffin
 Deborah Lane
 Jeanne Hawks
 Amy Suhr
 Joe Camp
 Rick Mittelstaedt
 Gillian Mittelstaedt
 Dr. Isaac Frydman
 Karin Frydman
 Tom Kerrigan
 Scully Cloete
 Teresa Earle
 Francesca Cloete
 EJ Schrader
 Van Blanc Productions
 Martha G. Hill
 Timothy P. Murphy
 Joy Wetterholm
 Jerry Wetterholm
 Lisa Wheeler
 Marvin Wheeler

San Diego, CA
 Sacramento, CA
 Sacramento, CA
 Palo Verde, AZ
 Santa Barbara, CA
 Santa Barbara, CA
 Santa Barbara, CA
 Cheyenne, Wyoming
 Cheyenne, Wyoming
 Palo Verde's, CA
 Costa Mesa, CA
 Valencia, CA
 Gillette, Wyoming
 Fontana, CA
 Costa Mesa, CA
 Colorado Springs, CO
 Garden Grove, CA
 Garden Grove, CA
 Garden Grove, CA
 Garden Grove, CA
 Palo Verde, AZ
 Congress, AZ
 Costa Mesa, CA
 Bell Buckle, TN
 Issaquah, WA
 Issaquah, WA
 Brookville, OH
 Brookville, OH
 Patstrup, NJ
 Malibu, CA
 Malibu, CA
 Malibu, CA
 Foley, MN
 Hollister, MO
 Evanston, IL
 Evanston, IL
 Lompoc, CA
 Lompoc, CA
 Lakewood, CA
 Lakewood, CA

The SPRING MOUNTAIN ALLIANCE is a branch of America's Wild Horse Advocates (AWHA), a Nevada nonprofit 501(c)(3) organization (Federal ID # 30-089114) established in 2006 to preserve wild horses & burros within a balanced ecosystem by encouraging proactive management on public lands, raising public awareness.

Non-USA Residents

The following signatures are from interested non-American residents. Original signatures are available by request to the Alliance.

Marg Newell
 Tom Newell
 Pam Stevenson
 The Bookshop
 Mabel Gawne
 Jim Gawne
 Thomas Dressler
 Lynne Pearson
 Herman Du Plessis
 Janine Greverling
 Esti Mallet Maas
 Gert van der Merwe

Nelson BC Canada
 Nelson BC Canada
 Penitcton, BC Canada
 Penitcton, BC Canada
 Penitcton, BC Canada
 Sooke, BC Canada
 Marbella Spain
 Langebaan South Africa
 Franschoek, South Africa
 Hout Bay, South Africa
 Cape Town, South Africa
 Somerset West, South Africa

The SPRING MOUNTAIN ALLIANCE is a branch of America's Wild Horse Advocates (AWHA), a Nevada nonprofit 501(c)(3) organization (Federal ID # 30-089114) established in 2006 to preserve wild horses & burros within a balanced ecosystem by encouraging proactive management on public lands, raising public awareness.

APPENDIX 2: EXAMPLES OF SUCCESSFUL CO-OPERATIVE PROJECTS WITH BLM

1. LITTLE BOOK CLIFFS WILD HORSE RANGE:

http://www.blm.gov/pgdata/etc/medialib/blm/co/field_offices/grand_junction_field/PDF.Par.73208.File.dat/littlebookcliffs_web.pdf to quote:

"Beginning in the mid-1980s, Friends of the Mustangs and the BLM have worked together to ensure that both the Little Book Cliffs Wild Horse Range and the horses living there are kept healthy. Projects include trail clearing, spring development and maintenance, and tracking horse numbers, locations and range conditions. Friends of the Mustangs also assist in gathers and in finding adoptive homes for the animals, working with prospective owners and checking back with them to make sure horse and owner are doing well. If you are interested in becoming a member of Friends of the Mustangs, contact the Grand Junction BLM office for their address and phone number."

Website: <http://friendsofthemustangs.org/> to quote:

"Friends of the Mustangs was established in 1982 by a small group of people that had come to love and care about the Little Book Cliff (LBC) wild horse herd and their health and range. We have established a good working relationship with the Bureau of Land Management (BLM) through the years.

The Friends of the Mustangs have received several awards from the BLM for our volunteer support of the horses in the Little Book Cliff Wild Horse Range (HMA). A couple of members were honored to be able to go to Washington.

Our volunteers work hard to keep the water holes and tanks flowing and clean, we also maintain trails by clearing them and marking them for other hikers/riders. We also help with the gathers and adoptions associated with the Little Book Cliff herd, along with the prospective adopters. Many of our members are qualified to do check ups on the adopted horses. We do this to make sure that the adopters and the horse(s) that they adopted are getting along well. Along with the work on the range, we also go to different events in our area to bring awareness of the wild horses. Each year we hold an Open House so that people can come out and meet many of the members and their mustangs and to show just how trainable mustangs are, also we have mini clinics to help people to understand many different things about the horse and adoption process, the use of PZP, training tips and much more.

We have become a 501(c)3 non profit and we have grown to around 100 members along with a few from other countries. We are also Non Political organization.

We are very proud of what has been accomplished since 1982. We are the only group of our kind that works so closely with the BLM and the Little Book Cliff Wild Horse Herd."

Quote from http://www.hcn.org/issues/44.19/is-there-a-way-through-the-wests-bitter-wild-horse-wars/article_view?b_start:int=3&utm_medium=email&utm_source=wc1 :

"In 2001, Kirkpatrick began inviting such enthusiasts to his lab for a three-day PZP training. One of his first graduates was a retired Colorado schoolteacher named Marty Felix. After she learned how to mix the drug and shoot a dart gun in 2002, she convinced her local BLM office to let her dart the 150 wild horses of the Little Book Cliffs herd near Grand Junction. Within a few years, PZP cut the herd's offspring by nearly half, she says. 'Because of what we've done, they've postponed roundups again and again. They just don't need them.'"

2. THE MCCULLOUGH PEAKS HMA

From http://www.blm.gov/wy/st/en/field_offices/Cody/wh.html to quote:

APPENDIX 2: EXAMPLES OF SUCCESSFUL CO-OPERATIVE PROJECTS WITH BLM

"The McCullough Peaks HMA is located 12 to 27 miles east of Cody (70 miles east of Yellowstone Park) and encompasses 109,814 acres of land, including the McCullough Peaks Wilderness Study Area. The climate is typical of a cold desert with annual precipitation averaging five to nine inches. Stock reservoirs and intermittent streams fed by winter snows and spring runoff provide adequate water for the HMA. Topography is highly variable, ranging from mostly flat to slightly rolling foothills carved by drainages, to colorful badlands and desert mountains featuring steep slopes, cliffs and canyons.

A diversity of coat colors (bay, brown, black, sorrel, chestnut, white, buckskin, gray, palomino, and blue, red and strawberry roans) and patterns such as piebald and skewbald are found in the McCullough Peaks wild horses. The animals tend to be moderate- to large-sized and habitat conditions are such that the horses are in very good condition. The combination of size, conformation, coat colors and patterns, and excellent physical condition have become a draw for potential adopters and a matter of reputation for "McCullough Peaks" horses. The management objective for the HMA is to maintain a population of 100 wild horses; as of January, 2008, the population is 167 animals."

WEBSITE: <http://www.friendsofalegacy.org/> to quote:

"Generous donations and grants have enabled us to erect two **watering systems** in two separate pastures within the HMA. At each water site a well has been drilled, a windmill installed to pump the water, and two watering tanks have been placed. The first tank provides water for large animals such as wild horses, antelope, deer, and cattle. The second tank provides water within a fenced "exclosure" where birds and small mammals have protective cover from the naturally growing sagebrush. In 2012, a new partnership among the Bureau of Land Management (BLM) Cody Field Office, Marathon Oil Corporation and Friends of a Legacy (FOAL) made great strides toward improving water sources for the benefit of wild horses, wildlife and livestock inside the McCullough Peaks Wild Horse HMA.

A weed control program has also been implemented, targeting Salt Cedar and Russian Olive, two invasive species which drink up copious amounts of water. Four more systems are planned by 2014.

MANAGING THE POPULATION:

We have taken the lead in fertility control and tracking. Native PZP (Porcine Zona Pellucida) has a proven 95% efficacy rate in preventing pregnancy in wild mares, using field darting techniques. This method of fertility control is cost effective, humane, safe, reversible, and has proven to be a useful tool in managing wild horse populations. Two FOAL board members have become certified "darters" and hope to aid the BLM with future fertility control of our local herds. Our goal is to maintain strong genetic diversity in the herd and minimize the need for future gathers or round-ups.

FOAL members also help conduct on-going tracking of the herd genetics, monitor traffic counters on the BLM roads in the Herd Management Area, record the amount of water available, and have kept records on the horses for the past 13 years."

3. SPRING CREEK BASIN WILD HORSE MANAGEMENT AREA

Another successful area is the Spring Creek Basin Wild Horse Management in southwestern Colorado where joint projects like water tanks, fencing and PZP field darting are well recorded in TJ Holme's blog: <http://springcreekwild.wordpress.com/> or view <http://www.sciencemeetsadventure.com/the-wild-horses-of-spring-creek-basin-colorado/>

4. ASSATEAQUE ISLAND WILD HORSES

For over 20 years, scientists Dr. Ron Keiper and Dr. Jay Kirkpatrick, have worked successfully to control the population of wild horses by field darting with PZP. For greater detail on the history of this longterm project, see <http://www.sciencemeetsadventure.com/and-now-a-word-from-the-wild-horse-scientist/>

Appendix 3: PZP Population Control Details

ZonaSat-H, or 1-year PZP, is the safest and most effective contraceptive available at this time. It has an efficacy of 95%. Its contraceptive effects are fully reversible if annual injections are terminated within 5 years of continued application. PZP has no harmful effects when administered to pregnant mares and offspring of treated mares can reproduce normally. It has no ability to pass through the food chain. PZP has no long term health effects and doesn't interfere with the social interactions of herd animals. In fact removing the burden of annual birthing and lactating greatly improves mares' health and extends their life span up to 5-10 years.

How PZP (Porcine Zona Pellucida) Works

From <http://www.fort.usgs.gov/WildHorsePopulations/Contraception.asp> "**Reducing Population Growth Rates: Fertility Control in Wild Horse Mares**" :

In order for sperm to attach to the ovum and fertilize the egg, there must be complementary proteins on both the surface of the sperm and the zona pellucida (ZP) of the ovum. PZP acts as a foreign protein against which the treated mare produces antibodies (thus, the PZP fertility control agent is actually a vaccine). These antibodies attach to the mare's zona sperm receptors on the ovum and block fertilization. Domestic pig ovaries (obtained from slaughterhouses) are minced and the PZP is obtained from screening filtration. An adjuvant is mixed with the PZP to enhance its effectiveness when it is injected into mares intramuscularly. Once injected, it causes an immune response, making the mare infertile. Over time, the antibody titers fall and fertility returns. With the liquid vaccine, a booster injection can be given at 10 months to raise the titers back to the infertile range. This can be done each year for at least 4 years, after which time the effects may be more likely to become permanent. For this reason, current individual-level field trials involve only 1–4 years of treatment.

"A National Park Service research team on Assateague Island National Seashore turned to an immunocontraceptive agent, porcine zona pellucida (PZP), which had been reported to block fertilization in dogs, rabbits, and primates. Experimental PZP application on the wild horses of Assateague Island commenced in 1988, resulting in promising reductions in the pregnancy rates of mares: by 1994, population growth began to stabilize solely through the use of PZP immunocontraception."

"The USGS, BLM, and **USDA Animal and Plant Health Inspection Service (APHIS)** have essentially completed individual-level field trials of PZP in free-roaming wild horses at three locations: **Pryor Mountain Wild Horse Range, Montana and Wyoming; McCullough Peaks Herd Management Area, Wyoming;** and **Little Book Cliffs Wild Horse Range, Colorado**. Application of PZP began in 2001 at Pryor Mountain, in 2002 at Little Book Cliffs, and in 2004 at McCullough Peaks. Results of this work in terms of horse behavior are reported in **Ransom et al. (2010)**, and efficacy results are detailed in **Ransom et al. (2011)**"

PZP Delivery Methods

PZP is extremely low cost (under \$30 per dose) and can be remotely delivered by a variety of methods.

Appendix 3: PZP Population Control Details

Pneu-Dart 1.0 cc (P-type) Darts with a 1.5 inch barbless needle will be used to deliver a 1.0 cc dose of PZP/ Adjuvant vaccine. Darts will be loaded into a variety of delivery systems.



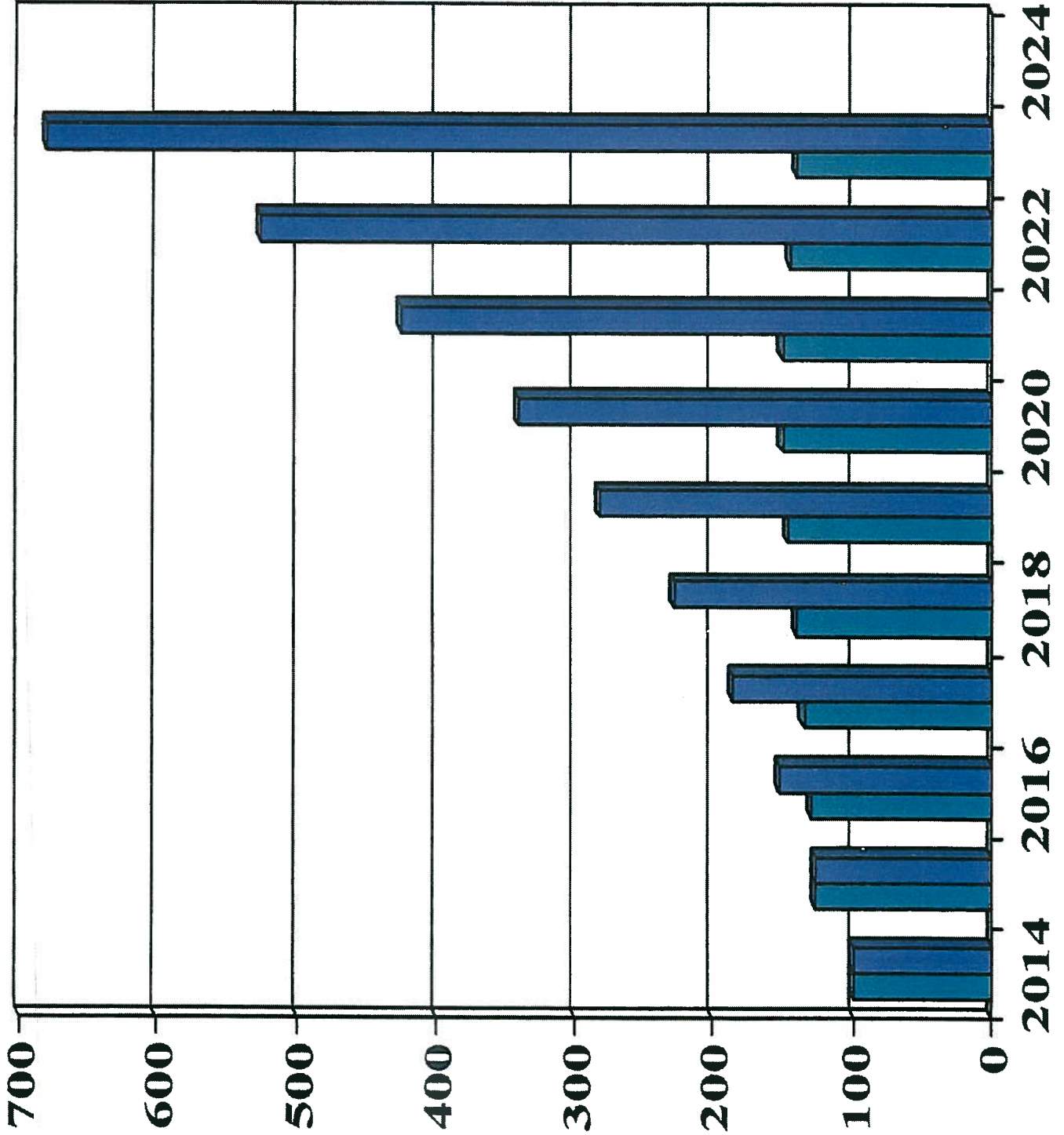
Jab sticks
Hand Blow Guns or CO2 Trigger operated Blow Guns
Pneumatic Pistols
Various models of pneumatic rifle - the Pneu-Dart Model X Caliber rifle being the easiest to use in the field, however, it is the heaviest selection.
Several of the rifles shown are Cartridge-Fired that are more complicated to use in the field. Because they are fired with gun powder, they are dirtier and they emit substantially more noise.

The Spring Mountain Alliance will supply a minimum of six people to assist in the PZP inoculation of Spring Mountain Complex mares. Three of the volunteers are already certified by the Science & Conservation Center, Billings Montana in the handling and delivery of PZP immunocontraceptive in wildlife. Additional personnel working in teams with the darters will retrieve the dart that falls from the mare's hind end to verify if the vaccine was indeed injected and will keep detailed records of the animal, its condition and time vaccinated according to a strict protocol for record-keeping of each mare that is treated with PZP. The data on each animal will be updated on a continual basis as animals are re-darted, give birth, etc.

Comparison of Population Growth in PZP-treated Animals vs Normal Growth

The following chart is a projection of the population growth over a ten year period of 100 wild horses (40 mares, 60 stallions). One group is a normal growth trend and the second is the growth controlled with injections of the contraceptive PZP. The PZP controlled population assumes 95% efficacy and a normal foal rate the first year. From the second year on a foal rate of 10% was used for the PZP population. Because mare life spans are extended when the burden of foaling is removed the population does not start to drop for 6 or 7 years until attrition catches up. An aggressive adaption program will positively affect the projected population growth.

A projection of a wild horse population of 100 using PZP to control the growth and a normal population growth rate.



APPENDIX 4: HSUS PLATERO PROJECT ON BURRO CONTRACEPTION

http://www.humanesociety.org/news/press_releases/2013/06/wild-burros-grant-project-launch-062513.html

June 25, 2013: **Grant Project Launched to Help Wild Burros**

The Humane Society of the United States receives five-year grant aimed at improving herd management and adoptions.

As the recipient of a five-year \$760,000 grant from an anonymous donor, The Humane Society of the United States has launched "The Platero Project" to promote the protection of wild burros managed by the Bureau of Land Management. The aim of the project is to develop partnerships and programs to research the effectiveness of contraceptive vaccine on wild burro herds and to reduce the number of wild burros currently living in BLM holding areas, by increasing adoptions and relocating difficult to place burros to sanctuaries. The project was financed by a donor who cares deeply about the humane treatment of burros, and it is named for the Spanish Nobel Laureate Juan Ramon Jimenez's book about a faithful and friendly donkey named Platero.

Heidi Hopkins, The Platero Project manager for The HSUS, said: "There are many challenges to the management of wild burro herds, and through innovation we can find a way forward that saves burros from suffering and saves tax dollars and agency resources. We are grateful for this generous donation that allows us to step up our work to protect and celebrate these animals."

Over the past five years, the rate of wild burro adoptions through BLM has drastically decreased, and more than 1,300 burros remain in federal holding facilities in the western U.S. The HSUS plans to develop a training program for wild burros that aims to increase the number of burros adopted annually.

The immunocontraception vaccine commonly known as porcine zona pellucida (PZP) was registered by the Environmental Protection Agency (EPA) to manage wild horse populations on the range last year, but it has not yet been used by the BLM on burros. The Platero Project will assist in a long-term research project to determine the efficacy and cost-benefits of using PZP to manage wild burros on the range. Increased use of PZP by the BLM could save taxpayers millions of dollars over the next decade while helping to maintain healthy wild horse and burro populations.

Background:

- There are more than 20 Herd Management Areas in five western states that are home to over 5,000 wild burros.
- Wild burros are decedents of the burros used by early settlers and miners in the 1800s.
- The Wild and Free Roaming Horse and Burros Act of 1971 is a federal law that was enacted to protect these animals and their habitat.
- In many species, including wild horses, PZP, registered under the brand name ZonaStat-H, causes the production of antibodies that bind to sperm receptor sites on eggs and block fertilization. The Science and Conservation Center (SCC) based in Billings, Montana, produces the vaccine, which has been used to treat more than 1,600 wild, sanctuary and tribal horses annually at dozens of trial sites across the U.S., including east coast barrier islands, western wild horse ranges, Navajo and Pima/Maricopa tribal horses.
- PZP was first used on wild horses in 1988 when a team led by Jay F. Kirkpatrick, Ph.D., the director of the Science and Conservation Center, began a pilot project on the famous wild ponies on Assateague Island National Seashore off the coast of Maryland. This project, which has been supported by The HSUS for more than 20 years, was so successful that the National Park Service began to utilize PZP as a population management tool in 1994.
- About 300 burros live at Cleveland Amory Black Beauty Ranch, an animal sanctuary operated by The Fund for Animals, an affiliate of The HSUS.
- Earlier this month, the National Academy of Sciences (NAS) released an extensive report that called for an increased use of on the range management tools, including PZP. See the report <http://hsus.typepad.com/wayne/2013/06/nrc-gets-it-right-in-panning-blm-wild-horse-program.html>

Media Contact: Stephanie Twining, 301-258-1491, stwining@humanesociety.org

Spring Mountain Alliance ID Card

ID # - M 1210-4

Name - Babe

Band / Family - CC11

Gender - Female

Color - Light Buckskin

MARKINGS - Mane : Black (Right)

Tail - Black Legs - White Pastern Left Rear

Face: Whorl on forehead between eyes

Ears: Black

Muzzle : Black

Sire - S0612-01

Dame - M0511-01

Foals - None

Birth Date - 12/10/2011

Remarks : Frequents houses in and around Cold Creek.

