

the government, I probably wouldn't get a contract because it's a lot of work. But there are organizations that have gone through the process, several of them. And I think once you get through the process, pull the proposal together, the contracting officer and grants management, they are great to work with. They are busy people. So, the fact that they take the time to talk with anyone who is interested during that process is really commendable. And I appreciate all the work that they do.

Dr. Perryman: Yes, thanks, Madam Chair and Holle. I want to segue briefly to another subject. And there was a lot of-- a number of concerns expressed yesterday in the public comment period over some of the mechanisms and logistics on the ground when gathers occur. And that's always been a concern of the board as well. We are concerned about that. And so, I noticed in our packet there's a brief statement on animal care and safety remaining a top priority. 99.76 injury free gather rate for lack of a better term. And I'm going to put commissioner-- on the spot here. The last peer review, this is for the board's education. The last peer review step I've seen-- correct me if I'm wrong, mule deer captures in the wild-- there's inherent risk when you're capturing wild animals. But mule deer as I recall, about the same number percentages, it's less than a half of a percent of mortality. And I think big horn sheep, maybe higher. Maybe 2%, some it where in that range. But that puts us right in line with other wild animal captures and holding. Am I still on the right track with that? I don't know when the last time I saw peer review.

Mr. French: You're right, spot on. And big horn's higher than that. But it's primarily, I guess you have to look at the technique for the capture. You know, big horn is generally a-- net gun from a helicopter and hazardous to both parties. At any rate-- if that, shooting a net gun at a running animal and then jumping out of a helicopter and pinning them to the ground, even with that, we're seeing a very low incident of injury.

Dr. Perryman: The point is, we're in line with other methods and other species with regard to care and concern and quality assurance, quality control. So, I commend you for that. And you know, keep going. We can't stop at this point. Vigilance is required. We can't just sort of sit on our own Laurels, so to speak. So, I just kind of wanted to bring that to the attention of the board. I yield back.

Ms. Carlisle: And is Ms. Bertola still in the room? In terms of that, where you are going through the internal auditing process you're going through, you have audited some of the gathers if I'm remembering correctly.

Ms. Bertola: We've completed 11 gather assessments so far.

Ms. Carlisle: So, I think that is ongoing, that's exactly what you're saying, you don't stop at that even though you're along the lines were what's considered appropriate sort of industry standard for lack of a better term. Doesn't always translate to like, hey, great. But that idea of refinement and continuing to dot those Is and cross the Ts. It's good to hear. We've had discussions just sort of on our personal levels of how to capture the public's interest in gathers and in being able to go to a place where they can communicate any frustrations that they're seeing with the gathers. And I mean beyond the social media postings that occur which you can't grab onto and do anything with. They spin everywhere. You can't tell where the original report is coming from. And that's difficult for the agencies to respond to. And so, when perceived or real violations of that comprehensive animal welfare protocol occurred during a gather, I think the public feels like they have no voice in reporting that out or getting information back about whatever their concern had been. Either we looked into it and checked this box or didn't and you're right and we're refining that and you're right and there's a consequence. So, I don't know if anyone has-- anyone from BLM in particular or Forest Service are there mechanisms for the public to engage in that in a manner that can be collected and identified and is-- the agency acting upon it?

Mr. St George: Could you reframe the question.

Ms. Carlisle: Yeah. Well, I'm re-thinking my answer. I was hearing you differently. Thank you for that.

Mr. St George: Then what? There are liaisons on the ground at each of those gathers. And we would encourage the members of the public to express their concern to those liaisons and we expect BLM to respond in coordination with its contractor. Yesterday in subcommittee we talked about several parallels to the way BLM administers its fire program. Wildfire program. And I kind of wish I had the props at this moment. But in BLM's fire program, there is something called the Red book. And it's about two and a half, three inches thick. And that guides the administration of every

incident. We have something very similar in the Wild Horse and Burro program. It might not be two and a half, three inches thick, it might be two inches thick. It guides the operations on the ground. And we expect both BLM and contractors to comply with those guidelines. And that we would take action where we have failed to comply. Again, similar to the fire program, there is a strong culture within the fire program of preseason preparedness reviews. An independent team from BLM goes in and reviews another organization's preparedness for that season. Do after action reviews and audits. And the culture accepts that review not as something punitive but as something with a growth mindset that we are going to do better to continue to ensure we are providing for firefighter safety and public safety. And then respond to the incident appropriately. We are working and Jerrie is in the lead of instituting the same sort of culture within the Wild Horse and Burro program of a growth mind set of understanding that these audits are for the betterment of the program. And we have mechanisms to receive that public comment and criticism and critique where we can go wrong. Holle' shared with me because we can go wrong. Humans are involved here, and we can make errors and make mistakes. Holle' shared with me an article from the journal of Equine Science that found that BLM Wild Horse and Burro gathers are considered as safe or safer than similar gather operations for elk, deer and caribou to the point you were discussing. Commissioner French.

Mr. French: If I could, just a follow-up question. I'm wondering is it SOP for the bureau to conduct a debriefing following each of these operations? Because I would think that would be the opportunity especially following it, similar to what the fire program does. There's a debriefing following the activities on the fire program to see where did we mess up and how did we perform in that. Because there is such a limited of number of contractors on the ground, I think they would welcome the debriefing evaluation audit very soon, following that. I'm wondering is that an SOP?

Mr. St George: We're going to pitch back to Scott and Jerrie. Did you hear the question?

Ms. Waddell: Before the lead in, I think Jerrie or Scott, whichever one-- there is a self-assessment tool. Therefore, several components to CAWP and Jerrie is moving in had phase 1 moving to phase 2. There is a self-assessment tool. There's also the tool where her team is assessing operations. And eventually we will move to this external assessment tool where members of the public would be able to participate in different ways. Does that mean that anyone that's on the ground can throw up their hand and say, I don't like that this is happening? They can say it, right? Freedom of speech. It doesn't mean that that's part of assessing the actual operation. I think that's part of what's challenging about this. The public feels very empowered to often weigh in on operations without maybe knowing all of the SOPs, knowing the instruction memorandums, the standards associated, the requirements, what's identified in the contract itself. So, there's a lot of opinion about the work being done instead of questions being asked. Go ahead, Jerrie.

Mr. Fluer: I want to add to Brian's comment how it relates to fire and incident management plan. In gathers we have an incident management manager for the overall operation tied to an incident manager's gather plan. So, there's an overall gather plan for the entire operation. And then of course we have what we call a contract officer representative on the gather that is basically in charge of the gather and working with the incident commander. Those operations are followed through a laid-out process. And I'll turn it over to Jerrie to talk about how CAWP is feathered into that. But we have a very structured approach. And as far as after a gather, we have gather reviews and debriefings and you know, to review after action.

Ms. Bertola: So just a couple of points I was going to make is that Ms. Carlisle was asking about the temperature. On the gathers that I've been to, doing the internal assessments, most times there's somebody at the trap, somebody at the public viewing and also at holding that's checking those temperatures. And there's constant communication behind the scenes on those to see if we are achieving that. We carry our own, double check, triple check to make sure that those things are happening. There's been times where, I've seen we're stopping for the day because of whatever issue has come up. I feel like, our specialists, this is all becoming second nature to them. It's been a learning process. It's going to continue to be a learning process. And that is how our CAWP is designed for all that feedback to keep coming in. How can we improve and make it better? How can we better explain ourselves internally and externally on what we're doing? It's been a learning process and we're working through that. So, the self-assessment like Holle' mentioned, Nevada has been excellent in setting something up. And it's simply going through and looking at our standards, how are we doing? And that's something that they can do, you know, on a weekly basis or at the end of a gather, depending on the size. We're encouraging that for our other activities as well. Because it's a good spot check, oh, I didn't-- that standard reads different

than I thought it read. It's a way for us to double check ourselves. Those are the ways we use the CAWP to help send our message out there. We are doing this and our people really care. So, I don't know if I answered your question fully or not. Those are the comments I'd like to add.

Ms. Carlisle: Yeah. Thank you. Appreciate that. I didn't mean to intimate that that is happening. It was the quickest, simplest example I could come up with. I know the board has been sort of poking away at exactly what you're talking about which is the fire model for something that is-- it's big in the public's mind. I know it's big in the agency's mind and the board's mind. This is a place where there's, you know, it's like going on a field trip. Highest risk portion of that field trip is your drive to wherever you're going. That same thing is happening in the program with the gathers. There's a lot that can go wrong and go wrong spectacularly. So, I'm pleased that you all are ticking off that long list of things to do to just continually refine that program. Anybody else?

Mr. Kuechle: Okay. Well, that puts us ahead of schedule. We have time. We come back from our lunch break at 1:30. We're looking at, you know, almost two hours. So, we can take an extended lunch break. When we return, it's our public comment period time. Again, just a reminder, we'll do virtual first then in person. If you would like to provide in-person public comment, please register in the back. You can all provide public comment one time over the course of these days and meetings to ensure everybody has the opportunity. And we will begin promptly at 1:30 with public comment. Thank you.

[Break for Lunch]

Bryant Kuechle, Facilitator, The Langdon Group

Mr. Kuechle welcomed the Board and members of the public back to the meeting. He then went over the rules for public comment, either virtually or in person.

Public Comment Period (2)

Shari Frederick

My name is Shari Frederick, and I would like to thank the members of the board for letting me comment today. You play a very important role, cause your role is to safeguard and be the fiduciary responsible for the horses and burros that are on public lands. I am also a fiduciary for public funds, I'm a treasurer for a government agency and I understand the responsibilities that you have today, and I appreciate your taking the time to listen to us. I have several points I would like to touch on. First is the overall treatment of wild horses and burros there are several areas where, the treatment seems to be, very damaging to them. And I know your responsibility is to maintain their safety at all times. This starts with the roundups. Some of them are traps, some of them are helicopter roundups. We have had documented and seen lots of damage to the horses and really no action taken on those. And if it was, you know, um, another horse, you have animal abuse, you have areas that you can do so certainly they are, um, you know, it's very just horrific to see the Foles being roped and, and broken legs out there when they're running at break neck speeds. So, very important to look at the treatment. Um, they move from the roundup. They're, they're split from their families. Horses are family oriented. The stallions are put together. The mares are sometimes separated from their young foals because roundups are done during foaling season, which depending on the weather may be all during the year. Again, another form of really animal abuse. Um, and then they're put into these warehousing lots, which really are more meant for cattle. Um, they're disoriented. They start having mental issues. Obviously, they may be then warehoused or get ready for adoption and just like a, a person, they are probably not in the right state. It's harder for them to, um, to be able to take time after going through this trauma, uh, to be adopted and to become a regular working horse because they've gone through this. So, again, I think the treatment of horses, the fiduciary responsibility really needs to be reviewed closely because the things I've looked at certainly do not show that, and it really shows animal abuse. Secondly, uh, you have requirements to review the, the herd management areas. They have, from what I can see, they have not been done timely at all. In fact, they're very delinquent important. You can't be making decisions based on old data. You've had a lot of roundups, I mean, thousands of horses are being warehoused and roundup. So, you really need to update these. Um, the incentive program that you, um, certainly the BLM has needs to be reviewed. I see daily horses and kill pens that are unhandled, they were just titled in the last day or month or week. How can they be unhandled and they're getting the thousand dollars incentive. Where is the due diligence? We need controls that are,

Connie Ahrend

Hello, my name is Connie Ahrend and I'm the vice president of a Wild horse sanctuary in the southern USA, thank you for the opportunity to provide my public comment. I would like to start with a quote from Henry Kissinger. Learn the facts, not just the slogans. So here's a question for the board. With the drought of the last years, and especially in 2022, does BLM have valid numbers on how much water is used for the cattle and sheep grazing on public lands? And then BLM administers 155 million acres of lease grazing allotments on public lands in 13 Western states? About 54 million acres of assessed acres fail land health standards. And your own data determines that livestock grazing is a significant factor. So why does BLM not apply? Paragraph 47, 10 0.5 of the code of federal regulations closure to livestock grazing until land health improves, remove the cattle before the wild horses, the removal of livestock will protect the land and the wildlife. And in reference to the AIP I would like to state even untitled horses are ending up in kill pens. I bought a wild horse mare from a kill pen in 2019, of course, as so often without a title accompanying the horse. Just because I requested a letter of confirmation from BLM in 2023, it came to daylight. The horse never had been titled and was dumped at an auction by the adopter before the one year waiting period was over. So how come BLM does not follow through and wonder why an adopter does not apply for titling? BLM is responsible for these horses and should stay responsible even after titling. To Mr. Perryman. This board demands respectful behavior. So why do you speak disrespectful about the wild horses? You called the wild horses' critters yesterday?

Mr. Kuechle: Ma'am, we ask that you respect the Board members and respect them with no attack. Mary, when you are ready.

Mary Koncel

Hello. Thank you for this time. My name is Mary Consul. I'm a program specialist with the American Wild Horse campaign and the proud adopter of a BLM mare and two burros. My comments today are focused on the Forest Service. They include both concerns and hopes for the future. First, we strongly encourage the Forest Service to increase its use of PZP fertility control, which is highly effective. Since 2018, almost 2,500 wild horses have been removed from Devil's Garden on the Modoc National Forest in California, largely by helicopter roundups in order to reach an AML of just over 200 horses. Additionally, the Apache sit Grieves National Forest in Arizona is currently conducting a significant bait trap operation of Alpine Wild horses without public notice. And during foaling season, the Forest Service has yet to implement PZP fertility control in these herds, meaning roundups are destined to repeat. But in Apache sit grief, a local nonprofit has offered to implement a fertility control program. We ask the Forest Service to accept this offer to better and more humanely manage the alpine horses. Second, we encourage the Forest Service to reevaluate AMLs to ensure the health of the herds under its care and the O'Chico National Forest. In Oregon, a new management plan calls for the reduction of the big Summit Wild horse herd from about 150 horses to between 47 and 57 horses. Besides endangering genetic diversity and vigor, such a low AML can result in the herd being decimated during a single harsh winter. Moving forward, AWHC asked the advisory board to support the following recommendations that prioritize humane and cost effective management of the wild horses and are advantage advantageous to multiple stakeholders, including the Forest Service, first, implement comprehensive PZP fertility control programs that could result in the end of removals. Such programs can be accomplished by taking up offers of assistance from NGOs. Second, reassess AMLs to support and increase healthy Wild Horse in burlled populations on the rage. Third, relocate captured wild horses in burros from active territories to inactive territories that have been reevaluated and determined to, once again, excuse me, provide suitable habitat. Thank you once again.

Linda Kemp

Hello, my name is Linda Kemp. I am a master watershed steward and serve as volunteer for Save Our Wild Horses. Thank you for listening to my comments. The 1971 Wild Horse and Burro Act has designated wild horses and burros to receive first place in consideration on their designated lands. The board must recommend actions that do not advise breaking this law. The BLM by law must write herd management plans for each HMAs and include wild horses and burros on rule changing that pertain to their lands. It is very deceiving how AML numbers are used to accent overpopulation. They are over 50 years old and never scientifically arrived as published by the National Academy of Science. The last RM plan from Idaho shows a low allocation of 135,116 AUMs for livestock, but only 2,304 AUMs for wild horses. But surprisingly, 2,673 AUMs for wildlife like pronghorn, mule deer and upland bird species. This is BMLs Thriving Natural Ecological Balance. This causes a decline of wildlife population, especially the killing of wildlife. For cow to pasture on our lands, wild horses occupy less than 10% of our public lands, yet all our public lands and wildlife are in steep decline directly due to livestock grazing. The BLM has the authority to remove livestock at any

time from wild horse designated lands, 56 million acres were designated for wild horses and less than half is now managed for them. The land is now being used for other purposes. Release the wild horse in holding back to the lands, restore the genetic diversity of wild horses to prevent birth defects and extinction. Eric Marlborough, director of Western Watershed Project has established the minimum viable population sizes of 278 animals for small herds and 370 for larger herds. While the rest of the world is using wild horses assembly wilding to restore the land, here they are being falsely accused. It's extremely beautiful the way our wild horses are being rounded up and handled. The willingness for BLM to revise and review the CAWP is so needed.

Lorna Torrey Palermo

Hi, I am Lorna, and I very much appreciate this opportunity to talk to you. I would like to speak to several key concepts and they are, solution focused strategies, collaboration, humane management, rewilding, and respect for ecosystem priorities. Humane management as defined by Jim Benson includes five things. Communications, relationships, respect, flow, and continuous improvement. If we strive for those things, I think we can make a difference. Wildfires, floods, wildly fluctuating temperature patterns and drought has let us know that change is with us and if we do not deal with it, it will deal with us. The Center for Biological Diversity estimates, estimates that approximately 30,000 species per year or three species per hour become extinct. This die off is being driven by humans. Extinction is irreversible. The BLM with 245.7 million acres and the Forest Service with 192.9 million acres are tasked with protecting America's public lands. Public lands and management can make or break the future wellbeing of this continent, if not the world. It's a huge responsibility, one that must be shared to be achieved. We have a crisis looming. We all need to work together to protect the planet. Um, I'm going skip everything I was going say and go down to, um, where are we need for change. Okay. So I think that many times we keep doing the same thing over and over because it's the way we've always done it and we don't keep a clear perspective on how things actually do need to change to meet the changing environment. Um, one of the things we really need to look at is public lands ranching. The other thing, of course, is the inhumane management of our wild horses and burros. We can live without public lands, public lands ranching. We can't live without the land. I will be sending you a written statement, I apologize, I didn't really get to any of my specific data. Roundups are lethal methods, though is incarceration and sterilization. We need to look at humane non-lethal methods of managing wild equines. Thank you.

Sheila Sterling

Okay. Good afternoon. My name is Sheila Sterling, and, I ask that you please actually listen and take to heart with the people have to say, today, what is happening to the wild horses and burros is full on genocide of a majestic intelligent animals, horses, and burros who are very family oriented. They've lived for a thousand years keeping the balance of the ecosystem. Yes, I said that they actually create and keep the ecosystem healthy. You see, horses and burros do not and cannot digest seeds. So, as they travel and they eat and they defecate, they defecate out the seeds. They're planting the next generation for the food and shelter of the entire range. As this, as the rains come, plants grow, it is said that they have to be removed because to protect other animals, and this is just not true. The horses enhance and protect the environment. They're not starving either. I've heard that said, if they were, there wouldn't be thousands and thousands of sheep and cows being sent to graze on the very same land. Now those animals do destroy the land and they destroy the ecosystem because they do digest seeds and they pull up plants from the roots, which will not grow again. And we will be left with huge dust bowls of unusable land. And this hurts all of us. So, you know, the horses have always been a symbol of our freedom and our heritage. I also am totally against PZP because it poisons the horses, and it is a quiet genocide. 10% of the land, of the vast amounts of land that the BLM has is not a lot. It's not a lot at all. These horses are, are treated horribly. They're run down with helicopters, many young ones killed and removed from their families. They're stuck in pens and they're; they're left out in the baking sun with no shelter. They're poisoned, and then they're sent to slaughter using our taxpayer funds to misuse and decimate. Uh, and a species really must stop. You know, it's a sin against all of us and all that is good and right in the world. This must stop. We must start to honor our heritage. This is our heritage and our history. I think it's time we start to honor them and allow these horses and burros to run free. You know, they can coexist right along with the cattle and the sheep. And we need to stop allowing people to block the use of the water from the horses that should be made illegal right now. This is public land and it was put there to protect the environment. Thank you.

Stephanie Carnfield

Stephanie Canfield, thank you for this opportunity to speak on the behalf of wild horses and birds, woman speaking on behalf of what, what is a native reintroduced species. And I hope that the um, board will acknowledge that there's research to back that up. I would like you to uphold your responsibility to the Wild Free Roaming Horse and Burrow Act, to

acknowledge horses as an, as an important part in the ecosystem and, and acknowledge and utilize their contributions to the ecosystem. I also do not support the use of PZP for some of the reasons that we're already, um, spoken about. I would like the board to consider as hard as it is the importance of predators in the balance of the ecosystem. We can look to the wolves in Yellowstone, reintroduction of the wolves in Yellowstone as a, as a really good lesson and reminder of how without those predators, um, the other species don't thrive either. And I'm not talking about livestock care, I'm talking about native species. Um, the predators, uh, for wild horses are cougars, mountain lions, as we call 'em. Um, I also urge the boards to consider the psychosocial needs of horses. Um, that is an important part. I'm a licensed clinical social worker. They're sentient beings and they deserve our care, not just for their physical care, but their psychosocial needs. They're, they're herd animals. They, they make families like everybody's talked about. And anyone who's spent time with wild horses from afar where they don't know you're there so that you can just observe, you'll see that it's super important. Um, and it honestly makes me really sad that we, we have the arrogance to, to just brush that aside. That is really all I have to say. Muro, thank you again. Please take care of these horses. It's important to those of us who are, who are here speaking on their behalf. And it's important to people who, um, don't have this opportunity to speak up. Thank you.

Charlotte Roe

Good afternoon. I am speaking from Berthoud Ohio, Berthoud Colorado, alongside our adopted wild horses and burros Um, and I'll focus on burros today. Uh, as with the wild horses, the BLM's mandate is to manage them as self sustaining protected species. That's not what we're seeing today. The BLM is actually managing them for extreme populations suppression and, and unprecedented removal from their legally designated habitat. As though we are listening to a broken record, we're told that burros are overpopulating because their numbers exceed appropriate management level AML, and that this harms the thriving natural ecological balance to NEB, AMLs have no scientific basis. We see that they are politically derived and frozen to keep giving preferential treatment to taxpayer subsidized livestock grazing. The National Academy of Sciences found that these population quotas were artificial and rigid and warned that removing burros permanently from the land could jeopardize the genetic health of the whole population. TNEB is an important concept of BLM. Cite it like holy writ, but is not once analyzed. TNEB with respect to any herd management area from which wild horses or burros are being evicted. Burros are not the problem for the failed land health standards of path of BLM's assessed rangeland. They're at one with a naturally functioning range ecology. They eat through office forage, they dig waterholes, they open trails for other wildlife and they help fertilize the ground. Their presence is dwarfed by millions of collect of commercial cattle and sheep, which do run down the land together with extractive industries. You can't claim overpopulation with puffed up numbers, but that's what's happening. The BLM keeps shrinking wild burro populations, uh, to unsustainable levels, but, uh, actually tends to double count the burros because of their coloration. Um, on successive days to compensate for spotty aerial surveys, BLM adjusts the final count by 25% to add to those, uh, present but not seen. Then speculative population modeling, which has nothing to do with burros multiplies the previous year's estimate by a typical expected growth of 20 to 25%. Again, nothing to do with burros. Why does this matter? It matters because in the case of the Black Mountain range, I'm ending my time, but I did deliver written comments. Thank you for your time.

Emily Raap

Hi, my name is Emily Wrap. I'm a campaign manager at Nonprofit Animal Protection Group, lady Free Thinker. Thank you for the opportunity today to provide this public comment. This summer and fall, the BLM plans to remove at least 6,000 wild horses from their wild homes by cruel helicopter roundups, which have caused horses to suffer immensely and indeed die in the past, including from broken bones, snapped necks, lacerations, and heart failure. In fact, a lady free thinker analysis found that at least 245 wild horses died as a result of the 2020 helicopter, uh, as a result of the helicopter roundups between 2021 and 2022. This death toll doesn't even take into account the hundreds of horses who died from disease like equine flu after being captured and packed into holding facilities or the horses who were slaughtered after being adopted out through the Adoption Incentive Program and sold at livestock auctions. But not only are these roundups cruel, they're also costly and ineffective. According to federal records, since fiscal year 2017, the BLM has spent more than \$25 million in taxpayer money for the cruel helicopter roundups, and stated that the costs to round up a horse from the range and house the wild animal for life is up to \$50,000. Inhumane helicopter roundups have also proven ineffective at stabilizing horse populations as they cause wild horses to grow at a high to grow at higher than normal rates due to a biological phenomenon called compensatory reproduction. The BLM also claims that the roundups are to protect the land from destruction from the horses, but still allows 1.5 million cows to graze on federal land, which devastates our planet. Out of the 245 million acres of land, the BLM manages 155 acres are for livestock in just 26.9 are for wild horses and burros. By continuing this practice, the BLM is showing its not interested in protecting public rangelands or the welfare of

animals. I urge the BLM to do the right thing and stop the cruel. We Wild Horse helicopter roundups immediately. Thank you.

Dre Arman

Thank you. Hello everyone. My name is Dre Armand and I'm the Idaho-Nevada Chapter Coordinator for Backcountry Hunters and Anglers, a membership based nonprofit organization consisting of over 10,000 members who seek to ensure North America's outdoor heritage of hunting and fishing in a natural setting through education and work on behalf of our wild public lands, waters, and wildlife. The great state of Nevada holds the most public land in the lower 48 with more than 85% of the state belonging to the public. The BLM manages 63% of Nevada lands, the vast majority of public lands within the state. Many times interagency collaboration can hinder progress in land management, but that is not the case for the horse and burro issue in Nevada. This is a matter of providing the right resources and funding to BLM offices across Nevada to appropriately manage horse and burrough overpopulation. Nevada is a stunningly beautiful state full of unique landscapes that are rapidly losing their biodiversity. Due to horse overpopulations, many Nevadans rely on these public lands as a food source in addition to recreation, mule deer, bighorn sheep, the Lahontan cutthroat trout, sage grouse and more are losing their habitat at a rapid pace. As these under acknowledged symbols of the American West are losing their habitat, we are losing our natural food systems just as quickly. Proper management is needed for the sake of the horses themselves too. Uh, there are endless stories across the state of hikers coming across as starving or severely injured horse and feeling deep remorse for the horse. With a population of wild horses in Nevada doubling every four years, horse populations will continue to suffer due to their own overpopulation exceeding resources on the landscape. In Nevada, we are already removing cattle from the landscape in many areas, and horses continue to decimate landscapes that have not been grazed in years. Public perception and opposition to science-based management practices is one of the greatest hindrances to restoring Nevada's biodiversity and reaching AMLs within horse populations. If we don't tackle this issue at ground zero, we cannot expect to implement effective solutions across the Western US with more wild horses in the state of Nevada than all other states combined. We ask the advisory board to recommend that Nevada be prioritized within this ongoing conversation and within the budget for horse and burrough management. Again, the BLM manages 63% of the land in Nevada. This organization can work towards a healthy Nevada landscape and appropriate management levels as defined by the wild and free roaming horses and Burroughs Act. We just need to give them the proper resource resources to get the job done. Thank you so much for the time today.

Bryant Kuechle: Thank you, and before we turn to our next speaker, we have Clint Frady who was registered on the Zoom and dropped off. So Clint you if you would like it rejoin before we close the virtual session, and we sent a link to your e-mail.

Joyce Purtzer

Good afternoon. My name is Joyce Purtzer and I thank you for the opportunity to speak today. I'm very concerned about the way the wild horses are being treated, that horses are losing their freedom and they're losing their family. And the claims of over overpopulation and scarcity of resources are simply not true. In 1971, there were 53 million acres that the horses were able to live on. Today there are 31 million. At every roundup, horses are injured and killed. They're then taken to corrals and crowded. Very often they suffer from disease. The majority of the horses remain here. Perhaps a few end up in pastures. But the ones I have seen are basically in, in, uh, horse, in, in corrals. The adoption procedure, which is really their only way out, only provides for a limited amount of horses to be placed again. And very, very often, many of these horses end up in slaughter. Uh, as far as the, um, forest Service goes claiming that they're, that they have no budget, somehow they managed to come up with over half a million dollars to take the horses out of the forest where they were living and put them into an auction which was unregulated. Many of them arrived in very, very poor condition. There has to be a better way that this can be handled as far as fertility control to me, in the most part, it really is not needed. The, the figure of 20% increase every year, I think is exaggerated. The AMLs, which are said are very arbitrary and GonaCon is a permanent sterilization. This is not anything that could be, that be, that could be used. I would like to complement the state of Colorado who's gone into partnership and is attempting to assume some responsibility for the horses here. I would like to see this done in other places. I thank you again for the time and for the amount of money that's been spent. I feel like the horses should be allowed to at least be re relocated to different lands and not left to languish in corrals. Thank you very much.

Mike Jenkins

It's a privilege to be allowed to deliver a public comment. I'm a multiple adopter of wild horses. I have two and they're quite different from my domestic horses. I'm enjoying a two-year-old and a recently received yearling. My experience with the Adoption Incentive Program led me to an in-depth investigation of where these horses go after consignment to the adopter. I'm a Kansas resident. I live 80 miles from a large BLM off range holding facility. I live 65 miles from a federal corrections facility with a wild Mustang program. I live 50 miles from a notorious livestock sales barn known as a kill pen for equines. I live 40 miles from a family who adopted 12 BLM wild horses and disposed of them at that kill pen. I can say this with absolute certainty because I obtained, obtained through Freedom of Information Act request copies of the paperwork which consigned these animals to the adopter. I have photographs and records taken at the Livestock Sales Establishment, which confirms the date of their transfer as one year past the initial BLM consignment. The evidence I have gathered on Henry and Chandra Stackman in this matter is incontrovertible. It confirms from which source the family obtained, the animals that they received incentive payments, and that they dumped the animals into the slaughter pipeline shortly after being made liquid by the BLM. These are the facts in the matter, and they are not in dispute. The Adoption Incentive Program as implemented facilitates a nationwide cottage industry whereby adoption of wild horses is executed not to provide them with good homes, but solely to deliver them to slaughter. Multiple sites around the country facilitate the unlawful transfer of these animals. You have heard from previous speakers that this is a repeating saga of abuse. My work as a volunteer with Equine Rescue has made it clear that the operators of the slaughter pipeline use emotional blackmail and coercion to fraudulently obtain blood money from the well-meaning individuals and groups. This scheme is conducted using social media to execute a well-established cycle involving horses and burros as they exit the Adoption Incentive Program. The BLM, this advisory board and members of Congress are well aware of this problem. The 1971 Wild Horse and Burro Act did not specify how long the horses must be managed by the BLM. The BLM has adopted internal rules and procedures, which curtail protections, which are supposed to be afforded America's wild horses and burros. These are the facts in the matter, and they are not in dispute. I thank you very much for allowing me to make a public comment on this day. June 29th, 2023 for the National Wild Horse and Burro Advisory Board's Public second public comment session.

Bryant Kuechle: That concludes the virtual public comments session, and we have four in-person. If you are in-person and still wish to provide public comment. We'll have time in the session tomorrow.

Nicole Hayes

Hello. Thank you guys for your time today and allowing me to speak. My name is Nicole Hayes and I am a conservation biologist with the American Wild Horse Campaign. I'm here today, today to talk about livestock, drought and resource allocation. As most of you in the room know, this past winter has been record breaking for the American West in Nevada alone. January to May has been the 13th wettest on record the Carson River Basin in Eastern California. And Western Nevada has had more than three times its median snow level. And the Southern Nevada Spring Mountains have more than 500% of their median snowpack. As of May, 2023, only 5% of the contiguous United States was under severe drought, none of which is located in the American West. So my question to the advisory board is how are these current conditions being taken into account By law? Removal of excess animals may only occur upon examination of current information. This brings me to livestock and resource allocation. According to the public employees for environmental responsibility or peer quote, livestock grazing mostly by cattle is the single largest use of publicly owned lands in the west. The BLM issues, 18,000 grazing permits covering 21,000 allotments across 155 million acres in 13 states. Though the department does not release a head count, it has been estimated that those permits represent about a million and a half, 1.5 million heads of cattle. According to the National Cattlemen's Beef Association in 2021, there were 93.6 million cattle in calves in the us. If we take the rough estimate of 1.5 million cattle on public lands, that equals less than 2% of cattle in the United States. I want to ask why so much emphasis and so many resources are allocated to a program with so little impact on the American cattle production, that is also the single largest reason for degraded range health. The BLM site's lay livestock grazing as by far the most significant cause of failure of an allotment to meet, uh, rangeland health standards. According to BLM field staff, 39 million acres site livestock as the sole cause of land health failure. When you look within the HMA more than half the allotments that fail standards for Rangeland Health, the agency has identified livestock as the significant cause of failure. If we take Nevada as an example, there are wonderful 48 million acres of public land within the state. Livestock grazing occurs on 43 million acres, while wild horses exist on only 14 million acres, which they also share with livestock. We've heard many people comment that in Nevada horses are the biggest cause of range degradation, but they exist on only 29% of this public land while livestock grazing occurs on 90% of it. In fact, in the past 50 years since the act was passed, more than 41% of public lands designated for wild horses in burros have been eliminated, while private livestock is still authorized to utilize these areas. Thank you for your time.

Tracy Wilson

My name is Tracy Wilson and I am the Nevada State Director for the American Wild Horse campaign. The BLM is stated, it needs to reduce Wild Horse populations to AML before fertility control will work. But the reality is getting to AML and holding it is an unattainable goal. With the agency's current plans continuing to round up horses en masse while waiting to get to AML is not only proven to be counterproductive to the B'S goals, but it's costing taxpayers millions. It's been 10 years since the National Academy of Sciences recommended robust fertility control as a strong management tool. The BLM needs to use scientifically proven fertility control in a meaningful way. Used when over AML every birth prevented with fertility control is one less horse removed, one less horse, uh, at risk of entering the slaughter pipeline, or one less horse requiring funding to be held in long-term holding for its lifetime. We've already seen that fertility control works on a larger scale in the world's largest Wild Horse fertility control program here outside of Reno. In the first three and a half years of our program, we reduce the foaling rate by 60% with no roundups and population continues to decline. While some may say a program like this can only be implemented in a herd that is acclimated to humans, many of the VR horses live high on the range where they're far more afraid of people. And yet our team continues to trek into those wild areas to treat mares if they can do it. Imagine what could be done on a larger scale with more resources. Our program successes are being presented at one of the world's most prestigious, prestigious equine reproduction symposiums in Brazil next month. And a scientific peer reviewed publication is slated for later in the year. The summer roundup season is supposed to start in the coming days with 7,000 wild horses and burros targeted for removal. And yet the BLM plans to treat just 1600 with fertility control. We heard today the plan to treat just 390 mares within the roundup schedule in Nevada this year. If we accept for argument's sake that the nation's herd is at 80,000 wild horses and Burroughs, of which approximately 40% or th 32,000 are reproductive mares, a nationwide fertility control program should be targeting 22 to 25,000 mares or 15 times the current plan. We can't flip a switch to fertility control overnight, but BLM can take measured steps to recount reallocate resources and scale it up. We cannot spit at a fire and expect it to go out. If we are to finally have a truly humane, sustainable, tax efficient, and supported program, there has to be a significant change in priority towards on range management. One answer does not fit all but answers can be found in many areas. There are untapped resources outside of the status quo from hunters to veterans to partnerships with livestock permittees and more. There are opportunities to be explored with the common goal of maintaining healthy herds in healthy numbers. And we at American Wild Horse Campaign continue to stand ready and willing to assist and advise. In conclusion, I ask the board to recommend that the BLM take concrete steps to reform its current management program by scaling up humane fertility control programs even while an area is above AML. Thank you for the opportunity to speak.

Tammy Adams

Good day. Thank you all for giving me time today. My name is Tammy Adams. I'm a representative for Wild Horse education. I'm an environmental engineer and as a consulting engineer, I have completed and managed multiple environmental assessments, restoration and reclamation across the west as a scientist and engineer. Methods and data collection we're clearly defined and demanded on our federal state laws and agency policies. BLM has these same clearly defined rules under law for methods, data collection and reporting. Yet only once in the last three years have I encountered a gather ea, which provided Rangeland Health summary data as a supplemental piece of information. And that was Utah BLM Secretary Halland promised in her secretarial order to improve agency transparency and public engagement in the decision making process on blm.gov, it states their mission on decision making as science is foundational to transparency and trust. A statement made yesterday insinuated a plethora of misinformation on the Wild Horse and burro newsfeed from advocates every week. Videos, photographs and FOIA data are not misinformation. What I find concerning is in my research and multiple appeals is the lack of required data provided by BLM. There is no rangeland data for both livestock and wild horses and burros. There's no rangeland data from past removals demonstrating return to TNEV, no rangeland data over multiple years to establish a transparent and legitimate AML anecdotal information and withholding methods and data creates public distrust. It's also a slide form of deception. For example, the New Mexico Bordeaux, HMA has a hundred percent of AUMs allocated for livestock, zero AUMs for wild to horses at all on the entire HMA yet. Bordeaux wild horses have an AML based on zero AUMs and no range land data. The tour map from Tuesday had no key. When you say all tools, does that mean slaughter's back on the table? Science and data are fun, are foundational underneath a for law and policymaking and management planning. How can any management plan or decision about issues take place without transparency, science and data as its foundation? I suggest the board recommend that BLM transparently provide all existing methods and data for public review on the website. I'm going to just leave you with this little food for thought. Wild horses are a public resource permitted discrepancy from profit driven use that is allowed on a public resource only when the resource can produce a sustainable yield. I greatly appreciate your time and it's an honor to be able to comment. Thank you.

Mark Boshell

My name's Mark Boshell. I am the Deputy director of the, division of Public Lands in Utah. I first and foremost, I want to thank you for your time. I know many of you are here in your personal capacities, uh, donating your time and I appreciate that. I think we all do. Um, uh, I'm not going to say anything that the board hasn't heard and, uh, and that the board doesn't understand, but I think it bears repeating. Um, this issue carries serious and long-term implications for Utah and the West. Um, when the United States Congress passed the Wild Free Roaming Horses and Burros Act of 1971, it declared these animals to be living symbols of the historic and pioneer spirit of the West. Congress then mandated the horses and burros be managed as an integral part of the natural system of public lands. Although this declaration of policy is clear, the specifics as to how to preserve and maintain a thriving natural ecological balance is more complicated. Reasonable mines can disagree on how to achieve thriving range lands in concert with other uses of public lands, such as livestock grazing, when what seems to be indisputable is the basic and fundamental need for active sustained. And sometimes creative management helicopter gathers are critical to the BLM success of managing healthy herds on healthy range lands. Without the use of helicopters assisting in gathering horses and burros, the cost of wild horse and burro program would skyrocket while the effectiveness of removals would plummet. Helicopter gathers are the only effective way to gather horses in the remote and inaccessible HMAs throughout the west. If we care about the whole range and not just our famous accessible HMAs, often located near population centers, we must continue the use of helicopter gathers. Um, we've heard a lot about fertility control today and yesterday. Um, fertility control needs to go hand in hand with, with our gathers to make our, to make better use of our, of our dollars. I really appreciate, um, this opportunity. I think we've heard today from a lot of people that are passionate about this issue. There's no doubt about that. Um, but there's, there's no doubt that horses out on our western landscapes need to be managed for the benefit of wildlife and the benefit of other sensitive, wildlife. Appreciate your time. Thank you.

Mr. Kuechle: Okay. Thank you very much. That concludes our public comment session for today. Again, we have a third and final public comment session scheduled for tomorrow morning, and the virtual slots for that are full, however, we have the opportunity for in-person comment. So, if you arrive tomorrow at public comment, you can sign up as you enter with that public comment section. With that, we have about an 18-minute break and we want to begin at 2:45 for our panel discussion, so please, return promptly at 2:45. Thank you.

[Break]

Panel Discussion: Drought, Wild Horses and Burros Presentations

Mr. Kuechle continued the meeting by introducing Dr. Paul Griffin.

Dr. Paul Griffin, BLM

First, I would like to thank you – this is an organized panel to discuss the relationship between drought and climate change and wild horses and burros. There's no new normal in sight, the pace is fast and accelerating and everyone can expect this is going to be for years to come, and we'll keep moving forward in the interests of discussion. The panelists gain knowledge, and each gained through science, managerial experience and traditional understandings. They have long careers and their views are their own and should not be determined as policy positions for agencies they work for. We made it clear to panelists, this afternoon is an open-ended forum for board and panelists and the agency has no control over the content and views expressed. I intend to step back and hand it over to the chair and we can mainly learn a lot from the panelists. Let me introduce them. Each panelist will make opening remarks in the order shown on the screen. Matt Reeves with the U.S. Forest Service Rocky Mountain Research Station displays traditional modeling tools. And Tamzen Stringham, University of Nevada and many aspects including plants, soils, hydrology and safe deforestation. And Eric Thacker is with the Utah State University office, and experience with including -- John Wauconda, among other roles, the ranger department coordinator and now with The Nature Conservancy agency as Indigenous Partnerships Program Director. And his family roots have been aired long before domestic horses brought to the continent. And Dr. Reeves, if you are ready.

Dr. Matt Reeves, US Forest Service Rocky Mountain Research Station

Ready. Excellent. Well, thank you, everyone, for allowing me to speak to you today about data considerations from managing wild horses and burros in an uncertain future. As mentioned, I do work at the Rocky Mountain Research Station in Miss Hola for range station issues. And we're going to talk about key resilience factors looking at approaches

the Forest Service is using in collaboration between the U.S. Forest Service system and I take a peek at climate change. One of the main points, I am hoping we can use consistent approaches using past trends and future trends about what with you know about wild horse and burro management. Pop quiz for everybody, if we look at these two sites, we ask which site will be more resilient to drought. Is it A or B? I am going to say it is B because I want it to be that way. A is cheap grass and we don't like that too well. There's a mixture of life forms there, and critically, we see perennials here and not here. That's the key. And it is because improvement and carbon we get from the perennial about you bulbaceous species, on the Y is the soil depth and green dots are the perennial grasses and it's almost always beating the peach color, the under grass soil, and especially deep in the soil because the roots go down. And that's what brings things together. And soil resistant to drought because of moisture retention. I talked about data consistency and mentioned in the comment period about the lack of data, and I think we're beginning to be at a stage where satellite and we have the ability to say something. This is a year in Utah, and what we see is the trend of perennials forks and grasses, the stuff with the yellow in the blue circle. That's whether the perennials have decreased since 1986. We don't want to see this, and critically, the last two years, and that would be 2021 and 2020 were the lowest on record. And this is a bad thing and don't want to see this when talking about the future. So, the reason it is so important to keep those perennials, remember, the soil and carbon component. There are other factors, of course, why we want to maintain perennials, but that's a biggy. Switching to the viewpoint of climate change. We have on the top here, what's called the RCP 4.5, and on the bottom RCP 8.5, don't worry about what this means, but recognize that this map, in the future, tells us that we're going to be losing annual production in the warm tones. And the cool tones, more likely gaining production. And production is not equal. We know it is divided amongst scrubs, trees, grasses and we don't want it to be only piece of the pie because of losses to the present day. This is of course over a long time period. How does this relate to wild horse wild horse and burros we use this as a determine nation, modeling approach if you will. We used this now 7 times in different years, recently on the Montgomery pass herd management area there, and we use it also in some NEPA cases and if we want to look at "What if" questions. Instantly you can apply these. And we start with the annual productivity and this is the mountain pass here, and we have average, below average and above average annual production, from 1984 to 1992. This is numbers per acre, you can't see them. Lower productions is the cool tones and warm higher productivity. You have the annual production, but not the entire story. That's what this landscape is here. The distance to water, scrubs, diet, those things. And in this case, the cool tones tell us the higher propelling of that forage is used or useful, and the warm tone is original out of reach, out of water or country is too steep or something else. We take all of these into consideration of the model. I would propose that the consistent modeling approach would go a long ways to debating everybody on the same page. Closing thoughts, looking at the impacts of forage for things like drought and light form changes as we move from annuals to perennials shrubs and understanding what that means for wild horse and burros would be critical going forward. Not just the quantity of forage, but also the quality, talking about pretty own here promote even. When it rains it will be droughty, and... This mindful approach, putting all of the data we have into a common modeling program, it gets us to what we can agree on, creating dialogue and improves decision-making over all. With that, I will yield the time to the rest of the others, thank you.

Dr. Tamzen Stringham, University of Nevada Reno

Good afternoon. So, as I was sitting here listening to public comment and my esteemed colleague sitting next to me. I thought about the research project I am currently involved in with Eric Thacker sitting to my left. I do want to talk about this, but I also want to make the comments -- I will start with the comments not on the slides and then go through the slides. I am a range management ecologist, commonly called a rock kicker because I spend my life living in the dirt, out on rangelands. I just got home from about a four-week stint. I see horses, but that's not why I am out there. They are beautiful and I like to look at them. I am not there to quantify the condition of rangelands through a modeling process. And I have done that now for -- 400,000 acres in Nevada. If you want to do a deep dive in data on plant communities, conditions they are in. We see the impacts of drought and also of wet years like this year. It is really important talking about rangeland health and rangeland functionality, that not every piece of land is the same practice when I am up in northern Nevada up to Elk Grove, those areas are much more resilient than Tonopah and I looked at the conditions from Galena, Nevada near Area 51, and over to Tonopah to the California border. I can tell you what is happening and I will not provide data today, but I have it if you want it. Mass scale off of a small shrub in that part of the world and drought-related. There are other shrubs suffering and the horses that live there are primarily eating shrubs. There's no shrubs in that understory. And there's a higher elevation, where the grass is essentially comment opponent. But most of that should desert. Has HMAs on it livestock eat grazing it. And overuse. Cattle will be removed and that happens in Nevada with EAs, but can't be done with horses and we need to have a management plan moving forward looking at the individual HMAs and climate change and they are going to vary and make decisions based on that model about what the caring

capacity will be, and it cannot be based on annual production, but a long term understanding how production is declining with climate change. Past that and getting involve with the body scoring methodology. I have to confirm we would see significant changes in body score across HMAs based on elevation and location of the HMAs. Unfortunately, we don't know that occurs in the larger portions. I don't have data from below Hauffy; a little bit from Cal thicken. And data camera, where they have been set up cameras and horses trigger its camera and camera takings the picture. We utilize learning from these datasets and the machine learning tells us whether a horse, cow or deer is present, what's tripping the camera. We can sort of the horse photos out and it with human ID sample brought out from the modeling context. Then we use random data sets within specified seasons, so spring, summer and fall to lose body condition score. Utah State works with us and trains people on how to do body condition scores and then score a subset from the students and then apply an individual factor for each of the body division scores. It is quite a process but used pretty well. We use those for the body condition score within trapped locations overall and the covariate influencing it. Is it elevation, growing season length, a number of different covariate we look at. I will show you a map of where our data exists. This is current data and each with an HMA we have camera traps on. And unfortunately, I forgot my glasses and can't read this. There should be body condition scores, but I can't see it. I can see the colors. Each of those has a body condition score on it with red being -- read it. 4.3 to 4.5 and then 5. Okay. The red one is the lower one and blue the higher one. We want horses to be at least above a 4. Pretty thin, actually. You notice we pick up red ones that's hotter and dryer on this map and picking up blue ones where it is cooler in weather. The next layer I wanted to bring up is, this is a spring layer, known water sources that USGS produced for our part of the world and we can overlay the spring layer giving us an understanding how far horses have to travel for water, similar to what you are try doing. Notice as we move south, the amount lowers substantially. And when we get into drought situations, it is not whether it is for HMA, but if there's a water source. A combination of forage and water, and as horses are standing or living near a water source because they have to have water, the areas around that water source, you can get concentric circles of degradation and water because they can't travel far enough and get to forage. To give you an understanding how drought impacts horses water sources and would be good for HMA goes forward and also help you understand that when we say there's a lack of forage in HMA, it is a lack of fromage that a horse can get to that's found by water. That's where I am going it leave it. I have a really pretty picture. There they are.

Dr. Eric Thacker, Utah State University

Well, it is nice to get to clean up behind two great scientists. And this presentation will look really good, I hope. I decided to focus on the grazing aspect. I have worked in range and worked on everything from resting to grazing and even wildlife damage and endangered species. Horses I have been working on for about ten years. There's something unique about the Great Basin and most of our horses occur in the Great Basin. I want you to pay attention to the green line. This is the phenology, and this is the growth curve over time in a particular year, and if you watch the graph moving from screen to screen, bouncing up year to year, it means the higher the peak goes, forage and the how long you have vegetation on the landscape. What gets overlooked the question, how long do you get to produce most of the forage for the animals, what's the timeframe? Three? It is actually closer to 60 days, depending on elevation and maybe narrower from 35 to 40 days, and you might have the accumulation of that, and what that means the consequence? The Great Basin all is produced in a relatively short window. Let reason I bring it up is because I think it is important to keep in mind, April and May, generally whether this happens in most of the Great Basin, a great time for the plants, and also mules and horses, mules drop their fawns early May. And sage grass, what do you know? Early May. The reason is they time their birth with the green up and take advantage of the nutrient-rich forage and grasses. Specifically talking about species that overlap and don't overlap. Mule deer, deer horn, browsers and prong horned in Utah eat 60 to 70% of shrubs, guess what? In April and May, how much of their diet is shrub? None. They primarily focus on foraging and grass because in the last months of pregnancy they all need to lactate. These will make sense when I am done. We only think about drought in a single year. It happens, snows a bunch, rains a bunch ever we move on. The reality is, and not a lot of good data when you lay grazing over the top of the drought. If the research suggests if single year, you still have a one-to-two-year lag in production, so just because we're no longer in a drought according to the weather services it is still trying to recover from the drought. Arizona and Montana, we can draw conclusions, they are the same. And if you have drought further, and the length to recover, if you have a 3-year drought you are talking 4 to 5 years of recovery. I have spent a reasonable amount of time to understand grazing practices, my focus is not so much what we're doing the drought, but what in fact we're doing after the drought brought, we often think about we need to take care of the drought and plants have well adapted to handle the droughts and they go dormant, their way of protecting themselves from the drought. Put a pin in that. We want to be sure we're giving plants a chance on the back grazing, I am talking about elk, horses, cattle, sheep, and we as humans have managed grazing. We determine the type of animals, number of animals, the length of time grazing in a

particular area. The timing and sensory, how much of that foraging is taken every year? With livestock, these are the principles we abide by on grazing across the landscape. Dr. Reeves gave you a really good clue how it should look. Our stocking rates should not be dying age, based upon conditions. And a lot of livestock predesires going on with 30% fewer animals in order to plan and adjust for that. However, when moving to wildlife and horses, how many of those principles do we manage? We have one. This is just reality. We have one. There are some things we can do with hunting pressure and I am sure wildlife biologist in the room talking about ways to manage the landscape. The way we control that is by the number of manuals, even livestock are looked at primarily by what's on the landscape. The reason it is important. Sorry. Here is forage production on the Onaqui, and I picked it because most in the room know what I am talking about. In time, what is the most notable thing about production. The only constant it is constantly changing and there's no constant I put a Lynn there to make you feel better, that's actual production. Especially in the Great Basin we see large swings in production. Go back to the grazing condition, how do we manage grazing in a highly manageable system. Controlling numbers in a given year. In bad years you take animals off and in good year, add them on. And I would like to know well before the grazing season starts, how many animals are on landscape, currently not available. Historically, we started in the 50s a conservative stocking range, and reducing the number of years we have too many animals on the landscape with our grazing animals. Thinking about our wildlife and horses specifically, and important to remove animals in a timely manner, and pointing out that's a difficult task. And means as the numbers increase, you will be grazing too many animals in half the years is what it amounts to. This is a cautionary tale, and two points. This is a project that Dr. Reeves is part of. The graph on the left is precipitation, which is bouncing all over the palace. If the land is healthy, we expect it manage the precipitation. Good and bad years, but stable over time. On the right, that's the forage year. And lost about 10 percent-ish of forage production since late '80s, early '90s, does that concern anybody? It should. 10% is more than you think. The concern is if you keep the same number of animals on the landscape during that time, you are compounding that effect, meaning literally driving it into the debt. A cautionary tale. If we don't manage appropriately, I am talking about all animals, not just horses specifically, the outcome of this is real. In fact, in this year bison, horses, stress tests cattle and it is messy. The last point I want to make is back to the wildlife thing. I am playing a little bit off the body condition score, studies that Tim mentioned. Take everything with a grain of salt, with you we have not had a lot of change in range condition. That's alarming. And a lot of animals on the landscape show variation in landscape. And even talking about managing horses and setting aside horses and just talking about wildlife. Going back to the window, forages and grasses, you'll horn and wrong horn are heavily relying on the 60 days and no, their diets don't overlap horses entirely, but in the 60% window, one hundred percent overlap. If you have too many animals taking the grass and are compete clock for the same forage, it can have pretty dramatic long-term outcomes for the population as well. And also recognizing as the doctor pointed out, we're losing precipitation and don't get as much as we are used to and some of the problems can be exasperated bait for the future. And with that, I will leave you with a nice picture. Thank you.

John Waconda

Thank you. First, let me say thank you for the invitation to join your group. And I appreciate and certainly understand the challenges, roles and responsibility all of you have, as public land managers, and these who are responsible for addressing a large challenge, and in Reno, where there are many social public attitudes, concerns, values, that come to play in additions that surround managing wild horses and burros on Federal lands. And I appreciate and am somewhat can relate to that. I retired from Federal service, had 32 years of Federal land acknowledgment experience, first with the Bureau of Indian Affairs and then the U.S. Forest Service. I do have somewhat of an understanding of the complexity in areas that are being discussed and appreciate the role in the participatory environment that has evolved in making and helping make these decisions about how to deal with wild horses and burros. As Paul mentioned I work with The Nature Conservancy now, and I do have other experience that I think lends itself well to your conversation and meeting today. I am a livestock producer, and very fortunate to carry on this tradition that has been handed down in my family for multiple generations. We have grazed land on Tribal trust land, but also it is addressed and participated in grazing on deeded land as well. Which myself and my family have been responsible for carrying. And know the challenges in regards to multiple uses of land and the complexity with multiple species. And I can appreciate and relate to some degree the challenges that we all address as managers and myself, a producer, and also a farmer as well, too. And I have plenty to keep me busy and thinking, which is what I do late at night or early in the morning and using a tractor and a hoars. And what our responsibilities are for taking care of the land and taking that seriously. My perspective here, I hope to offer from a little bit of perspective of an indigenous person who has experienced land acknowledgment in various ways, and tribal trust land and keeping with my neighbors and relatives who are also producers who live on Indian reservations and also dealing with Federal horses and livestock conflicts. So, I hope that a little bit about what I say today is taken with that, in that

context. I do also want to say my perspective here today reflects myself and my experience from my Tribal knowledge and experience, which is one of only 567 tribes across the country, and many diverse people, and traditions, and culture, and I am here in New Mexico, which I am situated along the beautiful mule grand valley, and fortunately was blessed this year with large runoff and irrigation water, but also quite familiar with years in which there are water shortages and larger conflicts between wildlife and livestock and horses, when it comes to water, and so I do say that my experience here is within that context of that race and of that people. Our Pueblo people here in Mexico were introduced to horses as part of a time in our history that was not very good. It was a conquest by Spanish coming from Mexico, who introduced horses to our people, and it did not come in a partnership nor a friendly relationship. It might have started that way, but it essential was a conquest, and the introduction of horses to my people also introduced other parts of our colonial domination that we're not very well and not very well taken because of slavery, fortitude when working for survival of another people, who were intruding upon our traditional and ancestral lands, however, they brought the horse and it did change our culture and tradition in many different ways. We did use horses to allow us to travel and transportation over larger distances, but horses were also used in a utilitarian way, and our people competing for survival during very harsh times and depending on our food source, and that's not something known or understood in our culture. We rely on our environment and our systems, our natural systems both plants and animals for survival. And throughout Centuries of trying times, we had depended upon many types of animals. Animals that normal society would not think edible, or even fathomable to use as a feed source. Horses, burros, were one, and our culture and tradition basically is living within nature and what we are blessed with surrounding us as a people and our environment to be able to live together, to be able to survive, to be able to endure conditions that are not always favorable and relying on many food sources and in relation to our existence. So, with that in mind, we do have historical cultural positions revolving around this. And rather ranging and livestock production is a part of life given to us because of our placement on lands, Indian reservations that restricted our travel, restricted our mobility tore able to travel and utilize different landscapes, for survival, and many of our tribes were located on less desirable lands and the only suitable life was agriculture and livestock production, and doing what was given to us, and one of them was the horse. We used it in ways which it supported our lives, and it was a subsistence as well, too. Being able to rely on tools such as the horse to be able to make our lives easier and being able to utilize what we could and continue our survival and subsistence off the land. I do also know there are many challenges that the livestock, wildlife and horses that utilize the same forage and water, and it is quite apparent right now, today, many of our Tribal reservations have conflicts, and those species that are dominating are curtailing livestock reduction and degrading grasslands and dominating our water systems, near the desert environments, water is very controlled and very well evidence that horses, feral horses are controlling and restricting some of our traditional and cultural ways that have never been -- at the end of the day in light of drought and situations and not being able to aggressively manage our horse populations. I do want to say, there are tribes I am aware of and others you also might be aware of using Tribal sovereignty, and being able to take more aggressive action in managing horse populations and that certainly is a situation and action that is thoroughly within the scope of Tribal sovereignty, and as Federal land managers, being able to work in partnership with tribes is certainly not only mandated by governmental administration and administration requirements and rules and regulations and consulting tribes, and I hope addressing our horse and bureau challenges certainly not excluded from Tribal participatory decision-making processes. That much of our public land today was once ancestral lands of American Indians, Native Americans and indigenous people. So, I would expect that these decisions are on the advisory group here, and decisions that are shared and inclusive of Native American tribes, Tribal governments, represents, and the values and input that is collected from that participation is going to vary place by place. Social, cultural tradition, and respect with the tribes in many places and is not consistent and taken as universal just as my thoughts and perspective today are not reflective of other tribes and values of other tribes throughout the country, it varies. However, I would strongly advocate, the decision-making, wherever it takes place or how it gets done, that it includes our Native American communities and community leaders who often have a large contribution to share with us. And I have worked with various tribes here in the southwest, and many of these experiences and have directly addresses Federal horses on specific type of reservations and animal control ordinances were developed to aggressively manage horse populations. And as a Federal BIS line officer upholding Tribal and governmental authority, have no ability to pass decisions or regulations that were made, even though they go against my personal particular values, I have to uphold Tribal sovereignty and that's for them to manage horse populations or wildlife populations, just as they have done to address the basic species in our watershed environments. Plants and animals, and I think that ability allows us to live in a better relationship and not being particularly favorable of one type of species or another, which there are certain conflicts that create imbalances in our natural environments. So, let me just say, I have been working and have had experience with tribes, where aggressive management actions have been taken. For the -- burro and horse population and certainly that decision should be upheld, and certainly the advisory group are familiar with that and can gain more information how that

relates, and essentially their desire. I am essentially aware of the degraded conditions that originate from these conflicts, excluding livestock production, excluding wildlife and it has happened on some Indian reservations here in New Mexico. I should have taken a picture, a couple of days ago, along the interstate, and honor that reservation, where sand dunes are now present and horses are barrel hanging on themselves after they included livestock, the pueblo, excluded livestock and graded conditions, and dominate all water sources that are nearby, and have excluded wildlife populations where they were present before. The other impact was the lack of forage, and for wildlife or livestock, is the lack of grasses that certainly impact being pollinated and being able to essentially pollinate plants and species that are necessary for healthy ecosystems, certainly we're at that stage. And we have many decisions to make, and I hope that there are solutions that can be made so we can -- if possible, support to aggressively manage when these conditions warranty and actually take place. I am very familiar with the U. such forest policy and very aware of challenges ahead for the U such forest population and the public has misunderstood about the presence of feral horses on public lands, and have taken a very strong opposition to management actions, yet, I think are essential necessary to avoid degradations to our environments that are irreparable, or very costly to be able to restore degraded ecosystems and I am sure many of you have examples where that has taken place, and being able to restore those are quite the challenge and requires such large investments of public funds to restore it. There has to be a stronger way to address opposition to manage and opposition or misunderstood or ill-informed public about the conflicts that do exist. And myself, as a Tribal member, certainly, quite concerned about our policies within our Tribal community about taking more aggressive action when necessary and certain conditions. And I appreciate that opportunity to speak with you, and I am sorry, I don't have slides or pictures of the scenario I have described to you. There are many and I have been to many places on Tribal lands where the challenges that you are facing on public lands are occurring as well, too. I just hope there are some meaningful actions we'll all take, and taking on this water responsibility, rather than ignoring it or thinking that [Indiscernible] one exists. I appreciate the opportunity to speak with you today. Thank you very much.

Panelist Discussion

Ms. Carlisle: Now we have time for the board to engage with any of the panelists, and I just want us to sort of watch time. I will watch time and give you all a heads up. But we'll also have one more presentation about the population modeling and we can gauge discussion about that, and we want to keep track of that. I will keep track of time and we'll start with Dr. Lenz.

Dr. Lenz: I understand from your comments the studies shows horses maintain their body weight when other species loosen there's. My memory is not so great, but 25 or 30 years ago papers were published and comparing horses to cattle and maybe sheep as well. When you have the forage, the horses did begin fine and I think the cattle lost weight and didn't go we will. And theory was horses are high fermenters and the cecum behind the small intestine, as posed to the rumen, in front the of the small intestine and maybe why they did so well. And often they have upper and lower incisors, whereas the originals don't. Have you read any articles?

Dr. Thacker: I am not a physiologist, but I have enough experience with horse and cattle. Specifically, if you look at the rate of passage, horses have a much faster weight of passage. Current theory, if they are not fluctuated like the others, they are better adapted to consuming forage. The concern that I have, if they are not fluctuating in terms of other animals and condition, then waiting for poor health of horses before we take action and might likely lose -- we should take to the range first and it will take care of the animals.

Dr. Lenz: I think they graze 16 to 20 hours a day, and although they don't have a gall bladder there built to constantly.

Dr. Thacker: When looking at stocking rights, horses have grazing and higher rates of passage and well validated they consume more feet per body weight more than anything on the earth.

Dr. Stringham: We were thinking hypothesis was a tool to determine when to remove horses from range, and we have come to the conclusion that it is not the tool. That horses, one because they are behind up perimeters can forage and poor quality as well. But they can also range U further than other animals from water. When we see really thin horses, we're already at a range where they are really degraded and that's when we see skinny horses and at that point in time, we may be at a threshold for recovery of the range itself. Those are the things to consider. What we look at on a cow, determining when to bring her home and feed her hey is very different than a horse.

Dr. Lenz I think that a full body condition score is not necessarily a bad thing. When I look at horses, I think that you ought to see maybe a slight image of the last rib and certainly able to run your fingers down the side and feel the ribs. That would be ideal and society as we move from not using our horses every day, and society moved in horses 5 + to 6, whereas 4, 4 1/2 is fine.

Dr. Thacker: The other thing I will add in conscious of time and it is important. Horses are also able to handle landscapes that are already been degraded. For example, if you take a sagebrush ecosystem and grasses and almost unuse and to cows and things low on the list, and r- but horses can do really well on that. The greater landscapes, the other species are lost to begin and the horse is still able to contend with that, and in fact, a lot of horses are already living in that scenario.

Dr. Perryman: Yeah, to -- could you guys expand on this concept? I think it would be good for the board, and for those watching as well in Internet land and in the audience. Expand a little bit on the idea of ecological potential. And if you get a sequence of drought years from your grasses you added up earlier, you get a sequence of drought and the production is below average line, and yet, the number of grazing animals are still well above that line, so to speak. There are thresholds that can be crossed that you may never recover information and those are the things that we're concerned about talking about degradation, can you expand on that a little bit. I know all of you three are qualified, but whoever would like it --

Dr. Stringham: I will take a stab at it. That's been my life for the last 15 years, modeling the edge logical range conditions in the West. The concept of pre-settlement condition, which has been used in range science for years as the standard for determining whether or not a range land is degraded. I would say the range science protection is moving away from that. That one, the plants that developed back into the 1800s, the plant communities, or developing under a different climate than we have today and coming out of a little Ice Age and a lot more grass at that point in time than today, and we have a significant legacy grazing effect occur with settlements across the west, and there are many places in the range lands in the Western United States that have not recovered from the grazing impact and never recovered. And the plant communities that adjusted to the heavy use whether set off and was occurring is less palatable today than they were at the time of settlement. And the number of APMA's livestock has been reduced and MLA and -- yet, we don't see improvement with millions of days of many range and that's a threshold event. If we're going to compare lands to the 1850, that's not fair. And I know the range land is moving away from that and assessing health-based off of disturbance ecology and state and transition models that the scientist community is developing today. If you are in a shrub-dominated system and the reference condition would be fifty percent grass and fifty percent shrub and now you have a 90% shrub, removing animals from that will not bring the grasses back. That's just a fact. And what we need to say, the land experienced a lazy grazing event and this is not a current management issue, but a historical un with. If we talk about setting the number of horses out there, and we need to also be considering to what they have done to the HMAs they are grazing in and if the MMAs experience their grazing and the number reduces just for the sake of the animal, and maybe the grazing will not recover, but the other animals and the horse, we need to consider what they are living in. Things are changing, science is advancing.

Dr. Reeves: I wanted to bring it back home to the modeling idea. In the modeling approach I sort of talked about, you notice the trend in the perennials I talked about and that doesn't occur everywhere, effect, but leveraging on what Jansen said, you take the trends at all of the different locations and do the things when they pop out at us looking at the nation, increasing the abundance of invasive animals, but also increase in the wooded species, throughout. One of the things when we use our model a little bit out in the future, we is project the things we see, opinion you can readdress functions of what they mean because of these trends, maybe they are going up, down, sideways, but you can leverage those trends to help you make better decisions.

Dr. Perryman: Based on a current ecological possibly, rather than some perceived ecological potential than it was in 1850 or 1804.

Dr. Reeves: You will remember which is more resilient pop quiz, which everyone failed except for me. The one on the left the annual grazing situation, that's not coming back without real help.

Dr. Perryman: Without additional inputs it won't return to anything like it was ten years before that. And something from the little Ice Age climate period. Yeah, so. Eric?

Dr. Thacker: The only thing I will add to that is a project we just finished up. The most alarming thing that came up, looking at most sites burned, mostly 80% were sagebrush or juniper, so classic vegetation, and the condition prior to burn played a huge role in setting your expectations for recovery, and meaning if it is messed up and cross the threshold, no amount of hope is going to help. And with that, doctor, adjust our expectations and what Matt is telling us, you need to look at what things are trending to and do it based upon that arrearage than desired conditions, referenced conditions.

Dr. Perryman: Or if we pull all of the animals off, it will become something it used to be. Something like that. And it is important. And you guys talked around it but not specific you can do it, and many of these habitats around the watering holes we're talking about are seasonally -- important is not a strong enough word, but seasonally critical habitats for all kinds of animals that are out there. From squeaky dogs to birds, to domestic animals to horses to big game. Jim and I have had these conversations time and time again. These are critical habitats, and whether these animals show up for the time of the year, they need to have those habitats there in some form so they can use them, and they get there and they are because they have been degraded and they have to go some other place. And anything you have animals move ago cross the land, all kinds of bad things can happen. Are you more exposed to predation, and water, hunger stress, and just stress, and that is important over time, and that can play into next year's recruitment. And some of these populations in decline, at least regionally declines, so this is big stuff we have to be cognizant of, talking about the seasonal habitats and trying to maintain their functionality and ecological potential, so the other animals out there on the landscape will have them when they need them as well. Thank you.

Mr. French: I think this is a great saying way into a comment that I had early this morning, talking about AML and AUM. And all of those numbers we utilize historically, and it comes back something Eric said to me at lunchtime, there's a huge difference between recovery and restoration, and we talk about restoring habitats after a fire or lazy and grazing event, and we're finding out now, that's not possible. Recovery is something to stabilize what you have left. I think, you know, if you go back to the comments that I made earlier this morning, I think that makes the argument that I think we should really take to heart, as it applies to establishing the grazing and/or utilization standards for the piece of ground, whether it be for cows, big game species, or horses, many of these habitats that we establish these boundaries on, whether they call them big game units, HMAs or grazing allotments, we established a caring capacity and vegetative community that existed at the time when we put the numbers, assigned those numbers, whether AUMs or AML. And I think a lot of us would be been in the field or a lot of years observe this, be we're not seeing a proportional return back to that pre-legacy event. It seems to be leveling off and as Doctor Perryman was talking about thresholds, once you achieve it, even with the drought cycle and preset versus productivity. It didn't come back. The production didn't come back preponderance of the evidently when the water, the preset came back, and that's your threshold you are talking about. I guess what I am saying, it is a complicated concept, but it is something that I don't think we really considered, when building those management protocols around those numbers, and I think it is something that we're going to be talking about in a lot more detail down the road because if we're going to be successful with regard to healthy landscapes, we're going to have to recognize that production and in that production potential looks like.

Dr. Stringham: Let me make a few more just generalizations here. In the great basin, this concept, I like the concept of maintaining what we have, versus trying to restore something, and the data shows that if you are in the five data pre-inch zone, trying to get any data back to the way is used to be, and we're not there, and maybe science will come up with a golden bullet, but we don't have it now. And the largest biome in Nevada, we fail miserably, and unsuccessful. Being able to reinvests in the community. And up to 12, we get about thirty percent and when we get above 12-percent we decent need to do a lot to restore those systems and we need this think about how approach the management. What's the quality of allotment, the HML from a plant mapping, and soil compliment mapping perspective, and lay over the top of that, the extreme woodies coming in. We knee in the Western United States, we have more than 18 and 19 pictures that didn't exist in 1950. And what does that do not data? Research and the tree, the size of the tree, they are drinking 8 gallons a day. We're creating hydro logic drought by not helping the wood lands and helping them to expand. And if there's 12 20 per acre drinking 8 gallons a day. The meadows are drying out and critical habitats of meadows and water are declining as we watch trees march across the landscape, and when they burn and no understory and crown fields, we get tea grass and we're cooked. That's something to think about as an approach to landscape. It is a really big puzzle with very few solutions right now. So --

Ms. Carlisle: I think we're all feeling kind of bummed out right now. [Laughing]. It is a hard place to sit in the advocacy chair and think -- I mean, quite frankly, I don't want to be on the board right now because it is a no-win situation, trying to think about how do we advocate for these horses and important for American people to remain on these landscapes in multiple use and regardless of you want it to be. And the blame game between who's doing more or less is moot at this point, and it doesn't matter. That said, it is very difficult to try and figure out how to, I don't know if how to explain is the right term. How to wrap our heads around the idea that, you know, I mean, it is true, the numbers look like there's favoritism for some uses over others, and of course, the management is different. In terms of cattle, you may not be grazing them the number allocated, and there's actual use and allocated use, but we can't see the information. It is happening in a field office to field option basis and it looks bad, we're removing animals saying habitat doesn't support them and putting out more of a different type of animal, but you all have not relying on that, and you are annualizing the system to support that process, so how do you speak to that idea there's an inherent unfairness between the user groups. I see it as a stopping point for forward progressing, and we have been there forever.

Dr. Thacker: Wow. Um, I have thought about this some. That's a pretty difficult question. I think there's something I learned when I took a population biology chance helped me think more clearly about these systems, especially when you start talking about animals and populations and you can't think of them as individuals. The result is to maintain the population over a landscape over time. So, the question is, what do we need to do to keep horses and mules there on the landscape, and important not to think about the individual because the population is here to stay. Changing our thinking a little bit and thinking long term about populations and not necessarily individuals, and that's one thing that would help frame it differently for a lot of us. Secondly, the range community has been preaching this for a long time. It has to start with the base resource and the base resource is the land. Science doesn't make decisions, so I can't give you that answer, Celeste. I often tell my BLM partners, I have the easy job. Tell them what the science says they have to figure out what to do with that. First off, we have to think about the resource, which is land, being realistic about what it can do and not do. Second, I tell my students all of the time, horses, cattle, sheep, deer, they are not magic. All range management is, managing plant and animal physiology together. That's it. It is that simple. Not that it is easy, but it is that simple. There are two questions to approach this of the perceived imbalance, um, I don't know if I have a good answer for that. I can sit down and go through numbers and I calculated ALMs mule there and horn and elk, and the horses are winning that game by a large margin. I don't know so fair is the right way to approach this. That's all I got.

Mr. French: To be honest with you, I think it is a fair discussion for us to be having right now because perception is reality, and I think -- I was just thinking we're on the same wavelength, and thinking about the standpoint of the physiology and the horse having the ability to thrive and sustain itself, in marginal conditions, gives it that ecological or at least a genetic advantage over some of the species trying to compete for the same resources at the same time. So, the AUMs we're discussing are that the horses are doing better across the board, and predictable. And one of the things we're finding with this, with the events occurring right now, we're seeing annual grass and weeds, noxious weeds coming in and replacing almost in Monotypic stands across the great basin right now. The bad news today, the expectation for that to return, even with intensive management is probably not going to happen in our lifetime. It suggests knowing the physiology of horses and the susceptibility of a certain species versus another. And that's where the biology is and manage specific to risk. I think about, we're watching significant shifts. I heard today and yesterday about the reductions in horse numbers across the west, and I even heard the word "Extinction" several times. And I would suggest that days of 25 to 30,000 mule deer in Nevada are over. We reached that threshold a long time ago and we're not going to sympathy return, and we let already see the potential for real numbers already. And I reported yesterday, having to do with the needed recruitment in Nevada and this year, it is being record that upwards of 40% on the upper end of reduction and in recruitment on mule deer, and a high of 72 percent in Elko County, loss of mule deer recruitment, and that's an indicator, another number, which is an indicator of the resilience of mule deer given drop siblings. The sad part is, and what we have seen in my lifetime in Nevada is I don't think we'll see the numbers rebound back to what we saw in 1988 for instance. Back in the 1990s, I think the populations will go right along with the threshold with the habitat they are living on. It is reasonable for all of us to expect that those population numbers are going on with the thresholds right along the habitats, and the idea we'll see more mule deer, more horses are on more AUMs and they are susceptible to loss and habitat and forage production, we're probably not going to see the restoration happen and we'll see some sort of return to that level, but the baseline activity will be adjusted downward. And I don't know how long it lasts and probably in our lifetime. I have been in this business for almost 50-years and I have been watching this happen and didn't know what I was seeing, but I have been watching for that 50 years and it is definitely real.

Dr. Perryman: Well, you are bringing me down. I am pretty optimistic, just a couple of things and will do this and finish up with a comment on what the ranger said. Keep in mind, in most of these areas we're talking about and we have seen some degradation occurring, by statute, I guess. Maybe that's not the appropriate word, domestic livestock are not allowed to go into areas that have nothing to eat on them. The bureau and Forest Service will not allow for that it happen. I know where degradation is occurring and haven't had a domestic annual for more than 30 and sometimes for voluntary use. Animals are not being turned out to the areas where we have an extremely high degraded sort of situations going on. There would be an exception to that, but in general, there's no point for a producer from a common-sense standpoint. You can't turn animals out if there's nothing to eat. It is not a viable, economic model; right?

So, I don't make the pizzas, I just deliver them. And with respect to this idea of ecological potential, and probably having a lower our expectations over the next few decades. I have seen in my career and these guys can probably say the same thing and doesn't want to put words into their mouth, but in the same profession I am in.

I have seen times I thoughts it was Nuked. I mean, just absolutely Nuked. And five, six, seven, ten years later, it just surprised the heck out of me. So, these systems are much more resilient than we think they are sometimes. Sometimes, yes, we know there's a threshold and something has been crossed and it is really, really bad, but from an optimistic standpoint, these systems can be really resilient if we manage them appropriately, and that's what we're talking about here, appropriate management and trying to get to the bottom of what that is, what possibilities will, and we can have healthy horses and wildlife, and healthy economic system for producer out there and can pay taxes and economy and on and on. And I am pretty optimistic, and I think we can do it and do a good job at it, and I think this board is quite capable of shepherding that along the pathways. There, I said it.

Dr. Thacker: I want to -- not necessarily correct, but something I want to emphasize. Something in my presentation as well. We can't look to a certain species to solve the 'problem. For example, we can look to all of the horses across the United States and the trend is not fixing and constantly remove all of the livestock and this problem doesn't fix. Everything has to adjust to the reality of the situation we're in. So to your question, specifically, we can't point fingers at just one group of species and assume by removing them without adjusting everything else, everything will fix itself. For example, dumb the numbers and I have students do this in class. If you pick an HMA and leave the horses to do their thing, most of the time after ten years, they will surpass the cattle in on the allotment, assuming you are taking cattle off. And my point is not managing cattle the same problem. The point is, everybody has to file a little bit of the bite, for the future and we all have to set up the table and it has to be done more -- uh, with more of a consensus among groups of the reality of what's happening. I'm done.

Dr. Perryman: I go back to a statement a number of years ago. If you have this box and it has this function in it. You take it out and all you have is dysfunction in a bigger box and that's where we have been having these issues.

Dr. Stringham: One more statement. Don't forget water. And as the climate is more and dry, and water is what dictates however we can move, regardless of what animal we're talking about. And radiation coming out and less water sources will degrade quickly then will you get into trouble with whatever is out there, horse, cattle, deer, and think about water and how we're going to manage that going forge. I told you march water trees drink. And BLM removed 18 miles of meadow and we have monitoring in. Within one year of drought, the meadow after removal of trees gained fifty -- went from 800 pounds per acre to 4000 pounds per acre. And as an altogether agency, what are the water sources and what are the emblems above it, can we improve it?

Dr. Bechert: I would like to thank the panel for all of the information you shared. I learned a lot. And I like how you broke it down, too. And I am thinking of one of Eric's slides, how do you manage livestock and wildlife and compare that to horses and identifying how our hands are tied in certain ways, and based on what you both just said, too, it looks if we focus on different species, what we're going to pick up, it's a little too late and we're a little behind the game, and the focus and determining AML and status and more focused and the range land itself and the water. And to me, you know, then our job as a board is how does is that happen? And I think there's a lot of consensus about working locally. Because locally, that's where people are the resources to gather these kinds of data, but also, the wherewithal to do something about it. And so collaboration is really key. That's what I gleaned from this, and maybe then there's some hope. [Laughing].

Ms. Carlise: We're going to do Mr. French and then Brian and we have one more presentation, so I think we might have to cut ourselves a little bit short here.

Mr. French: Quickly, I wanted to address the issue about water that Tamzen talked about, and you guys remember, we want through a period of time from a resource management perspective looking at librarian health, habitats and meadow complexes regarding damage control actually from improper livestock grazing and hedge cuts lowering water tables and I remember we spent hundreds of days at the underground coming up with solutions and mitigating those problems that were created by livestock, improper livestock use and in their defense, most folks didn't realize what we were doing at the time. There was a lot of armoring and head cut stabilization projects to include meadows. One of the things we found on those areas we didn't touch, that ground water went deeper into the ground with a head cut on the streams, initially, and dried the entire piece up, and meadows dried up and completely didn't know they were meadows and most of us we see places and wonder what happened to them. I only bring that up, I am seeing similarities right now. The difference between AUMs and AML, whether there's a problem with livestock interaction, meadows or aquatic habitats and aquarian habitats and the livestock needs are not met and they move out of that spot and stay in that spot many, many cases and that was a painful thing to enforce, and a lot of people were really hurt in the process trying to stabilize those habitats. Right now, I can think of three allotments for AUMs in northern -- Humboldt county I am think being right knew, and recent significant changes to the livestock and timing and the location the cows can be at the time of the year and protect the streams and walk away from the horse population there. And in my cases the horses stay right on the Riparian tone, and that's why they stay and where the water is and wind blows and stay there all of the time. In many cases the aquatic dry up in that area as a result of not managing the horses and it want the horses fault, and talking about HML, and in the context. HMA and not just forage potential but talking about pieces of habitat out there that we need to protect under that type of management, regardless of where it is AUMs or AML. And I would go back to something Dr. Perryman said a minute ago. There are several HMAs I can think of in the northern part of the county and haven't had 'cows on them for many years plus, and the kilowattic territory, has been submission into horse years and it doesn't take a lot of damage to these zones, and I want to compare if it is something we need to put in the frontal lobe when talking about the management protocol.

Mr. St George: Well, thanks. I think this has been astoundingly useful discussion and thank you to all of you on the panel. Celeste, I am still struck doing hard things and I want to reflect on what Federal policy and altogether -- land acknowledgments says, and the challenge, the false dichotomy, and pitting one against the other and only if we can create one use and create solutions and space for north use. I heard an certification during a point in time today and public meeting, that public land livestock grazing is the single grazing use, and perhaps Forest Service may agree with me and the number of accounting and the use confounding both organization it is recreation and we're managing with a fraction of the budget that public land grazing or wild horse and burros get, and that's a massive challenge to try and deliver for the public. Let me take a second and remind all of us that Federal land acknowledgment and ultimate defining of multiple use definition. It means the management of public lands and their various resource values, so they are utilized in a combination to best meet the present and future needs of the American People. Making the most judicious use effort land for some or all of the resources or relate services -- paraphrasing now, and to make adjustments in those uses to conform to changing needs and conditions. Multiple use is the use of some lands for less than all of those resources. And a combination of balances and diverse resource using that take into account long terms for future generations. And Dr. Perryman goes on to identify what these uses are, include by not limited to recreation, range, timber, water shortage, water, fish shall scientific and historic values and harmonious and management of those using it and the sustained field and productivity. That intent is very elegant in my mind. I don't know if we give Congress enough credit sometimes when we do it, and that's a really elegant definition and incredibly consistent with the Wild Horses and Burros Act. And I want to draw us back to that. That's what we're trying to do, and while it seems focused on wild horses and burros and it is actually focused on that mission. Thank you.

Ms. Carlisle: I would like to thank the panelists as well. You made all of our stomachs hurt, but it is very necessary, and I appreciate your knowledge, too. And Bryant, I think we have one more presentation and some follow-up discussion on it and we'll adjourn for the day.

Mr. Kuechle: Yes, we'll get the presentation pulled up, Dr. Paul Griffin as a presentation just momentarily. We'll get his slides going. This is the population modeling presentation.

Discussion: BLM Wild Horse and Burro Program Population Modeling Program Presentation
Dr. Paul Griffin, Wild Horse and Burro Research Coordinator, BLM

Dr. Griffin: Yeah. I want it dovetail with what Brian just said, and if the necessary -- well, necessary is not a great word, but if the ratio of removals and fertility control actions over time is not appropriate from where your starting point is, then are you inevitably, and it requires a huge number of fertility control treatments and as I showed in the results and you inevitably increase the overall population over time, and over one hundred thousand will be extremely hard for us to catch up for exponential growth or operation.

Ms. Carlisle: Thank you, Paul, I think this board is tired. But we appreciate that a lot. And thanks for your time and thanks for calling in from the home base. Bryant, over to you.

Mr. Kuechle: Thank you, that concludes today's meeting and we have a final meeting tomorrow, 8 to 12, the focus on the board meeting is draft recommendations and final recommendations BLM. And there's a public comment at 9:30 if you are interested in public comment, the virtual is likely full, however, can you sign up in person when you arrive tomorrow. As Celeste mentioned, there's an event next door. That event starts at 6 and the hotel told us try not to linger and thank you very much. We'll see you tomorrow.

[Adjourn]

Public Comment Period (1)

****From June 28th, 2023***

*This comment period occurred on June 28th, 2023 at the conclusion of the advisory board subcommittee meeting. The transcript is included here.

Mr. Kuechle: Okay, we're going to go ahead and get started with the public comment time. Appreciate if everybody can grab their seats. We have a lot of commenters and a short window to receive them. Reminder if you signed up for in-person public comment, it will be helpful if you sat in one of these first two rows over here by the side of the front row. Okay, welcome back, everybody. We're going to go ahead and get started. I want to provide announcement prior to the beginning of the public comment session. Okay, so really quickly I want to go over some of the rules of public comment for everybody's benefit here that's going to be providing comment today and potentially in future dates. To ensure smooth meeting for all engaged, the following rules have been accomplished for the comment periods In-person and virtual commenters must register in advance at [BLM.gov/WHB/Advisory Board](https://blm.gov/WHB/AdvisoryBoard). As mentioned prior all virtual comment slots have been filled. However, we do have opportunity for in-person comment to sign up for tomorrow and the following day. Virtual commenters must address the comment to the board via audio only. Do not watch on [BLM.gov/live](https://blm.gov/live) while speaking on Zoom. That will create a feedback loop. We want to avoid that. Commenters will have-- they may not reassign their slot to another speaker. Commenters will have three minutes each and finish in designated time to allow the maximum number of individuals to express their viewpoints. Commenters must show mutual respect for everyone participating. Do not use unprofessional conduct, yelling, profanity, et cetera, including personal attacks to member of the board, BLM service or anyone for that matter. That's immediately mute and move onto the next speaker. Again anyone disrupting the meeting may be muted or asked to leave. Written comments to the board must be sent up at least three days in advance of the meeting via email. For any comments you'd like the board to see prior to this agenda item. If you have comments you can submit those to the record at the conclusion of Friday's meeting at noon. Disregarding the rules may result with being muted or removed. We appreciate you following the rules. BLM or the Forest Service will not responsibility to comments. They should not interpret that they agree or disagree with anything said and the Chair serves the right to comment for factual and accuracies. We're going to begin with the virtual session and when that concludes we will move onto the in-person session. What we will do is go through the list of folks that registered and begin with the person that registered first and move down the list to recent registration. I'll announce who's speaking and who is on deck. Meaning that person is going to go the first person I announce. As I mention those names, if you can raise your hand virtually on the Zoom, that will move you to the top of my list and make it easier to find you. So, we'll go ahead and get started. This is audio only, no video. So, the first person we have on our list is Rick Karcich and Laura Leigh is on deck. Rick, I see you there. We're going to allow you to speak. Okay. Go right ahead. The comment will start-- the timer will start when you begin speaking.

Rick Karcich

public. UCSC doctorates were looking for the oldest fossil bones in existence. They came with the horse bones, oldest of all bones on the planet. The horse fossils in every continent are younger than in the United States. What of should been the pride of the United States is these wild horses, legislatives in Colorado legitimized-- they substituted natural-- artificially manipulating future genetics that we ended, far predated the animal which is the human species. Human fossils are younger than horses fossils. Best wild horses brought to-- by the arrogant human species, Nevada legislators even want to shoot them as game for hunters. 80% of the public wants to know wild horse slaughter, it's the will of the people.

Debra Clemente

I'm Debra and I live in New Jersey I was probably one of those children that advocated for the wild horses back in 1971 with Richard Nixon writing letters and advocating. So, I actually have been around advocating for a long time. You brought up very good points today about your perceptions and our perceptions and the public, we do feel that you mismanaged the herds. That there are issues. There's not transparency. You hiring publicists doesn't make it transparent. I think the people would rather be more hands on, maybe you can get some cameras or maybe you would allow us to view the trap sites better when the photographers are out there. There's lots of ways that we do see things now between lives and YouTube and the people that are out there recording. So, we do see where this stuff happens and the issues come in. And I do think that we need to collaborate and think outside the box. COVID showed us you can rapidly change laws. It needs what it needs to be done better. And also, the wild horses really are needed to that land. They're integrated into the land. They're very important. They do protect against the fires. There's very many advantages to them being on the range. And the BLM does not ever bring up the fact about the cows and the sheep that are out there on the lands. And I think that it's like 30 to 1 or something like that in that area. And also, I think that the incentive program is a problem. I think that maybe a recommendation of changing it from the six months to 12 months review might stop a lot of those horses ending up in the slaughter pipelines in very poor condition. Six months they can have their hooves really grow long. They could not be shed. There's there are issues with that. I am happy today that you did say that you would like to work on some is of these issues and you're open to a lot of this. That's what needs to happen. We need to move forward because you cannot move all the horses in holding. And that's no way you can keep up with that pace. Thank you very much.

Stacey Lumley

Thank you very much. I want to start off by saying that I am Stacey Lumley. I'm from New York. I am a United States citizen. And I feel that the wild horse free roaming, the whiled free roaming horses and bureau act that was established in 1971 to protect wild horses and bureaus on federal land is antiquated and needs to be changed. The act does not work any longer. It is decimating our wild horse populations. Unfortunately, this act allows wild free roaming horses and burros that are deemed to exceed their territorial limits even when their numbers are extremely low to be rounded up as a means in keeping with the multiuse BLM management concept of my public lands. These animals are deemed excess to preserve and maintain a thriving natural ecological balance and a multiuse relationship with ranchers, allowing four wheelers and bikes through these areas is not keeping a thriving, natural ecological balance that the BLM is trying to propose. I will say it again. This is not a thriving ecological balance. This devastates the ecological balance. This is not what I want from my public lands. The adoption program is a complete failure. Many of these wild horses are not trainable. Nor should they be. Many are mistreated because they cannot be trained. They wind up in horrendous conditions because they cannot be trained. Many wind up in auctions. They are-- purchased by kill buyers, kill pens and then sent for slaughter. Also, the BLM currently has more than BLM horses stockpiled. Many of the long-term facilities have no shelter from the elements. The horses are stockpiled into pens. This is not a life for once free and wild animals that had family groups broken a art from horrendous round ups that were extremely traumatic. This is not what I want for my public lands. I want to see my wild Mustangs live their lives in a way that is free. We must find another way to manage the numbers. I do not want my lands given over to ranchers for their gains. I do not want to see cows and sheep on my public lands. This is not maintaining a thriving ecological balance nor providing a multiple use. This is not land management.

Dawn Johnson

I had surgery and forget about this so I'm not prepared as I normally am. I am going to submit written comments as well. But the few things that I would like to point out which many of the people have is that the amount of land that has been taken away from the original wild horse and burro plan has been millions of acres. And it has been replaced as most of us know with the livestock industry. And I have a background in the livestock industry. I have parents and great

grandparents that did all of this. Cattle men, different ranching and things they did. So, I understand the balance that we have to have with some of the stuff. But the amount that is taken away from it the horses in relation to what most of these ranchers that are quite wealthy and quite large and the subsidies they get and is the fact that they get to get land for pennies on the dollar oppose to some farmers and ranchers that don't get the opportunity like that is something that needs to be looked at. We remove the wild horses off land. And Colorado is a great example. There are documentations of pictures and videos that was done and grazed with sheep everywhere. And it is a-- it's a shame that the information is not being given with full transparency as to what is going on in a lot of the lands in the horse' lands, wild horses' lands. And you add onto it the kill pen issue and I have firsthand knowledge. I have from Kansas. Kansas Peabody pen is one of the largest in the country. I've been a part of that, working with that lot for probably eight to ten years now. I had a conversation after the conference which I was a part of. And the amount that's going into the kill pens because of the incentive program which is an extremely broken problem. And I've had this conversation with the people in the BLM two or three times. I sent documentation. That has got to change. The BLM, I know got a lot of hats. But that is the one thing that they are supposed to be doing is safeguarding their livelihood and the safety of those wild horses. And they pretty much just wiped their hands clean. Just because they don't have a title anymore is not an excuse. It needs to be changed and looked at. And I'll send more comments.

Deborah Legg

Hello. Yeah, my name is Deborah Legg from Virginia. And I'd like to share a story of something that happened to me in May of this year in an area where wild horses live. And so, I'm going to read my story like a little script. And here we go. The river ran through under cold ice shelves clinging in time in this western landscape. I, too, was guarding my time in this linear space while walking along the river's edge. The music playing through my noise canceling headphones couldn't over-fake a new fact I learned. In 1858, approximately a thousand horses belonging to the American Indians were ordered to be slaughtered by EO settlement colonel George Wright. The intent was to break the spirit of this first nation's people. The plight of the buffalo pushed away. They too were slaughter by the millions further crumbling Native American's way of life. My noise canceling headphones weren't able to block the buffalo and the soul of the beaten tribes of the American Indian. I found myself in between, something in me shifted as I moved through the woods. My heart settled into a deliberate beat and my muscles worked in painless synchronicity. My breath was measured-- I was returning to a state of wildness. Sunlight illuminated the spot under a tall pine. I sat in a thick pile of moss and leaned back against the tree. The prayer-- closed my eyes, this prayer comforted the mournful cry. I was deaf and blind in the wilderness. And this is true. Bear, fear, and then I realized it was early May and the bears were coming out of hibernation. Then suddenly just as quickly as it came on, the fear transformed into the fear of fiercely protected and calmness came over. I a few feet from me stood a wild horse, a lone stallion stood over me. I was protected and returned to the wild. Under his welcome protection, I meditated moving into the in between, I appreciated I was whole. Any division in me was united going forward my work would be founded in benevolence.

Holly Gann Bice

Hello and thank you for the chance to speak today. My name is Holly. I'm in Washington D.C. and I'm the Director of government relations for the American Wild Horse Campaign. Today I'd like to focus my comments on the importance of collaboration to create progress on the wild horse management issue. There are undoubtedly numerous aspects of the wild horse issue that are areas of disagreement. There are also areas of common ground where we can and should collaborate. And one area is implementation of fertility control. To that point we are glad to see that BLM started a grant program to work with NGOs. It's a step in the right direction, but we urge the BLM to fully embrace the partnerships in a larger number of herds. Collaboration is certainly not always easy, but it is necessary in order to move forward to implement real solutions to stabilize wild horse populations in a humane science based physically responsible manner without collaboration on fertility control this issue will remain in crisis and continue on. Collaboration comes to the benefit of all stakeholders, livestock permittees, environment lifts, wild horse advocates and taxpayers. And it benefits the BLM and the Forest Service by providing necessary manpower and ultimately resulting in better public sentiment toward the agencies. Collaboration would also help the agency fulfill the directives for Congress and work with NGOs and military veterans. We have seen the benefits of collaboration including bringing together diverse interest such as groups that normally don't agree on much of anything. Colorado is a great example where agriculture, environmental and wild horse interests came together ultimately resulting in passage of state legislation to provide funding to supplement BLM's per filth control efforts in Colorado. The American Wild Horse Campaign has stepped up and submitted offers to help BLM and Forest Service to-- we continue to stand ready to assist and collaborate with the agencies on this issue. It's our hope that today's

discussion shows the importance of collaboration for the benefit of all who share an interest in this issue. Thank you so much.

Rebecca Falk

First of all, I want to talk about the cash incentive program. Give the vet initiative instead to protect wild horses and burros. If they have a vet initiative that would help—help get their feet done and get shots, et cetera. It's a great idea to do the cash incentive but the horses and burros are going to slaughter. I also want to talk about the round ups which needs to go away. I've done comments on the helicopters. They're cruel and unjust. There are horses and burros that get killed. There's got to be a bait trap or fertility should be focused more and keep the wild horses and burros out there. Helicopters are going to happen in a couple of days. Maybe it had to be done. Now it's becoming primitive. Colorado is an example. Last year a lot of the horses got injured. They were done in hot temperatures and that just needs to be stopped. I also want to talk about the HMAs for the wild, hoes. That needs to be focused just for the wild horses and burros and get livestock off there. You can get the livestock people maybe get them to retire their grazing allotments through compensation or other means, have the HMAs-- wild horses as I suggested. So also I want too talk about future round ups in the wild horses. There has been a round up that they're talking about in augment I did a comment and other people did. And this round up needs to be stopped. A lot of the horses are older and there's a fertility control going onto these wild horses, the ones close to Cody Wyoming. They need to be looked at and round up, needs to be sought unfortunately. It might not be, but I'd like to see that one done also. HMAs in some other areas need to be focused on in Idaho. There's only four HMAs and 640 horses only. HMAs in Idaho need to be improved and more HMAs need to be focused on so the HMAs in Idaho, there are only a few wild horses. So, I think that they need to add the wild horses in Idaho as well. So, Thank you. That's it.

Cody Schroeder

My name is Cody Schroeder. I'm speaking on behalf of the Nevada chapter of the wildlife society. The Nevada chapter and affiliate society is an organization of wildlife biologist with the goal of sustaining wildlife populations and habitat through science based management and conservation actions. Nevada is the driest state in the nation and the overpopulation of wild horses and burros in the state has impacted many of Nevada's many native wildlife population. The current population managed by BLM in Nevada is approximately 50,000. High appropriate management levels for horses and burros in Nevada is 12,800. Horse and burro populations in Nevada are four time high. We node an additional 1500 horses occur in BLM land in Nevada managed by the California state BLM office and another 10,000 horses occur on other federal lands and tribal and state lands The current situation in Nevada is in violation of the wild and free roaming-- called to be consistent with the thriving ecological balance. Biomass of horses is now three times in Nevada, and Nevada-- have declined 30% over the last decade. Several severe habitat degradation is documented and clearly negatively influencing-- the negative impacts of overabundant horses is almost certainly impacted nongame species. Recent study published by stoner and others in 2021 in the journal of wildlife management found that Nevada has the highest overlap with free roaming horses in the entire western United States.-- sheep habitat-- over 35% of mule habitat in the state being occupied by horses and burros. Another recent study in 2021 demonstrated annual decline? Sage-- of 2.6% for every 50% increase in wild horse abundance over AML max levels. We strongly support BLM receiving funding to bring HMAs and AML, six-year timeframe. Simultaneously we support funds to achieve this goal. We also support research for fertility control. It will reduce future need for gathers. That said for reasons described above we strongly urge strategy that achieves AML rapidly as possible followed by fertility control which will substantially reduce the need for gathers and eliminate the need for long-term holding.

Danielle Matthews

My name is Danielle Matthews, I'm the Torrance California representative for the preservation of wildland. I ride my horses in competitions. My love forever horses is should go I'm passionate about. The BLM states that they gather and remove wild horses and burros from public lands to protect the animals. That is far from the truth. In fact, round ups are often done in secrecy with excessive police present to keep the public at bay. For every wild horse removed, a cow takes its place. Don't be fooled, round ups are not to protect the wild horses and burros nor nation's public land. It's all about the money. Simply put, round ups are animal abuse and the BLM turns a blind eye. They rip the wild horses away from native homes, resulting in thousands of wild horses and burros losing their freedom and lives. Horses are sensitive animals. They feel, communicate, love, and they have families and feed off of energy and emotion. They're traumatized and death is a common result. Separated from the families. Stallions often injure themselves reuniting with families. As a

mother, I would do anything to protect my child even if it means losing my own life. That's what wild horses do it as well. They get paid per organization dead or alive. At the holding sites for the horses that did make it that far, the BLM euthanizes horses with physical defects though they have managed to survive in years in the wild. There are more wild horses in government possession than in the wild. They regulate their population levels. As more wild horses are captured the pressure to sell them, the rise of our nation's innocent and wild horses and burros are at risk. If you have an ounce of empathy, we ask you stand with us and stand for our beautiful wildlife. Thank you for your time today.

Mr. Kuechle: Thank you. That concludes our virtual comment time. We will move on to in-person. Those providing in-person comments, the same rules apply. We have a timer that will begin. When you begin speaking, you'll see the timer. We ask that you conclude the comment by the end of that three minutes. Please show mutual respect for everyone participating. Don't use unprofessional language or conduct such as yelling, profanity and personal attacks of any kind. The board, BLM or Forest Service will not respond to comments. So, what I'll do is similar to the virtual process, I'll say who is up first, and who's on deck. Person up first can join me right here. We'll unmute the microphone and begin speaking when you're ready. Riley is up first, Devin green will be on deck.

Riley Peck

Yeah, thank you. Grateful to be here. My name is Riley Peck. I work for the Utah division of wildlife resources and represent them in the state of Utah. I am a legislative liaison. Our public policy analyst. And I got my start working for the division of wildlife as a biologist and doing wildlife research. Pretty passionate about that. I continue that passion, as I teach at the local university, wildlife and biology. Something near and dear to my heart. We talked today and there's a lot of passion within the wild horses. I love them. I have three of them. Adopted them, use them. My daughter races on them. We ride them all over the place. Wild horses and wildlife are like these giant pendulums. We talked today that there was data that showed the impacts to wildlife and wild horses. And it does exist. It's not just for mule deer we have data within the state of Utah that shows 13 different animals have negative impact because of the wild horse. We have 40 plus birds impacted because of that. So, it is with that perspective that I would want to echo the voice and say, we encourage BLM and everybody possible to use every tool we have in the tool box to bring horses to the appropriate AML. Like I said, it is that pendulum. I'm passionate about horses. We ride them regularly. My daughter practices on them daily. They are part of the family and they are a place. With arguing that horses have a negative impact on wildlife, somebody inevitably asks me what about the cattle or the livestock component to that? We need to remember that it's not just what mouth is on the landscape but how they occupy the landscape. It is not simply saying we have enough food out there to increase the horses so they should be all right. Often times we are water limited. We have different components that make that a negative impact. So, as we are balancing that pendulum, going left to right, we need to consider everything. Wildlife certainly is being negatively impacted because of the amount of horses that we have on the landscape. I am passionate about the horse. I hope that you can see that. I encourage anybody that has the capability to adopt one to do so. They are magnificent animal. At the same time I'll echo from the division of wildlife that we must do whatever we can and try to bring that down to AML including any and all options we have on the table. Thank you so much.

Devon Green

So, Devin Green here. I'm making a film. My background is in philosophy, comedy, going on adventures, asking questions. So, I've had the opportunity to go into this with an open mind. Certainly not partisan. Generally interested in truth and old school idea of journalism, investigative journalism. That was my dad's career. Now I continue with video. I say that to say, let me give you, I walked into the room here's my impression. And my feeling about the animals, when I look at the numbers and when I look at-- David who spent their lives making documentaries about wildlife, pointing to the fact in the last few decades, 30% of the livable land is gone. 60% of populations have decreased in the last 50 years. There were at one time 25 million horses in this country. Now it's more like 7. We have a bear on our flag in California. I've never seen a bear. I feel the love everyone has for these animals and the talking points and there's merit to everything. I'm nodding my head. But I want to encourage us to think bigger. At a time we had 60 million buffalo roaming wild, we had birds and grass to feed them. I can't say I can snap my finger and solve the problem. I'm saying we have less wildlife than we ever had. There's no Jurassic Park yet. We create these animals. Even if you have a billion dollars you want to get a lake house in Tahoe. You want to see animals and be to pristine nature. For a lot of people that's the closest thing they have to spiritual connection. It was with me when I started watching documentaries about nature. So just being able-- the wild horses are not starving. I don't mean to dismiss the ideas of overpopulation here. But it was beautiful. It's

beautiful to be around them. I swear to God, I can't talk to anybody from Reno without mentioning the wild horses. It's a big part why people live and come here. There are spots where you can see them. I'm from the eastern shore. I relate to all of you. I just want us-- I want to hear with the same passion of that no nonsense we have to get it down to 12,000. Get these species working together, we have to bring in America back to the fruitful hand. Let's-- I encourage you all to think big. Thank you.

Jim DeChambeau

Thank you. It was mentioned about funding opportunities which is a great idea. I'm aware of a nonprofit that is respected and has positive history would like to get with the BLM to agree on more partnership agreement and would utilize and raise funds to finish projects that BLM stated. And hasn't finished in rehab projects the lands. I ask BLM board to recommend the process for the BLM to do this. And as far as treating older mares with you should treat the younger mares first and not older mares. And the biggest thing is removing horses from long-term holding. So, you can get the 45,000 other extra horses out in Nevada's range. Nevada's a state being the most decimated by these horses. And the-- has come up with the public lands policy with conversation leases and restoration projects and restoring degraded land while we all know that 90% of the degraded land in Nevada is from wild horses. I come from a line of horse lovers. I'm 68 years old. The first horse I ever rode was a Mustang, roped in the-- my dad rode Mustangs from the 20s to 60s. She was a Mustang for all of his adult life. I love wild horses. I love to see them in appropriate numbers. And I love to see the land of Nevada restored to a healthy habitat. Thank you.

Brianna Merrill

Please excuse my wiggly one here. I am representing the Pyramid tribe and while our opinion is officially neutral, I would like to stress that the preservation of our lands is key to us obviously. And we'd like to ask that tribes be considered for opinion involvement, every tribe and all its people are different opinions. And I guess I feel you all have done a great job with remembering to keep tribes in mind today. Then I would also like to put forth perhaps not to all but the public to stop tokenizing Native American to support your opinion. Your opinion should be your own and these are not native animals. They have ancestors. But we would like to make sure that we have landscapes here that can support all wildlife in the future. And we have been here to see the actual decline of our native ungulate. And would like to do anything possible to encourage HR success and longevity and includes managing the wild horse and burro population. I feel that instead of catering to public opinion at this time that we're approaching a very dire situation with climate change, drought, wildfire, where we need to make the tough decisions and move more swiftly before it, we don't have much left to work with here. So that is my prepared statement. Thank you all for your time and your work. And I wish you all the best of luck.

Randal Massaro

Good afternoon. I would like to say special thanks to Brian St. George and Jason for his time. My name is Randall, I'm an actor in Hollywood, retired state police and retired federal law enforcement. And an animal rights activist for the preservation of wildlife. I've been involved with Nevada politicians before over the nurse Nevada bear hunt. I also went out to-- colony, sat in boards, they came in and joined us-- So I'm very involved across the nation and in Canada with Native American. I speak for them because a lot of times state natures aren't given the time to speak and not given that respect. Ladies and gentlemen, I dealt with BLM for many years. I used to be a green peace representative of about. Union members for the preservation of wildlife. What I would like to say is this, doing radio shows and TV many actors are taking stand ups-- I assign people and train people to go out to the range, get undercover footage. We have stockpiles of it. Your own 20-time investigative reporter George did a documentary called stampede to oblivion. George gauge covered the dance sisters on American land -- I associate with all these people. So, keep in mind, I'm not here to criticize you. I'm here to extend the olive branch. We're talking to three federal judges about going to Congress to show-- I was in Utah on the herd round up of the horses, rounded them up said there wasn't enough food and water. They start dying, the sick ones replaced with the healthy ones. This is what happens all the time. \$70,000 a calendar helicopter, taxpayer dollars taken from Federal agents, firefighters, to subsidized the shortfall. I want to catch more drug bangers and drug cartels? They teach us the art of sabotage, the art of chaos. And you did with PZP-- you have Native American taking sides. So, I would like to say, I'm out there. My fielders are out there. We reach out to people. Thank you, I gave you my card. Work with us, please. Thank you.

Joanna Grossman

Hi, everyone. My name is Dr. Joanna Grossman. As one of the nation's oldest animal protection group-- we appreciate the BLM's recent efforts to increase the administration of proven and safety fertility methods. The close collaboration with stakeholders will play an important role in improving the management of wild horse and burros. Take a proactive approach when it comes to fertility control. With a budget for the program in FY'24. We are pleased to see Congress include language on the FY'23 omnibus to set aside budget for use of immuno contraceptive vaccines and the agency treats it as a floor. We encourage the agency to conduct outreach to community groups to identify opportunities for collaboration. As colleagues and horse coalitions, a network of five hundred rescues and sanctuaries in the United States, we welcome the BLM to speak to our staff where they could assist. From our perspective and as the National Academy of Sciences has noted, mass removals lead to animal difficult to stabilize populations on the range. Removal of 20,000 in FY'22 is unsustainable. Financial considerations aside, they introduced in Congress prohibiting helicopter round up-- during the Wyman checkerboard round up of 3500 horses, horses died. We are greatly disappointed to see that BLM finalize its plan to move forward. 70,000 Americans signed a petition opposing the sweeping removal of wild horses in the cowboy state. The BLM management plan is troubling in view of the tenth circuit-- the removing horses from the checkerboard. From broader perspective extreme plans do not offer a viable path under the law. Proactive approach is key to keeping horses on the range and minimize exorbitant costs.

Matt Manroe

I have the pleasure of being executive Director of a nonprofit called Mustang Champions. We have received a grant to produce two new programs in partnership with the BLM Wild Horse and Burro program. The first program is two new Mustang championship competitions all English and all western competitions. We are looking at the Kentucky horse park, Lexington, Kentucky for our English competition, September 2024. Our western competition we're calling Mustang challenge. We're looking at Las Vegas, South Point arena and that competition for July 2024. We are working with an Advisory Board to help us develop these competitions and we're going to do a few things differently. We want an exhibitor to have as much time as possible to work with and train their horse. Adoptions and purchases can begin October 1 for our competitions in July and August. That's new and different. We want to promote better training techniques. We are going to be gathering training resources and developing a curriculum that must be completed by each exhibitor before they qualify for our competition. We want our exhibitors to go out and show their horses to get them better prepared. Attend a local or national event to qualify. These are things we are doing to showcase the Mustang and its abilities, the best that they can possibly be for our competitions. We're excited about that program. The second program is an education program. We will be creating trade show kiosk that we can be shipped to events across the country. We will support them in that effort. But we want to educate the American public and get them to better understand the condition of the range, what's going on with the Mustangs and burros and have face-to-face contact with the Wild Horse and Burro program staff. So, we are very excited about what we have been granted the opportunity to do. And I just wanted to make you aware that that is happening. And we will launch in July. Be watching over our two competitions and our education program. Thank you.

Karen Boeger

I am a retired school-teacher but lifetime conservationist, activism for half a century still belong to three different conservation boards. And also help to found this little Coalition for Healthy Nevada's Lands, wildlife and free roaming horses and burros. We came together to do just that, to alert people to the crisis on our public lands. And they need to conserve, protect and restore the health of our lands so that we also, in doing so restore health to our wildlife and those horses and burros in addition. I want to acknowledge that. I know I'm preaching to the choir. Many of you have been at this for many years. And I want to say from the outset in case I run out of time that I really appreciate your public service, your days, your time, your months and years of contributing your passion and your expertise to try to solve this persistent problem. One thing that I noted in reading over the agenda is that there is no place where our department of wildlife or even western-wide wildlife departments give an update to you on their situation because this situation with the horses and burros gravely as you heard affects our wildlife. In Nevada as you heard from Cody Schroeder, we have threatened nature species clearly at risk and decline as it shows-- [LIST OF NAMES]. Trout among other species. And wild horse and burros are among-- oh, dear. Okay. I'm going to flip back to the fact that I want to come to implore you that Nevada is ground zero for this issue. The accelerating crisis on our Nevada public lands is, must be prioritized and for management nationally. Nevada, our public lands health crisis is far larger than any other state. We have the most public land acres than the lower 48. And the state of highest percentage of public land acres. Our public lands belong to each and every

one of us. Congress needs to be aware of the key importance of our Nevada public lands health. Nevada is the driest state in the nation, over 50% of the horses and burros, 300% over population and 60% of the excess horses and burros. Thank you for this opportunity to speak to you. You should get my longer official letter sometime before you leave, I hope.

Tina Nappe

My name is Tina Nappe I'm a lifelong resident of Nevada long time member of several conservation organizations and have been primarily involved with wildlife habitat preservation, particularly water for wildlife. I want to express my appreciation for the tour yesterday which demonstrates the expansive Nevada Great Basin Desert, landscape and shortage of water essential to horses and cows and to wildlife. The rancher who provides the water source to distribute cows and horses on otherwise dry range demonstrates the impact that a lot of grazing can have around a water source. I will one of a small group of Nevada conservationists along with Karen who recognized that we conservationists recognize free roaming horses in Nevada were becoming numerous impacted wildlife resources and neither conservation organizations nor natural resource agencies were addressing it. Our group recognizes that over the years wild horses and burros grew. And the negative impact facing the future of virtually unlimited expansion of horses and burros were ranchers and livestock. Our long silence as conservationist fed into that presumption. In reality, as horse and burro populations expanded, it is wildlife, native plants and dependent pollinators who became the victims of excess horses just as they are of cattle, mining and renewable energy. In short, unmanaged wild horse and burros can be an extract at this resource user rather than maintaining a renewable one. That is over-phrasing by horses or cattle can spell the permanent doom of our native plants and subsequently our wildlife. We are requesting that Nevada receive its fair share of funding to remove excess horses. We recognize there are some who propose abandoning Nevada because the numbers of BLM horses and burros now exceeding 50,000 in the territory they occupy over 50 million acres seem beyond almost capacity to address. I am here today to let you know that Nevada's wildlife-- like Indian rice grass, water sources and areas are as important to the long-term future of our wildlife as they are in any other state. We look forward to your supporting and hearing our request to receive our fair share of funding, even though wild horse and burros are wonderful they have become a negative impact on our wildlife in Nevada. Thank you.

Colette Kaluza

Good afternoon. I volunteer for Wild Horse Education. BLM is continuing without addressing violations. Last year I was able to capture video showing a helicopter chasing a foal. BLM clearly violated humane policy. They directed the helicopter to chase the foals for far too long in bad conditions required documentation on method of euthanasia was ignored. BLM assessed the incident and determined, quote, all required protocols of the comprehensive welfare animal policy were followed unquote. BLM's abusive conduct has been repeated repeatedly resulting in the creation of cop. They put together a team to evaluate compliance. One round up incident was at Triple B yet they gave no consequences. I also attended and noted the many additional violations. BLM has not responded today to my report. What the camera cannot catch, we obtain through the Freedom of Information Act (FOIA) which accomplishes a discrepancy between the number of horses transported and number arriving at holding facilities. The majority arrived in Indian Lakes road, a private closed facility. From the time the horses arrived until the public was allowed to see them over three months later, 67 horses were dead. Broken Arrow had not facilitated a single adoption the 50 plus pan take horses the public were following, only three were ever found. Broken Arrow must-- anemia testing within 30 days of arrival. But only 4% of the horses were in compliance and 37% for more than 60 days overdue. It must adhere to BLM vaccination policy-- to identify injuries and needs, provide veterinarian care, request documentation, and discuss horse deaths with vet but no data was provided to show compliance. Scanned data for BLM's team cited violations yet no consequences. BLM should be creating management area plans as required to preserve wild horse habitat and to be humane. Protects act to ground helicopters was inspired by and can referred to the code-- there is no shade at Broken Arrow or wind break for horses, pens should be provided to segregate unhealthy horses. Ground horses.